

# THE IMPACT OF INSTITUTIONAL QUALITY ON THE UNITED STATES' FOREIGN DIRECT INVESTMENT(FDI) FLOWS INTO ASEAN COUNTRIES

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**Abstract** - This research investigates the impact of institutional quality on US foreign direct investment (FDI) inflows to ASEAN countries, using data from 9 ASEAN nations (excluding Myanmar) from 1996 to 2020. The study applies the gravity model, Principal Component Analysis (PCA), and Poisson Pseudo Maximum Likelihood (PPML) regression. The results reveal that institutional factors such as the rule of law, control of corruption, government effectiveness, regulatory quality, and political stability significantly and positively influence US FDI, while voice and accountability have a negative effect. Additionally, the study identifies that the inflation rate, language, geographical distance, and market size of ASEAN countries positively affect FDI, whereas trade openness and the US-China trade war have a negative impact. Based on empirical findings, several recommendations are suggested to attract the US FDI from the perspective of developing countries in general and Vietnam in particular.

**Key words** - FDI; Institutional quality; Gravity model; ASEAN; The United States

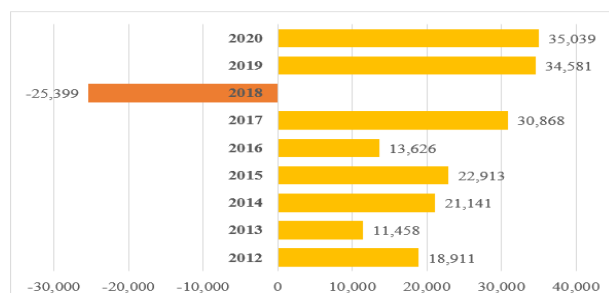
## 1. Introduction

Foreign direct investment (FDI) is one of the fastest-growing economic activities globally, playing a key role in developing countries. Most developing nations continue to strive to attract FDI through their economic policies. Economists have studied various factors influencing FDI decisions, such as proximity (language distance, geographic distance), host market size and growth, social factors (education, wage difference), exports and imports, and other macroeconomic aspects. Institutional quality has been widely studied since the early 2000s, particularly its role in explaining developmental differences [1] and its impact on FDI, with variables like corruption and political stability [2]. Institutional economics focuses on the importance of institutions in shaping economic behavior by reducing uncertainty and fostering economic activity [3].

ASEAN is regarded as one of the most successful regions in attracting FDI, particularly over the last two decades. The region is expected to become one of the world's top five economies shortly. However, most ASEAN countries still have high capital investment needs due to low gross domestic savings. The US is a major source of FDI to ASEAN, especially after ASEAN member countries promote bilateral and multilateral diplomatic activities. As can be seen in Figure 1, the US FDI inflows into ASEAN have increased significantly. Moreover, the US has risen to become the country that invests the most in ASEAN in the last two years 2019-2020. As a global leader in science and technology, US FDI projects often involve high-tech

industries, making a stable political environment essential to protect intellectual property rights and other interests.

While institutional quality's role in attracting FDI is well-established, there is still debate about the direction of its impact. Most research has focused on FDI from Korea or Japan, while the EU and US are underrepresented. Since the US-China trade war in 2018, ASEAN has gained attention as a new destination for foreign businesses. To attract more US FDI, ASEAN must improve its investment environment and create a competitive advantage over markets like India.



**Figure 1.** Total FDI Inward Flows to ASEAN from USA (in million US\$), 2012-2020

Source: authors compiled from ASEAN Secretariat data

This study examines the impact of institutional quality on US FDI inflows into ASEAN, filling gaps in the literature by analyzing each dimension of institutional quality and suggesting practical policy recommendations for enhancing ASEAN's institutional quality to attract more US FDI in the current global economic context.

## 2. Literature Review

### 2.1. Foreign direct investment (FDI)

FDI refers to a company's investment outside its native country, driven by long-term profit considerations [4]. However, this definition is incomplete as it overlooks the critical issue of control and management. According to Lipsey [5], internationalized production results from FDI, which involves some level of control over an acquired or newly established foreign entity. This distinction between FDI and portfolio investment lies in the investor's control over the investment. The Balance of Payments Manual (5th edition) also defines FDI as an investment aimed at acquiring a long-term interest in a foreign firm, to gain effective influence in the company's management. The investor must own at least 10% of the management for the investment to qualify as FDI. This research adopts this

definition, and the data from the US Bureau of Economic Analysis on US direct investment abroad follows this approach.

## 2.2. Institutional Quality

Although institutions have grown in popularity in the academic study over the last two decades, there is still no consensus on the definition of institutions in the literature. The most common definition of the last two decades goes back to North [6], who provided a clear definition by describing institutions on the macroeconomic level: "Institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction". The institutional framework and the mechanisms for enforcing them create the general principles that organizations must obey. North also emphasizes the relevance of institutions in the economy, stating that institutions supply an economy's incentive structure and shape the path of economic development toward decline, stagnation, or growth.

Since the late 1990s, academia has emphasized institutional quality as a key factor for international expansion. On a macroeconomic level, scientists have explored the role of institutions in the economy and attempted to understand the influence of national institutions on the behavior of MNEs [7], [8]. On a microeconomic level, researchers have investigated strategic decisions made by MNEs in their pursuit of acceptance by the values and institutions of the host nation in which they conduct business [9], [10]. The OLI paradigm has been expanded to include the quality of institutions as a location advantage for enterprises [11].

## 2.3. Previous research on the relationship between institutional quality and FDI

### 2.3.1. In the world

Dunning [12] highlighted the growing importance of institutional factors like governance and economic freedom in attracting investment, especially as MNCs shift from Market and Resource-Seeking to Efficiency-Seeking. This shift means investors now focus more on governance and institutional factors rather than traditional ones like market size and low labor costs. Researches such as Bénassy-Quéré et al. [3] and Asiedu [13] and others indicate that weak institutions reduce FDI inflows.

While many studies support the view that institutional quality significantly influences FDI, debates remain about the direction of this effect, and some research fails to find a strong relationship. Early studies used democracy or political risk as proxies. Levis [14], Root and Ahmed [15], and Wei [16] found political factors to be significant determinants of FDI. Harms and Ursprung [17] and Jensen [18] show that democracies attract more FDI, while Kolstad and Villanger [19] note this effect is stronger in services and emerging markets. Conversely, Li and Resnick [20] report a negative correlation between democracy and FDI when controlling for property rights. Adam and Filippaios [21] suggest MNEs may favor countries with limited civil liberties, and Kim [22] finds lower democracy levels linked to higher FDI inflows, helping explain China's success.

Wheeler and Mody [23] argue that political variables have an insignificant impact on FDI flows.

Political stability has also been identified as an important factor influencing FDI. Tuman and Emmert [24] report a negative relationship between political instability and Japanese FDI in 12 Latin American countries, arguing that regime transitions-particularly revolutionary movements-create uncertainty that discourages investment. In Asia, Quazi [25] finds a positive correlation between political stability and FDI inflows. However, Kolstad and Villanger [20] find no significant link between political stability and FDI.

Corruption is another institutional factor, with theoretical perspectives offering contrasting views. The 'grabbing hand' theory argues that corruption creates uncertainty and increases business costs, deterring FDI [26], [27]. The 'helping hand' theory, in contrast, suggests that in highly regulated or inefficient systems, corruption may facilitate entry and operations for foreign firms by expediting bureaucratic procedures [28], [29]. Empirical findings remain mixed. Wei [30] found a strong negative correlation between corruption and FDI, viewing corruption as a tax that discourages investment. However, Egger and Winner [31] argue that corruption can enhance FDI by bypassing burdensome regulations. Wheeler and Mody [24] find no significant link between corruption and FDI in countries with poor institutional quality.

Kaufmann et al. [32] examined multiple indicators and found that regulatory burden, political instability and violence, rule of law, government effectiveness, and graft were major institutional determinants of FDI; only the voice-and-accountability indicator appears to be insignificant. Globerman and Shapiro [33] demonstrated that governance infrastructure was a significant factor of FDI when using data from the World Bank, Environmental Sustainability Index, and UNDP. Additionally, they observed that institutional quality acts as a barrier to FDI in small economies while influencing investment incentives in large economies. According to Stein and Daude [34], who used the ICRG database, FDI inflows were strongly impacted by the rule of law, political instability and violence, regulatory burden, government effectiveness, and graft. Mishra and Daly [35] also underline the relevance of the host country's institutional quality (in terms of legal fairness, legal compliance, bureaucracy, and government stability) when attracting FDI from OECD member countries. Gangi and Abdulrazak [36], using the WGI dataset across 50 African countries, found that voice and accountability, government effectiveness, and rule of law positively influence FDI inflows, whereas political stability, regulatory quality, and control of corruption show no significant effect. Ullah and Khan [37] investigated the role of institutional quality in shaping inward FDI in South Asian, Central Asian, and Southeast Asian countries, revealing that the effects of institutional variables vary significantly across regions. However, Viguié and Jourdié [38], in the context of France, did not observe a consistent link between governance quality and FDI inflows.

### 2.3.2. In the context of ASEAN:

Ismail [39] used a semi-gravity model to examine FDI determinants in ASEAN from 1995 to 2003. Besides market size, factors such as shorter distances, common language, shared borders, lower inflation, slightly higher exchange rates, and sound fiscal management were found to attract more FDI. Social infrastructure like telecommunications, and non-economic factors such as transparency and trade policy, also played important roles. Masron and Abdullah [40] analyzed ASEAN-8 from 1996 to 2008 and emphasized that enhancing institutional quality is vital for future FDI strategies, alongside market size, human capital, and openness. Kiên and Huyền [41] found that Korean FDI in ASEAN is influenced by control of corruption, government effectiveness, regulatory quality, and rule of law, while political stability had no effect. Conversely, Dang and Nguyen [42], using the GMM model, identified political stability as a key determinant. Masron and Nor [43] argued that regulatory quality has no significant impact.

In conclusion, institutional quality is widely recognized as a key factor in attracting FDI. However, its influence remains debated, as prior studies often focus on only one or a few aspects such as corruption or political stability. Despite the availability of the comprehensive WGI dataset, relatively few studies have included all six dimensions in their analyses.

## 3. Methodology

### 3.1. Previous research on the relationship between institutional quality and FDI

This study uses the gravity model to analyze the impact of institutional quality on US FDI flows into ASEAN over 25 years for 9 countries, following previous studies by Bénassy-Quéré et al. [1] and Kiên and Huyền [42]. The proposed estimation model is as follows:

$$\begin{aligned} \ln FDI_{ij,t} = & \beta_0 + \beta_1 \ln(GDP_{i,t}) + \beta_2 \ln(GDP_{j,t}) \\ & + \beta_3(DIS_{ij}) + \beta_4(INS_{j,t}) + \beta_5(INFLAT_{j,t}) \\ & + \beta_6(OPENNESS_{j,t}) + \beta_7(INFRAS_{j,t}) \\ & + \beta_8(WAR_t) + \beta_9(LANG_i) + \varepsilon_{ij} \end{aligned} \quad (1)$$

Where:  $i, j, t$  represent The United States, ASEAN countries, and year, respectively. The dependent variable  $\ln FDI_{ij,t}$  measures US FDI into ASEAN countries in year  $t$ .  $GDP_{i,t}$  and  $GDP_{j,t}$  are the gross domestic product of The United States and ASEAN countries in year  $t$ . The coefficients  $\beta_1$  and  $\beta_2$  of these two variables are expected to have a positive sign, meaning that if the economic size of the US increases, the FDI outward will increase, and vice versa, if the economic size of ASEAN countries rises, then there will be an increase in the amount of FDI coming from the US.  $DIS_{ij}$  is the geographical distance in kilometers between The United States and the destination countries  $j$ .  $\beta_3$  is expected to be negative since higher distances lead to higher transportation costs, which will discourage FDI.  $INS_{j,t}$  is the main independent variable in the model representing the institutional quality of ASEAN countries in year  $t$  (synthesized from 6 components of WGI dataset through PCA technique).

In addition, based on previous studies, five control

variables are included in the estimation model.  $INFLAT_{j,t}$ ,  $OPENNESS_{j,t}$ , and  $INFRAS_{j,t}$  represent the inflation rate, trade openness, and infrastructure of ASEAN countries in year  $t$ , with data collected from the World Bank database. Specifically, inflation is measured by the consumer price index (%); trade openness is calculated as the sum of exports and imports of goods and services divided by GDP; and infrastructure is proxied by the number of mobile cellular subscriptions per 100 people. Many previous studies have demonstrated that these factors are important determinants affecting the attraction of FDI inflows. It is anticipated that the coefficients  $\beta_5$ ,  $\beta_6$ , and  $\beta_7$  of these variables will be negative, positive, and positive, respectively. Besides, this study employs two dummy variables  $WAR_t$  and  $LANG_i$ .  $LANG_i$  is the first dummy variable and it is similar to the common language variable widely used in extended gravity models. The second dummy variable is  $WAR_t$ , which is set equal to 1 since the year of the US-China trade war and 0 otherwise.  $WAR_t$  variable is expected to have a positive impact on FDI inflows into ASEAN because the US-China trade war will drive MNEs to relocate production activities out of China. As a result, economists around the world predict that ASEAN countries will benefit from this event because ASEAN is close to China and has an abundant source of cheap labor.

In addition, the study also considers the impact of each component of institutional quality on US FDI in ASEAN with the following estimated equation:

$$\begin{aligned} \ln FDI_{ij,t} = & \beta_0 + \beta_1 \ln(GDP_{i,t}) + \beta_2 \ln(GDP_{j,t}) \\ & + \beta_3(DIS_{ij}) + \beta_4(Component_{j,t}) + \beta_5(INFLAT_{j,t}) \\ & + \beta_6(OPENNESS_{j,t}) + \beta_7(INFRAS_{j,t}) \\ & + \beta_8(WAR_t) + \beta_9(LANG_i) + \varepsilon_{ij} \end{aligned} \quad (2)$$

where  $Component_{j,t}$  represents each dimension of institutional quality, including Control of corruption, Government effectiveness, Political Stability and Absence of Violence/Terrorism, Regulatory Quality, Rule of law, Voice, and accountability.

### 3.2. Data collection

This study analyzes panel data for 9 ASEAN countries from 1996 to 2020 to examine the impact of institutional quality on US FDI in ASEAN. Myanmar is excluded due to missing data for several variables over consecutive years.

Institutional quality indicators are sourced from The World Governance Indicators (WGI), which assess 6 criteria: Control of Corruption, Government Effectiveness, Political Stability and Absence of Violence/Terrorism, Regulatory Quality, Rule of Law, and Voice and Accountability. These indicators range from -2.5 (lowest quality) to 2.5 (highest quality) and are updated biennially through 2002, after which data is reported annually. For 1997, 1999, and 2001, data from the preceding year is used, assuming US investors rely on the most recent available data.

Data on US outward FDI to ASEAN countries comes from The U.S. Bureau of Economic Analysis (BEA). Geographical distance is defined as the distance in kilometers between Washington D.C. and the capitals of ASEAN countries, collected from <https://www.timeanddate.com/>. Data on GDP, inflation rate, trade openness, and infrastructure are from the World Bank database.

### 3.3. Research methodology

Taking logarithms is a common approach in estimating the gravity model, but FDI data presents several technical challenges, such as a large number of zeros. Logarithmic functions cannot be applied to zero values, leading to the exclusion of these observations. Additionally, logarithmic specifications often exhibit heteroskedasticity. The issue of unobserved heterogeneity arises because it's not feasible to include all relevant factors influencing FDI, resulting in unaccounted relationships between observed and unobserved variables. The analysis is further complicated by the presence of negative FDI values. Since negative FDI flows have economic significance, excluding or setting them to zero would be inconsistent, as it would imply no investment relationships between countries. Instead, Biro et al. [44] and Dorakh [45] suggest transforming negative FDI flows to \$1, as this small adjustment doesn't affect the interpretation of the coefficients.

In this research, various estimation methods are applied, with comparisons to ensure the stability of results. Two types of econometric methods are typically used for gravity models: linear and non-linear. The simplest approach is OLS, which involves taking the logarithms of the gravity equation. However, due to data loss, heteroskedasticity, and unobserved heterogeneity, OLS results can be biased and inconsistent [46]. As a non-linear alternative, the Poisson pseudo-maximal likelihood (PPML) method, introduced by Silva and Tenreiro [46] for trade flows, is widely used in gravity model econometrics. Notably, PPML provides consistent results even with zeros and heteroskedastic errors, where linear methods fail. Therefore, this study will use the PPML approach after finding that OLS regression is unsuitable. The RAMSEY RESET Test will be conducted to confirm the PPML method's fit to the model.

## 4. Results

Table 1 shows the correlation coefficients for the component indicators of institutional quality are high. If all of these indices are used in the same gravity model, multicollinearity can occur [34]. As a result, this research will utilize the Principal Component Analysis (PCA) technique to generate a composite variable of institutional quality [34]. This is a transformation technique that reduces the number of correlated data dimensions to a linear combination of newly created variables while retaining the most information from the original data group [47].

**Table 1.** Correlation coefficients of the component indicators

	CC	GE	PS	RQ	RL	VA
CC	1.0000					
GE	0.9582***	1.0000				
PS	0.6828***	0.6149***	1.0000			
RQ	0.9363***	0.9404***	0.5876***	1.0000		
RL	0.9531***	0.9628***	0.6729***	0.9330***	1.0000	
VA	0.4338***	0.4734***	-0.1038	0.5422***	0.4776***	1.0000

(Source: Author's calculation using STATA software)

Note: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$

**Table 2.** Data description

Variable	Obs	Expected sign	Mean	Std. Dev.	Min	Max
FDI <sub>ij</sub>	214		1.23e+09	4.91e+09	-3.98e+10	2.51e+10
GDP <sub>i</sub>	225	+	1.45e+13	3.99e+12	8.07e+12	2.14e+13
GDP <sub>j</sub>	225	+	1.80e+11	2.22e+11	1.28e+09	1.12e+12
DIS <sub>ij</sub>	225	-	14634.11	938.2675	13362	16355
CC	225	+	-0.1476069	0.9847231	-1.314594	2.32558
GE	225	+	0.2501532	0.9278794	-1.208072	2.436975
PS	225	+	-0.0401234	0.9186037	-2.094643	1.61567
RQ	225	+	0.1645222	0.8908619	-1.412353	2.260543
RL	225	+	-0.0718448	0.8300664	-1.279729	1.880382
VA	225	+	-0.6171013	0.6228785	-1.816531	0.4678029
INS <sub>j</sub>	225	+	4.70e-09	2.132033	-3.427729	4.91255
INFLAT <sub>j</sub>	225	-	5.140495	11.47417	-2.314972	125.2721
OPEN <sub>j</sub>	225	+	135.1968	89.52804	33.1906	437.3267
INFRAS <sub>j</sub>	222	+	73.35848	56.11784	0.0765	186.1586
WAR <sub>t</sub>	225	+	-	0.3256861	0	1
LANG <sub>j</sub>	225	+	-	0.4980119	0	1

(Source: Author's calculation using STATA software)

According to the standard process for estimating panel data, we should consider Pooled OLS regression as taking the logarithm of a dependent variable. Because the logarithm of zero is undefined, 10% of the data will be lost, resulting in unreliable research results. To keep the null observations, the usual way of dealing with zeros is to use  $\ln(1 + \text{FDI}_{ij})$  as the dependent variable. In this way, large values of FDI,  $\ln(1 + \text{FDI}_{ij}) \approx \ln(\text{FDI}_{ij})$ . This technique is commonly used in studies involving the zero problem such as: [36], [48] and [42].

**Table 3.** Test of Variance Inflation Factor (VIF)

Variable	VIF	1/VIF	Variable	VIF	1/VIF
ln_GDP <sub>i</sub>	6.71	0.149020	ln_GDP <sub>j</sub>	1.54	0.648997
INFRAS <sub>j</sub>	6.02	0.166029	OPEN <sub>j</sub>	1.50	0.665270
INS <sub>j</sub>	2.83	0.353320	WAR <sub>t</sub>	1.38	0.724067
LANG <sub>ij</sub>	2.32	0.431210	INFLAT <sub>j</sub>	1.19	0.841886
ln_DIS <sub>ij</sub>	1.59	0.629045			
Mean VIF	2.79				

(Source: Author's calculation using STATA software)

Table 3 shows the test results using the method of variance inflation factor (VIF). It can be concluded that multicollinearity is not a serious problem in this model.

Table 4 presents the OLS and PPML regression results. White's test and Wooldridge's test with a significant level of 5% will be used to identify heteroskedasticity and autocorrelation error. The results show that there is sufficient evidence to accept that there exists heteroskedasticity and autocorrelation error in OLS model. Additionally, the Ramsey RESET test is a regression specification-error test for omitted variables, ensuring that omitted variables are not causing model misspecification. Ramsey RESET test for OLS regression results indicates there is non-linearity present in the model. It suggests a linear regression model is not sufficient to explain the relationship between the dependent and independent variables. Therefore, PPML will be employed to estimate the model in this research.

**Table 4. OLS and PPML regression results**

Variables	OLS	PPML
	Coef.	
ln_GDPi	-3.472619 (4.577889)	-0.0336017 (0.7541686)
ln_GDPj	2.935385 (.3577874)***	1.199238 (0.1392592)***
ln_DISij	-4.037995 (10.207)	-2.273256 (2.006619)
INSj	1.464042 (0.3960755)***	0.7302426 (0.0531213)***
INFLATj	0.0811079 (0.0464658)*	0.0330065 (0.0146546)**
OPENj	-0.0018952 (0.0069098)	0.0009436 (0.0008906)
INFRASj	0.0231642 (0.0220542)	-0.0009922 (0.0038169)
WART	-3.6315 (1.972597)**	-0.8915844 (0.392947)**
LANGj	-3.566379 (1.536686)**	-0.3306383 (0.2511338)

_cons	83.87224 (177.9739)	11.71566 (32.85092)
Number of obs	211	211
R-squared	0.4058	0.8712
White's test	Prob > chi2 = 0.0323	
Wooldridge test	Prob > F = 0.0180	
Ramsey RESET test	Prob > F = 0.0296	Prob > chi2 = 0.1156

(Source: Author's calculation using STATA software)

Note: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$

The interpretation of coefficients in the PPML model follows the same pattern as OLS. However, PPML has a higher R-squared (0.8712 > 0.4058) and the Ramsey RESET test indicates that PPML is more appropriate for the panel data in this study.

After examining the impact of the INSj composite index on FDI, the study also analyzes each component index separately to better understand the role of the WGI dataset on U.S. inward FDI to ASEAN. The final estimation results are presented in Table 5.

**Table 5. Final estimation results**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
ln_GDPi	-0.0336017 (.7541686)	-0.62899 (.7355171)	-0.8755209 (.7465156)	-0.4959669 (.856036)	0.806536 (.8322086)	-0.3054079 (.7274564)	-1.371117 (.9640499)
ln_GDPj	1.199238 (0.1392592)***	1.218284 (0.1431117)***	1.175788 (0.133591)***	1.498266 (0.125107)***	1.256291 (0.1483391)***	1.20045 (0.1346932)***	1.351928 (0.1678466)***
ln_DISij	-2.273256 (2.006619)	-2.534333 (2.069529)	-0.3680843 (1.867065)	1.155508 (1.960183)	-1.503267 (1.890604)	1.440871 (1.760124)	15.1029 (2.562652)***
INFLATj	0.0330065 (.0146546)**	0.0215247 (.0192771)	0.0191114 (.0215849)**	-0.0029803 (.029671)	0.0476913 (.0097439)***	0.0222331 (.0136601)	-0.0581654 (.0405104)
OPENj	0.0009436 (0.0008906)	0.0012789 (0.0009281)	-0.0016381 (0.0008199)**	-0.0026152 (0.0007981)***	0.0013819 (0.0008883)	-0.0004064 (0.0008354)	-0.0078928 (0.0009738)***
INFRASj	-0.0009922 (0.0038169)	0.0030837 (0.0035347)	0.0029975 (0.0035277)	-0.0046986 (0.0038931)	-0.003352 (0.0040248)	-0.0019835 (0.0039534)	0.0049066 (0.0050367)
INSj	0.7302426 (0.0531213)***						
CC		1.356479 (0.1032103)***					
GE			1.607431 (0.132668)***				
PS				1.174859 (0.1094105)***			
RQ					1.76244 (0.1112837)***		
RL						1.705135 (0.1162251)***	
VA							-1.242416 (0.4436547)***
WART	-0.8915844 (0.392947)**	-0.8194955 (0.4123412)**	-0.8441681 (0.386503)**	-0.914743 (0.399829)**	-0.9393738 (0.3668042)***	-0.8891607 (0.3757062)**	-0.8922564 (0.3658655)**
LANGj	-0.3306383 (0.2511338)	-0.2211186 (0.2469545)	-0.2819186 (0.260995)	1.302557 (0.2463759)***	-0.0936243 (0.2487473)	0.0534453 (0.2360366)	3.201975 (0.4579041)***
cons	11.71566 (32.85092)	31.67696 (33.28346)	19.18318 (32.22428)	-14.42265 (37.48617)	-22.84832 (33.84989)	-15.49738 (31.64017)	-119.2984 (46.39777)***
N	211	211	211	211	211	211	211
R-squared	0.8712	0.8642	0.8682	0.8178	0.8689	0.8747	0.7450

(Source: Author's calculation using STATA software)

## 5. Discussion and Policy Recommendations

The GDP of ASEAN member states (GDP<sub>j</sub>) exerts a positive influence on US inward FDI, reflecting the attractiveness of larger market sizes through economies of scale and efficient resource utilization, in line with the gravity model and prior empirical findings. Although the effect of geographical distance (DIS<sub>ij</sub>) is mixed, it shows a statistically significant positive relationship in the model (7), which may be attributed to the preference of US firms for horizontal FDI-establishing production within host countries to minimize transport costs [49]. This relationship between trade costs(distance) and horizontal FDI is also supported by Egger [50] and Markusen [51]

The results in column (1) underscore the significant role of ASEAN institutional quality in attracting US inward FDI. A composite institutional quality variable, constructed through PCA, reveals a positive and statistically significant relationship. This finding is consistent with the effects of the five individual components (CC, GE, PS, RQ, RL), indicating that US investors prefer host countries with institutional stability, reduced risks, and favorable business conditions. ASEAN, in this context, emerges as a promising destination.

Regarding Voice and Accountability (VA), although the result appears unexpected, it is supported by several previous studies. VA captures the extent of citizens' political participation, freedom of expression, association, and media. Howell [52] notes that VA also encompasses military involvement in politics and democratic accountability. In the long term, a high degree of military influence may undermine governance through increased corruption and heighten the risk of political unrest. Moreover, this finding is especially relevant in ASEAN political context. Maranik et al. [53] explain that the negative impact of VA on FDI is particularly evident in the ASEAN+3 context due to the heightened sensitivity of investment activities to public perception and social legitimacy. Based on the Social License to Operate (SLO) theory, they argue that public opposition can hinder the implementation of foreign investment projects. Without social approval, foreign investors may face increased regulatory scrutiny, resistance from local communities, or even the cancellation of operational licenses. Similarly, Jadhav and Katti [54] also find that VA negatively affects FDI inflows into BRICS countries.

Regression results for the control variables indicate that the US-China trade war and trade openness negatively affect US FDI, while inflation and English proficiency have a positive influence. Although high inflation is typically associated with economic instability and increased uncertainty for long-term investment [55], it is also common in developing economies undergoing price liberalization [56]. This may explain continued US investment in ASEAN despite elevated inflation levels. Regarding trade openness, several studies have reported a negative association with FDI, including Wheeler and Mody [24], likely reflecting differences in investment motivations. In the case of ASEAN, an emerging market, US multinational enterprises tend to pursue market-

seeking (horizontal) FDI [50], making a lower degree of openness less discouraging. Similar patterns were observed by Wheeler and Mody [24].

The results for the English proficiency dummy variable (LANG) indicate that US firms are more likely to invest in ASEAN countries with higher levels of English fluency. This outcome is expected, as a shared language facilitates business operations, reduces communication costs, and enhances the transfer of knowledge and technology. Conversely, the dummy variable for the US-China trade war (WART) yields unexpected results. While economic theory suggests that trade tensions with China should encourage US firms to shift investment to ASEAN, the observed decline in FDI may be attributed to the simultaneous onset of the COVID-19 pandemic, which disrupted global investment flows. Furthermore, the relocation process is still in its early stages, and US corporations may be considering alternative destinations such as India, where infrastructure and policy conditions may be more favorable. ASEAN countries, in comparison, may face limitations in infrastructure and have been slower to implement reforms needed to capitalize on the trade diversion.

Based on the research results, this study proposes three key policy implications for ASEAN governments to enhance FDI inflows from the US. First, improving regulatory quality, maintaining political stability, and addressing corruption are crucial to creating a more transparent and predictable business environment that attracts foreign investors. Second, ASEAN countries should leverage their market size and geographical proximity to the US while simultaneously addressing economic challenges such as inflation and trade openness, ensuring a more favorable investment climate. Lastly, investing in education and enhancing English proficiency can further facilitate US investment by improving workforce skills and reducing language barriers, making ASEAN a more attractive destination.

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