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## Corruption and Foreign Direct Investment (FDI) in ASEAN-5: A Panel Evidence

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### Abstract

This paper examines the effects of corruption on the inflow of FDI in ASEAN-5 countries by controlling two macroeconomic variables namely Gross Domestic Product (GDP) and inflation. Using a static panel data estimation, the results show the significant relationship between corruption and Gross Domestic Product (GDP) on the inflow of FDI in ASEAN-5. This results indicate that less corrupted countries and larger market size would attract more FDI inflows. The policy implications from this study suggests that ASEAN-5 governments need to have concerted and continues efforts in improving the integrity and credibility of their administration and transactions. In addition, maintaining their sustainable of economic growth is also crucial as a full factor in attracting more FDI inflows in future.

**Keywords:** corruption; Foreign Direct Investment (FDI); ASEAN-5; static panel data

### Abstrak

Tulisan ini meneliti efek korupsi pada arus masuk FDI di negara-negara ASEAN-5 dengan mengendalikan dua variabel ekonomi makro yaitu Produk Domestik Bruto (PDB) dan inflasi. Menggunakan estimasi data panel statis, hasilnya menunjukkan hubungan yang signifikan antara korupsi dan Produk Domestik Bruto (PDB) pada arus masuk FDI di ASEAN-5. Hasil ini menunjukkan bahwa negara-negara dengan korupsi yang rendah dan ukuran pasar yang lebih besar akan menarik lebih banyak arus masuk FDI. Implikasi kebijakan dari studi ini menunjukkan bahwa pemerintah negara-negara ASEAN-5 perlu menyatukan dan melanjutkan upaya dalam meningkatkan integritas dan kredibilitas administrasi dan transaksi mereka. Selain itu, mempertahankan pertumbuhan ekonomi yang berkelanjutan juga penting sebagai faktor penuh dalam menarik lebih banyak arus masuk FDI di masa depan.

**Kata kunci:** korupsi; investasi langsung asing; ASEAN-5; data panel statis

**JEL classifications:** C01; O10; O40

## 1. Introduction

Foreign Direct Investment (FDI) enhances economic growth through the provision of capital, job opportunities, transferring knowledge and skill and increases the capability for export commodities to access global markets. In addition, FDI is very sig-

nificant form of capital flows particularly towards developing countries as it affects the host country's economic growth, the macroeconomic stability, the infrastructure and the governmental policy (Metaxas & Kechagia 2016). In addition, FDI creates various types of job that leads to reduces in unemployment among local citizen and indirectly increase their standard of living as well as reduce poverty in the host (See David, Nordström & Winters 1999, de Mello 1997). There are many possible factors that lead to FDI inflows such as degree of openness, political stability, costs of labor and tax

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rate. Edward (1990) found that there is a strong positive effect between the degrees of openness on FDI. Economic freedom tends to attract more FDI. A variety of regulation and restriction policy reduce the efficiency of the government to attract FDI due to less competitive market. Besides that, high cost of labor will discourage FDI inflows in a country. High costs of labor also affect the effectiveness of investment due to high operating cost as a whole and indirectly reduce the return on investment. In addition, high tax rate reduces the tendency of foreign direct investor to invest in a particular country. There is a significant negative effect of corporate income taxes towards the FDI inflow (Cassou 1997, Kemsley 1998).

According to the Transparency International (1996), corruption can be defined as the behavior of officials in the public sector either civil servants or politicians that improperly and unlawfully enrich themselves, cronies that close to them and misuse of the public power that have been entrusted to them. Corruption has created uncertainty and enhanced a bad image towards a country. Uncontrolled corruption activities may affect the sustainability of a government and it can lead to bankruptcies. High corruption activities will increase business risk and it indirectly reduces the willingness of investors to invest. Besides that, Gray & Kaufman (1998) argued that corruption in the public sector is the most severe factor affecting the development process. Shen & Williamson (2005) argued that government intervention such as restriction of certain products and licenses lead to increase the occurrence of corruption. Therefore, the strict government policy increases the illegal activities especially corruption. In addition, using 62 countries for the period of 1995 to 2007, Nuryyev & Hickson (2015) found conclusive evidence that decentralized corruption has a destructive effect on investment and negative effect of the country development.

Although corruption is unethical manner, it has a

complex and unique impact on certain countries. Sweden despite being one of the cleanest countries in the world, received less FDI as compared to Russia that has been categorized as one of the most corrupted countries. Russia ranked number 127 out of 177 countries, ironically received a huge amount of FDI inflows as compared to Sweden that is ranked number third in terms of transparency in governance. Based on the previous studies, there are mixed empirical findings documented on this issue. For instance, Mouro (1995) documented evidence that there is a negative relationship between FDI and corruption. However, Wheeler & Mody (1992) found that there is no significant relationship between the FDI inflows and corruption activities. However, Tullock (1996) shows that corruption has a positive impact on the economy through allowing the government to maintain the tax burden low and supplement the low wages. The impact of corruption may differ in different countries and the occurrences of corruption may have both positive and negative impacts accordingly. In terms of developed and developing countries, Egger & Winner (2006) stated that corruption is an important deterrent of FDI inflow in developed countries, but not in developing or less developed countries. However, Voyer & Beamish (2004) found that the level of corruption and FDI is negatively related especially in developing countries. Han (2006) mentioned that in a country with a high-level of corruption, the relationship between FDI and corruption is negatively correlated while in countries with less corrupt the effect on FDI is not significant.

In the context of ASEAN-5, as emerging markets, ASEAN has attracted FDI inflows in this region. Policies that have been implemented such as ASEAN Free Trade Area (AFTA) and ASEAN Investment Area (AIA) have made ASEAN more competitive in attracting FDI. The European Union (EU) is the largest source of investment in the ASEAN region. EU FDI in ASEAN has been driven by resource-and

efficiency-seeking, market-seeking and strategic asset-seeking motives due to the opportunities associated with the region's rapid economic growth and regional integration (UNCTAD 2017). Based on Table 1, in general, all ASEAN-5 countries show an increase trend of FDI inflows. In all three-year period of 2000, 2005 and 2010, Singapore received the highest FDI inflows compared to another 4 countries. In 2005 and 2010, Indonesia has become the second highest receiver after Singapore. Thailand received 8055 million US\$ in 2005 which is less 3.37% compared to Indonesia. However, Indonesia received 52.92% more than Malaysia which is almost double in the same period. In year 2010, Malaysia have preceded Thailand by 16.37% and received the third highest FDI inflows after Indonesia. Although Vietnam received the lowest FDI inflows in ASEAN-5, it shows an increasing trend. In year 2010, Vietnam has received 8 000 million US\$ which is 75.58% higher compared to year 2005. Therefore, it shows that ASEAN has become one of the potential regions that attract FDI significantly.

Although ASEAN-5 has attracted the FDI, however, the issue of corruption still exists in this region. Table 2 shows the world corruption ranking published by Transparency International, a global coalition against corruption. The Corruption Perception Index (CPI) in 2013 involves 177 countries around the world. Score and ranking are the two measurements provided to measure the corruption. Corruption ranking is the easiest way to identify or to understand the index. Ranking number 1 is the least corrupt country and ranking number 177 is the highly corrupt country. As shown in Table 2, Russia is ranked number 127 out of 177 countries which is showing that the country is highly corrupt compared to Indonesia and Vietnam that are ranked number 114 and 116 respectively. The cleanest country is Sweden that ranked top 3 and followed by Singapore that ranked number 5 in the CPI 2013.

Meanwhile, Malaysia has been in the middle that ranked number 50 out of 177 countries. Although the CPI is just a perception and not reflecting the reality, it is one of the reliable measurements that have been used in worldwide. The existence of corruption is expected to affect the foreign direct investment inflows to that particular country.

Thus, this paper contributes to the literature of the determinants of FDI in ASEAN-5 in three aspects. First, to the best of authors knowledge, there is no previous studies have examined the relationship between corruption and FDI in ASEAN-5, therefore we extend the FDI determinants literature in ASEAN-5 by examining whether the inflow of FDI is sensitive or not with the level of corruption across the ASEAN-5. Second, since the level of corruption is different across ASEAN, the results of this study may have implication to governments in designing their FDI friendly policy by monitoring the level of corruption from time to time, and also to foreign investors and businesses for their investment decision in the region. Third, this study uses more recent data and panel data estimation technique in investigating the role of corruption on the inflow of FDI by controlling macroeconomics factors, namely market share and inflation.

The rest of this paper is structured as follows. In next section, we present some selected literature review and methodology in the subsequent section. Empirical findings and discussion are reported in Section 4. Lastly, concluding remarks and implications are presented.

## 2. Literature Review

In 2012, developing countries were 9 of 20 largest FDI recipients which received more than half of global FDI inflows (World Bank 2012). The tendencies of the investors to invest are influenced by

**Table 1: FDI Inflows in ASEAN-5, 2000–2010 (million)**

	Malaysia	Thailand	Singapore	Indonesia	Vietnam
2000	3,787.6	3,366.0	16,484.4	-4,550.4	1,298
2005	3,924.8	8,055.4	18,090.3	8,336.3	1,954
2010	10,885.6	9,104.0	55,075.9	15,292.0	8,000

Source: World Bank (2011)

**Table 2: Corruption Perception Index for Selected Countries**

Countries	CPI
Sweden	3
Singapore	5
Malaysia	50
Thailand	102
Indonesia	114
Vietnam	116
Russia	127

Source: Transparency International (2013)

several factors in order for them to make a profitable investment. Many countries implement various policies such as giving subsidies and import duty exemptions in order to attract foreign investment to their country (Bouoiyour 2004). Dunning (1993) mentioned that there are three types of FDI, the first type of FDI is called market-seeking which serve regional and local market, the second type of FDI is called resource-seeking which aim to obtain various resources that are not available in home country and the third type of FDI is called efficiency-seeking which is the advantages obtained from the governance of geographically dispersed activities FDI is one of the main contributors to national economic growth. Borensztein, De Gregorio & Lee (1998) argued that FDI is the highest contributor to the economic growth compared to domestic investment and it is an important determinant for transfer of technology. Transferring technology increases the productivity of production and boosts the economic growth. It enhances the knowledge through skill acquisition and labor training as well as new management practices (de Mello 1999). The new knowledge enhances efficiency and makes the market more competitive. Therefore, the contribution of FDI on economic growth cannot be denied.

FDI positively influences the economic growth but

FDI negatively affected by corruption in five South East Asian countries (Azam & Ahmad 2013). Corruption has a different impact against foreign and local direct investment. According to Habib & Zurawicki (2001), corruption has significant impact on foreign investment compared to local direct investment. Foreign investors are more sensitive due to the high amount of investment. One point of improvement in CPI score can encourage around 14% to 30% of FDI inflows (Quazi 2014). However, there are also different findings from the previous research conducted. There are researchers found that corruption is not necessarily give a negative impact on FDI and economic growth. According to Wheeler & Mody (1992) there is no significant relationship between the FDI inflow size and host country's risk caused by high corruption activities. The economic condition will influence the illegal activities. Swaleheen & Stansel (2007) found that corruption enhances economic growth when there is economic freedom, but it also can be a restriction for economic growth if there is low economic freedom.

Drabek & Payne (2001) stated that non-transparency, including unstable economic policies, corruption and inefficient government institution increases the risk and uncertainty economic environment thus reduces the flow of

foreign investment. Strict regulation may enhance corruption. Djankov et al. (2002) stated that country with strict regulation and policies tend to have higher corruption activities. The loss of FDI inflows will indirectly affect national economic growth. Corruption activities in the government agencies distort public investment (Tanzi & Davoodi 1997). The widespread corruption will worsen the government institution integrity and increase the reluctance of foreign investors to invest in that country. There is an absolute difference in FDI inflow with different level of corruption and foreign firms considered corruption as immoral and lead to inefficiency thus they tend to avoid the high-level corrupt country (Habib & Zurawicki 2002).

The income distribution in a country may be affected by corruption activities. Gupta, Davoodi & Alonso-Terme (1998) argued that corruption can worsen poverty due to adverse effects of the inequality in the country's distribution of income. Uncontrolled corruption can threaten the government development programs and economic reformation. Juan-Ramon & Asilis (1994) mention that corruption activities can threaten stabilization programs supported by the IMF and it has an adverse impact on capital accumulation. However, some researchers found that corruption can also lead to increase in income of the society and reduce the cost of living. Tullock (1996) found that corruption can contribute to economic growth when it supplements low wages in developing countries and allowing government to maintain the tax burden low.

Besides that, political stability may influence the willingness of investors to invest in a country. Frimpong & Oteng-Abayie (2006) argued that political instability has a significant effect on the FDI inflow especially in a developing country. Akcay (2001) stated that there is a negative relationship between FDI and corruption, but there are also other significant determinants of FDI, such as labor costs, market size and corporate tax rate. Therefore, cor-

ruption may not be a major factor that affects FDI inflow. Foreign investment does not necessarily depend on the level of corruption and least corrupt governments are not the main factor attracting foreign investment (Alesina & Weder 1999).

The government should make a reformation in order to attract foreign investors. According to Balasubramanyam, Salisu & Sapsford (1996), trade openness is necessary and important in order to attract FDI. Foreign investors are vulnerable to the risk of losing brand goodwill and reputation due to the corrupt activities that tangled up in an international corruption scandal (Zhao, Kim & Du 2003). The reformation of government and strict government regulations is expected to reduce corruption. FDI is expected to increase when investor believed the government will implement reformations to curb corruption activities and FDI will decrease if the government unwilling to reform the economic environment that highly corrupts (Busse et al. 1996). In order to fight illegal activities, it also depends on the country's law. Weak law may give a positive impact on FDI. Houston (2007) argued that if the rules of law in a country are weak, the relationship between FDI and corruption is positive. Countries that have signed the OECD Convention on Combating Bribery has resulted low FDI and corruption has resulted higher FDI inflow in countries with high level of corruption (Cuervo-Cazurra 2006). Therefore, corruption may increase FDI inflow in certain countries.

In ASEAN-5 context, most of the empirical studies that examined the determinants of the FDI have not considered the role of corruption as one of the key factors that attract the inflow of FDI to ASEAN countries. Example of the studies that have examined the determinants of FDI in ASEAN are Ridzuan, Ismail & Hamat (2018), Xaypanya, Rangkakulnuwat & Paweenawat (2015), and Ismail (2009). For example, Ridzuan, Ismail & Hamat (2018) found that macroeconomics indicators namely economics growth, trade openness, financial development, and

government size play an important role in influencing the inflow of FDI to ASEAN. Xaypanya, Rangkakulnuwat & Paweenawat (2015) conclude that the determinants of FDI are different due to the different stages of economic development between ASEAN-3 (Cambodia, Laos, and Vietnam) and ASEAN-5 (Indonesia, Malaysia, Philippines, Thailand, and Singapore). They found that there are significantly positive effects of infrastructure facility, level of openness, and negative effect of inflation on FDI inflow in ASEAN-3, whereas in ASEAN-5 the market size and infrastructure facility are significant factors to attract FDI. Another study by Ismail (2009), using a semi gravity model, the results revealed that besides the market size for host and source country, other criteria such as the shorter the distance, common in language and border, the extended market relative to distance also attracts more foreign investors to ASEAN countries. In addition, other factors such as lower inflation rate, exchange rate and good management of the government budget, good telecommunication and infrastructure, transparency and trade policy are also among the key factors that can attract more FDI to the region.

The role of institutions in particular the level of corruption also plays an important role in attracting the FDI. Since the late 1990's, the literature on FDI has begun to focus on the quality of institutions as one of the key factors in explaining the inflow of FDI. Bénassy-Quéré, Coupet & Mayer (2007) provides three reasons why the quality of institutions may matter for attracting FDI. First, by raising productivity prospects, good governance and infrastructure may attract foreign investors. Second, poor institutions can bring additional costs to FDI (for example, in the case of corruption). The third reason stems from sunk costs, where FDI is particularly vulnerable to uncertainties arising from poor governmental efficiency; policy reversals; and general weaknesses regarding the enforcement of

property rights and the domestic legal systems. Essentially, by maintaining quality governmental institutions, more investments can be attracted and the economic growth process can be expedited.

### 3. Method

#### 3.1. Data

The data used in this study are annual data from 1995 to 2014 that comprising of corruption perception index score, consumer price index, foreign direct investment and gross domestic product for ASEAN-5 countries which are Thailand, Singapore, Malaysia, Indonesia and Vietnam. The FDI, consumer price index and GDP data are collected from the statistical data of world development indicators published by World Bank. While the data for corruption can be found in the corruption perception index published by Transparency International in their official website. From the corruption index, this study used the score as a tool to measure corruption. The score range is from 0 to 10. The highest score which is 10 indicates that highly clean from corruption and 0 score is highly corrupt countries. Both FDI and GDP are transformed into natural logarithm.

#### 3.2. Empirical Model

This study uses panel data estimation to examine the relationship between FDI and corruption. The benefits of using static panel data include a much larger data set with more variability and less collinearity among the variables than is typical of cross-sectional or time series data. Panel data sets are also able to identify and estimate the effects that are simply not detectable in cross-sections or pure time series data. Since the variables of interest in this

study are FDI and corruption, these two variables in bivariate context may not be satisfactory to test their relationship. As noted by Jordaan (2004) the FDI is more likely to move to a country that expanding their market and have a greater purchasing power. Thus, two control variables are also included in the estimation which is GDP and Inflation.

The static panel data for the empirical model of this study is as follow:

$$\text{LnFDI}_{it} = \alpha + \beta_1 \text{CPI}_{it} + \beta_2 \text{LnGDP}_{it} + \beta_3 \text{Inflation}_{it} + \eta_i + \mu_{it} \quad (1)$$

where, FDI is the inflows of Foreign Direct Investment; CPI is Corruption Perception Index; GDP is Gross Domestic Product (proxy for market size); Inflation is derived from the Consumer Price Index;  $\eta_i$  is countries specific effect; and  $\mu_{it}$  is the remainder stochastic disturbance term, in which is assumed to be independent and identically distributed with mean zero and the variance.

The baseline model in equation (1) will be estimated using three competing formulations under static panel data methodology namely pooled OLS model, Fixed Effect, and Random Effect model. The main differences between these three models are pooled OLS model assumed the homogeneity of all cross-sectional, in which the intercept and the slope are the same across units and time.

To test whether the data should be pooled or not, the Breusch-Pagan, lagrangian multiplier (LM) test is first applied. The hypothesis of the test is:  $H_0 : \sigma_{\eta}^2 = 0$  versus  $H_A : \sigma_{\eta}^2 > 0$ . If the  $H_0$  is rejected, this indicates that the pooled model is inappropriate, thus, next we proceed to the Hausman test to choose between Fixed Effect (FE) or Random Effect (RE) models. These two models assume that each units (countries) have their own intercepts, while restricting the slope to be homogenous. Specifically, Fixed Effect (FE) assume that the country fixed

effect ( $\eta_i$ ) is a part of constant, whereas Random Effect (RE) assume that country fixed effect ( $\eta_i$ ) is a part of error term. The hypothesis of the test is:  $H_0 : \text{Cov}(\eta_i, x_{it}) = 0$  versus  $H_A : \text{Cov}(\eta_i, x_{it}) \neq 0$ . If the  $H_0$  is rejected, the fixed effect is favoured.

## 4. Results

### 4.1. Descriptive Statistics and Correlation Matrix

**Table 3: Descriptive Statistics**

Variables	FDI*	GDP*	Corruption	Inflation
Mean	10,600	208,000	4.73	5.05
Median	7,120	158,000	3.5	3.5
Minimum	115	20,700	1.7	-1.7
Maximum	67,500	918,000	9.4	58.4
SD	13,600	187,000	2.51	6.85
Skewness	2.57	2.33	0.97	5.2
Kurtosis	9.7	8.83	2.49	38.94
Jarque-Bera	296.9	231.83	16.47	57.77

Note:\* USD million

Table 3 shows the descriptive statistics for all variables. FDI has shown a mean of US\$10,600 million and the minimum value is US\$115 million while the maximum value is US\$67,500 million. According the UNCTAD (2010), the global FDI inflows in 2008 decrease 16% from the previous year while the impact of the financial crisis leads to the drastic decline of global FDI which decrease 37% to US\$1,114 billion in 2009. The minimum value of GDP is US\$20,700 million and the maximum value is about US\$918,000 million while the mean of GDP is US\$208,000 million. The smallest amount of GDP is recorded by Vietnam in the year 1995. Despite the lack of infrastructures for several industries such as transportation, manufacturing and banking, with a former socialist country that causes the trade between the neighbor's country are quite slow due to several regulations and tariff imposed. The largest amount of GDP was found in Indonesia during 2012. Strong macroeconomic policies have made Indone-



sia economic growth outperform among ASEAN members (OECD 2015).

The mean value of CPI is 4.73. The minimum and maximum value of corruption score recorded is 1.9 and 9.4 respectively. In the corruption perception index, the score of 10 indicates the highly clean from corruption meanwhile 0 indicates highly corrupted country. The country with high corruption activity is experienced by Indonesia. In Indonesia, structural factors such as inequality, low income level, weak accountability mechanisms and weak judiciary has led to high corruption activity. According to Martini (2012), local public officials in Indonesia are able to approve permits without going through a national permit process and the companies have paid bribery to 'speed-up' the administrative process. Meanwhile, Singapore scored the maximum value of CPI for two years consecutively in 2005 and 2006. Tough laws and effective enforcement have found to be one of the reasons that lead to the successful of Singapore against the corruption. A Corrupt Practices Investigation Bureau in Singapore has a wield significant power that allows them to arrest individuals or suspect without a warrant and the offenders of corruption can be punished 5 years in prison or fine up to US\$80.000 US dollars (Berlinger 2012).

**Table 4: Correlation Matrix**

Variables	FDI	Corruption	Inflation	GDP
FDI	1			
Corruption	0.54	1		
Inflation	-0.09	-0.47	1	
GDP	0.47	0.06	0.12	1

Table 4 shows the correlation matrix of the variables used in the study. The correlation coefficient ranges between -0.09 to 0.54. The highest correlation is found between corruption and FDI at 0.54. It shows that corruption may be one of the factors that affect the willingness of investors to invest in a particular country. On the other hand, pairs of GDP-corruption record the lowest coefficient at 0.0555.

## 4.2. Pooled OLS and Static Panel Results

Table 5 shows the results from both Pooled OLS and static panel estimation. As can be seen from the table, the value of Chi-square for BP test is statistically significant to reject  $H_0$ , in which indicated that the pooled model is inappropriate. Next, the result of the Hausman tests indicates that the random effect model is preferred as the probability is not significant. Based on the random effect model, the results show the significant relationship between corruption and gross domestic product (GDP) on FDI. The positive coefficient of corruption implies that higher corruption perception index score (less corruption) would attract more FDI. As mentioned by Mauro (1995), Habib & Zurawicki (2001), and Udenze (2014), corruption is a significant deterrent of FDI that affect negatively the willingness of investors to invest in a particular country. Azam & Ahmad (2013) conducted a research among less developed country and found that corruption cause the multinational corporations to avoid and unwilling to make an investment in less developed country. Furthermore, Quazi (2014) that investigated the impact of corruption on FDI in East Asia and South Asia found that corruption act as grabbing hand and one-point increases in the corruption perception index score encourages at least 14% of FDI inflows. Therefore, the existence of corruption can be a restriction the foreign direct investment inflows in ASEAN-5.

The results of random effects also show that no significant relationship exists between FDI and inflation in ASEAN-5. Although it is insignificant, the positive coefficient between FDI and inflation is parallel with several previous studies (See Udenze 2014). In addition, GDP is found to be significant in influencing the FDI in all models. Chakrabarti (2001) notes that when the market size grows, FDI will start to increase until the further expansion. The larger the

**Table 5: Pooled OLS and Static Panel Estimation Results**

Variables	Pooled OLS	Fixed Effect	Random Effect
Corruption	0.29*** [8.07]	0.46** [2.52]	0.32*** [4.06]
Inflation	0.04 [1.92]	0.02 [0.68]	0.02 [0.95]
GDP	0.71*** [6.88]	1.06*** [7.51]	0.99*** [7.78]
R-squared	0.56	0.66	0.48
F-Statistics	38.07	23.97	27.91
Breusch and Pagan (BP)	8.66 (0.0033)***		
Hausman Test	4.82 (0.19)		

Notes: \*\*\* and \*\*Significant at 1% and 5% respectively.

Figures in [ ] is t-statistics.

Figure in ( ) is probability.

market size, the higher potential to attract more FDI. In addition, Mottaleb & Kalirajan (2010) found that Asian and low middle income countries are more attractive in receiving FDI inflows compared to African and low income countries due to the linked of global market and larger market size of the country. As several initiatives conducted by ASEAN country to create an open market such as ASEAN Free Trade Zone (AFTA) to attract more foreign investment. Besides that, some of the ASEAN country such as Malaysia, Singapore and Vietnam has joined Trans-Pacific Partnership Agreement (TPPA) that allow the market size to expand larger with developed countries such as United States and Canada. Through the agreement, the market size has significantly become larger and the capability to attract foreign investment is better compared to other country.

## 5. Conclusion

The purpose of this study is to investigate the impact of corruption towards Foreign Direct Investment (FDI) in ASEAN-5 for the period of 1995 to 2015. Using panel data estimation, the results show the significant relationship between corruption and GDP on FDI. The results indicate that less corrupted countries and larger market size would at-

tract more FDI inflows. These findings are consistent with Mauro (1995), Habib & Zurawicki (2001), and Udenze (2014).

The policy implications from this study have three aspects. First, corruption has created uncertainty and enhanced a bad image towards a country. Uncontrolled corruption activities may affect the sustainability of a government and it can lead to bankruptcies. The government can improve the integrity and credibility by adopting an e-government system as the primary system and procedure related to government transaction. Second, besides that, the enforcement of the law is also very crucial. The establishment of special commission is needed in order to fight against corruption. The commission must have high integrity and independence without political interference. Third, in addition, the government should make a reformation in order to attract foreign investor. Trade openness is necessary and important in order to attract FDI. The reformation of government and strict government regulations is expected to reduce corruption. FDI is expected to increase when investor believed the government will implement reformations to curb corruption activities.

For future research, in modelling the determinants of FDI, it is interesting to consider the role of pull and push factors. Considering these two group of main factors, it can help the government to

have better understanding about the main factors that influence the inflow of FDI, and then can re-strategize their investment policy accordingly. In addition, since the corruption is a part of institutional variables, therefore it is more interesting for the future study to consider another components of institutional variables such as government stability, law and order, bureaucracy quality, investment profile, and internal and external conflict in attracting FDI from multinational corporations (MNCs) to the region.

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