# Factors Affecting the Foreign Direct Investment in Thailand:

# **Do Political Events Play a Role?**

Vilasinee Phuditshinnapatra\*, Sahanon Tungbenchasirikul and Thananporn Sethjinda

Finance and Investment, Investment Analysis and Management, Assumption University No. 592, Ramkamhaeng 24, Hua Mak Sub-district, Bangkapi District, Bangkok 10240, Thailand \*Corresponding author. E-mail address: Ph\_Vilasinee@yahoo.co.uk Received: 15 October 2021; Revised: 24 February 2022; Accepted: 1 March 2022

#### Abstract

Over the past decade, Thailand has been losing shares of Foreign Direct Investments to ASEAN peers, particularly Indonesia and Vietnam. Several factors such as wage, skilled labor and political instability have been cited to be contributing factors by qualitative sources, with limited quantitative research. This research proposed a multiple regression analysis on the on the Difference of Logarithm technique with one-year lagged using economic and external control variables, such as Market Potential, Trade Openness, Infrastructure Availability, and External Shocks, represented by Flood and the COVID-19 pandemic and FDI on a quarterly basis during 2005 to 2020. Results demonstrated that GDP, one-year lagged of infrastructure availability, and one-year lagged of political events had a positive and significant relationship with FDI inflow, while negative impact over FDI was found in trade openness and natural disasters. Furthermore, only the COVID-19 pandemic was found to have an insignificant impact. In term of policy implication, priority should be placed on projects that will prepare Thailand overall infrastructure, continual support on international trade policy, and FDI incentives. Finally and most importantly, the administrative mechanism of relevant government units should focus on ensuring continual execution of such initiatives.

Keywords: Foreign Direct Investment, Political Events, Thailand, Market Potential, Trade Openness, COVID-19 Pandemic

# Introduction

As business becomes global, Foreign Direct Investment (henceforth, FDI) is considered as a desired form of capital resource for the receiving countries to accelerate the growth of their economy. In order to tap into the benefits associated with FDI, several countries, including Thailand, have made efforts to improve and offer more incentives to attract the inflow of FDI. Currently, Thailand offers foreign investors with various direct and indirect benefits, such as special tax policy, permission to own lands, infrastructure improvement, signing of Free Trade Agreement with other countries to compete in the market. (Thailand Board of Investment, 2021a)

Despite these efforts, Thailand has been losing its share of FDI to neighboring countries in ASEAN since 2005. Over the period spanning 2007, 2009, 2011, 2014, 2016, and 2019, the decline in Thailand's share of FDIs had corresponded to the increase in FDIs to Malaysia, Indonesia, Philippines, and Vietnam. Beyond the historical record, a more recent development of FDI did not seem to improve much. Specifically, Thailand did not make it to the top list when a number of multinational companies operating in China considered relocating to avoid the implication of supply chain disruption. For instance, when 87 Japanese companies had made the decision to relocate from China, about 65% or 57 companies decided to move back to their home country. Another 17% or 15 companies chose Vietnam with only 6.8% or 6 companies chose Thailand as the new base for the relocation (Thansettakij, 2020; Chewchinda, 2020).

Apart from that, Thailand's competitiveness had been further questioned when Panasonic (Chanvipaswongse, 2020) and Sharp (TNNThailand, 2019) announced that they would relocate their manufacturing operations to Vietnam and Indonesia. According to Chanvipaswongse (2020), the decisions were based on the investors'



concerns on vital economic issues such as wage, market potential, tax benefit, and political instability. Such development had cast doubt on Thailand's  $40^{th}$  rank in the Global Competitiveness Index, compared with those of Indonesia, the Philippines, Vietnam, Laos and Cambodia, which were respectively ranked at the  $50^{th}$ , the  $64^{th}$ , the  $67^{th}$ , the  $106^{th}$  and the  $113^{th}$  (World Bank, n.d.).

Without doubt, one of the most important areas of research during the past decades relates to the reasons behind the continual decline with its share of FDI attractiveness, along with other factors that shunned investors away. Specifically, several studies had documented political stability and political risk, as the root cause (Nigh, 1986; Li, 2006; Busse & Hefeker, 2007; Arbatli, 2011; Baek & Qian, 2011; Hoang, 2012; Khan & Akbar, 2013; Goswami & Haider, 2014; Witte et al., 2016; Ozbozkurt & Satrovic, 2018). According to Arbatli (2011) legal, political and the institutional environment are likely to be one of the influencing factors for foreign investor's decision for the long-term investment, especially political instability since it is related to the state of the economy of the host country. In Thailand, a number of leading economists pointed to political conflicts and the culprit for the loss in FDI (Bangkokbiznews, 2014; Chueykamhang, 2018; Sethapramote, 2020; Chanvipaswongse, 2020).

As Figure 1 demonstrated, political events in Thailand were observed from 2005. Over the past decade, political events occurred repeatedly every few years and seemed to worsen after 2010. In particular, Thailand saw the protest of Protect Siam Organization at the end of 2012, the protest of The Opposition People's Democratic Reform Committee (PDRC) occurring between 2013 to 2014, the coup d'état in 2014, and the protest of Free Youth, United Front of Thammasat and Demonstration (UFTD), Walk Through the Sky, and Restart Democracy (REDEM) started since 2020. These events seemed to coincide with the stagnating flows of FDI over the same period.



Figure 1 FDI Trend and Political Events.

Despite the possible linkage between the political instability and the decline in FDI inflow, the topic has not been discussed quantitatively to draw definitive conclusions. To the best of the researcher's knowledge, there are currently a few qualitative studies on this topic. For instance, Dautrey (2010) conducted qualitative research on the impact of political events in Thailand on FDI inflow based on investor's opinions and other related studies. In this case, the study lacked statistical testing and was recommended as an area for further investigation.

To contribute to the academic discussion on this topic, this research proposes to investigate the relationship between political events in Thailand and FDI inflow. This study applies time series regression analysis with macroeconomic control variables during 2005 to 2020 to assess whether a series of political events has an impact on FDI inflow to Thailand. By incorporating critical political events, this study contributes the recent empirical evidence for the academic discussion on this topic. The result could also be used among companies and policy makers to incorporate components of analysis for improving the competitiveness of Thailand among other neighboring ASEAN.

#### **Review of Related Document and Research**

According to foreign investors and economists, it was argued that political conflicts in a host country could trigger a negative effect on FDI inflow, particularly deterring FDI, or reducing the amount of FDI inflow to the host country (Sethapramote, 2020; Chanvipaswongse, 2020). Despite the seemingly convincing reasoning, the effect of political conflicts on FDI inflow remains an ongoing debate. On the one hand, several studies documented that the political risk and the political stability of host countries had a significant effect on FDI inflow (Nigh, 1986; Li, 2006; Busse & Hefeker, 2007; Arbatli, 2011; Baek & Qian, 2011; Hoang, 2012; Khan & Akbar, 2013; Goswami & Haider, 2014; Witte et al., 2016; Ozbozkurt & Satrovic, 2018). The level of impact was dependent on the type of political events (Arbatli, 2011; Witte et al., 2016), business sectors, and scope of multinational enterprises (Witte et al., 2016). Moreover, not all elements of political risk impacted developed and developing countries in the same manner (Baek & Qian, 2011; Khan & Akbar, 2013).

Most often perceived unfavorably, the political risk could be categorized into three different types: nationalization, policy instability, and political violence (Multilateral Investment Guarantee Agency, 2011). Among all three, nationalization posed the greatest risk to foreign investors. Nationalization refers to the process of taking control of privately owned companies or assets by the government of the host country without compensation. Despite the potential harm, the nationalization of FDI was a rare occurrence (Baek & Qian, 2011). The second type of risk involves policy instability, which refers to "the propensity of a government collapse either because of conflicts or rampant competition between various political parties. Also, the occurrence of a government change increases the likelihood of subsequent changes" (Hussain, 2014). According to Baek & Qian (2011), policy instability created an unfriendly business environment where government policies or campaigns negatively impacted business profitability. The last type of political risk was political violence, which refers to aggressive events that subject to change government where it comes with loss of life, economic decline and also political instability (Bodea & Elbadawi, 2008). Researchers found that political violence could inflict immediate damage to foreign investment assets and profitability and subsequently hurt the host country's economy in the long term (Baek & Qian, 2011).

For Thailand, there have been a number of periodic political events since 2005. Mostly associated with dissatisfaction with the ruling government, there were five major protests during 2005 to 2008, 2006, 2009–2011, 2012–2014 and 2020 until now. Based on Baek & Qian's classification of political risk, political events in Thailand would fall into the category of political violence as these were characterised by internal conflicts and military in politics, given that political conflicts eventually led to an insurrection and coup d'état (The International Country Risk Guide (ICRG)).

In terms of empirical evidence, several studies documented the negative impact of internal conflicts and military in politics on FDI. For instance, Busse & Hefeker (2007) studied the relationship between political risk, institutions and FDI inflow by using Arellano-Bond Generalized Method of Moments (GMM) to investigate 83 developing countries during 1984 to 2003. They found that internal and external conflicts, both, had a negative effect on FDI inflow. The finding was also consistent with the work of Nigh (1986) and Goswami & Haider



(2014). In particular, unanticipated political events were found to reduce the opportunity to be selected as a host country (Li, 2006).

Nevertheless, the impact of internal conflicts and external conflicts were not consistent across various contexts of studies. For instance, Witte et al. (2016) found that only nationwide conflict events would have significant and negative effects on the non-resource-related FDI. Khan & Akbar (2013) found that only external conflicts had a negative impact on FDI inflow of lower-middle income countries, but a positive effect on upper-middle income countries. Furthermore, Arbatli (2011) noted that only domestic conflict events had negative impacts on FDI inflow, whereas Dautrey (2010) and Baek & Qian (2011) found that internal conflicts had no significant impacts on FDI.

With regards to the empirical evidence on military in politics, the results were less pronounced than that of internal and external conflicts. In general, several studies found that military in politics had no impact on FDI (Busse & Hefeker, 2007; Dautrey, 2010; Goswami & Haider, 2014). On the contrary, military in politics was found to have a positive and significant impact on FDI for high-income countries or developed countries (Khan & Akbar, 2013; Baek & Qian, 2011), specifically after the 9/11 attacks. Based on the preceding empirical discussion, this paper proposes to examine the impact of internal conflicts and military in politics in Thailand on FDI inflow.

Apart from political events, prior research works report the influence of various macroeconomics variables on the attractiveness of the host country as the potential recipient of FDI. (Moosa, 2002; Addison & Heshmati, 2003; UNCTAD, 2006; Busse & Hefeker, 2007; Walsh & Yu, 2010; Baek & Qian, 2011; Hoang, 2012; Goswami & Haider, 2014; Li, 2006; Witte et al., 2016; ESCAP, 2020; UNCTAD, 2020) These factors include market potential, infrastructure facilities, trade openness, and other shocks. The relevant studies for each factor are discussed below.

When multinational companies consider international expansion or foreign direct investment, market potential and market size are often listed among the top three investment consideration criteria. Broadly speaking, market potential and market size are used interchangeably as market size is able to examine market potential. Most commonly measured by Gross Domestic Products (GDPs), this variable is included in most studies on the determinant of FDI inflow for two main reasons. First, market potential and market size are used as one of the standard indicators in measuring the economic opportunity. It is included as part of the "global foreign direct investment country attractiveness index" by Jelili and the "Market potential Index" by globalEDGE or Michigan state university. Second, market potential and market size reflect the economic condition, potential, and attractiveness of selected country for FDI investors (Moosa, 2002; Busse & Hefeker, 2007; Walsh & Yu, 2010; Baek & Qian, 2011; Hoang, 2012; Goswami & Haider, 2014; Li, 2006; Witte et al., 2016). Therefore, market potential and market size are proposed as the key influencing factor on FDI inflow.

The second influencing factor towards FDI is Trade openness. It is claimed to be a significant determinant for investment decisions of foreign investors as it improves the business climate of a host country by reducing trade barriers. Numerous studies agreed that there was a strong and positive correlation between FDI inflow and trade liberalization (Agosin & Machado, 2007; Sekkat & Veganzones-Varoudakis, 2007; Walsh & Yu, 2010; Liargovas & Skandalis, 2011; Baek & Qian, 2011; Hoang, 2012). In this study, Trade openness was defined as the sum of export and import.

In today's competitive climate, it is argued that economic growth and potential alone are not enough to attract and maintain FDI inflow (UNCTAD, 2006). Host countries, especially developing countries, strive to improve their competitiveness by focusing on bridging the link between the local economy and export sector by strengthening domestic capabilities, such as infrastructure (Asiedu, 2002; Kumar, 2006; UNCTAD, 2006; Rehman et al., 2011). Infrastructure consists of roadways, communications installation, transportation, highways, ports, etc. (Khadaroo & Seetanah, 2010; Rehman et al., 2011). Infrastructure is purported as the basic support for import and export (Addison & Heshmati, 2003) and contributes to a positive relationship with FDI (Addison & Heshmati, 2003; Kok & Ersoy, 2009; Rehman et al., 2011). The efficiency of the transport system promotes cost reduction of business operations and increases the accessibility, reliability, and security of resources (Mollick et al., 2006; Khadaroo & Seetanah, 2010). In addition, Infrastructure increases the capacity to access new markets with the host country or a neighboring country (Khadaroo & Seetanah, 2010). Finally, the infrastructure related to information communication technology increases the ability to diversify the economy which would lead to more attractiveness for FDI in service sectors (Addison & Heshmati, 2003). In this paper, infrastructure was represented by the growth of government investment in other construction services such as roads and bridges.

In addition to the economic factors, other shocks have been known to have significant impact on FDI. Recently, the world economy has been dramatically shocked by the Coronavirus pandemic (hereafter COVID-19) since the 4<sup>th</sup> quarter of 2019. ESCAP (2020) revealed that the global FDI dropped by 40 percent compared to the same period of 2019 at the end of quarter two, in which greenfield FDI saw the biggest drop. Developing host countries were significantly affected by the crisis with a drop of 75 percent. UNCTAD (2020) announced that COVID-19 crisis caused global FDI disruption and forecasted the impact to be negative 40 percent in 2020 or lower than 1 trillion US-dollar for the first time since 2005. FDI is forecasted to further drop in 2021 (ESCAP, 2020; UNCTAD, 2020). Apart from the pandemic, natural disaster is another type of shock that foreign investors consider in their investment decision. In Thailand, in particular, the number of natural disasters has increased more frequently with floods accounting for most natural disaters (Anuchitworawong & Thampanishvong, 2015), causing both physical and economical damages. According to the record of EM-DAT, Thailand's major flood in 2011 began in August and ended in mid of January the following year. The flood covered over 96,785 square meters with more than 9.5 million people affected and approximately 1000 deaths. The economic impact was approximately 40,000 million US-Dollar in damages (Escaleras & Register, 2011; Anuchitworawong & Thampanishvong, 2015). Therefore, natural hazard is hypothesized to have a negative correlation with FDI as the damages inflicted on physical capital, labor forces, infrastructures, and economy, all of which are significant drivers of FDI decision. Therefore, the COVID-19 pandemic and natural disasters are proposed as another control variable, represented as the dummy variable. The proposed conceptual framework is proposed in Figure 1.



Figure 2 The Conceptual Framework.

#### **Data and Sources**

According to the focus of this study, the analysis of independent variables affecting FDI inflow in Thailand consists of available data over the period of 2005 to 2020. Other variables were also observed for the same period. All data used in this study was collected from Bank of Thailand (BOT), Office of The National Economic and Social Development Council (NESDC), Centre for Research on the Epidemiology of Disasters (EM-DAT), and Public News.

The first dummy variable, political events included in the model, must be related to the internal conflict, military in politics and any event related to protester against Thai government detail are shown in Table 1. For the second dummy variable, flood events included in the model was collected for all natural flood events provided from EM-DAT. The last dummy variable was COVID-19 pandemic, it was started highlighting as COVID period since Q4 2019.

Year	Quarter	Event				
2005	Q4	Weekly rallies by Sondhi Limthongkul to addresse mismanagement of the government. The event drew				
		thoudsands of people to join.				
2006	Q1	A mega protest against Taksin Government at Equestrian statue of Chulalongkorn the Great.				
2006	Q3	Coup d'état 2006.				
2008	Q4	Taking over Suvarnabhumi Airport and Don Mueang International Airport by People's Alliance for				
		Democracy.				
0000	Q1	A protest event against Abhisit Vejjajiva's government calling him to step down by United Front for				
2009		Democracy Against Dictatorship.				
0000	Q2	A protest event against Abhisit Vejjajiva's government at the Royal Cliff Beach Hotel in the resort town of				
2009		Pattaya and disrupted the ASEAN Summit by Red-shirted protesters.				
0000	Q2	The government declared a state of emergency as tens of thousands of demonstrators took control of the				
2009		streets with Dozens of people were injured.				
2010	Q1	A protest event at Phan Fah Lilat Bridge by the United Front for Democracy Against Dictatorship.				
	Q2	The Centre for the Resolution of Emergency Situations made up of representatives from the armed forces,				
2010		police and government ministries to disintegrate the group of protest resulting in 90 dead and more than				
		2,000 injured.				

 Table 1
 Political Event by Quarter

# Table 1 (Cont.)

Year	Quarter	Event
2011	Q2	A gathering event of Red-shirts near Phan Fah Bridge to mark the one-year anniversary of first major
		crackdown against protesters in 2010.
2012	Q4	A protest event against PM Yingluck Shinawatra to step down by a group of royalist protesters.
2013	Q4	Protest events against Yingluck Shinawatra's government to step down by a group of anti-government protesters.
0014	Q1	A general election was held but disrupted by anti-government protesters who prevent polling from being
2014		held in all areas.
2014	Q2	Coup d'état 2014.
2020	Q1	A Run Against Dictatorship event by an anti-government.
2020	Q2	Protesters gather to mark the anniversary of the end of absolute monarchy in 1932.
2020	Q3	Protest events calling for the dissolution of the parlianment and new election by anti-government, and for
		the reformation of the monarchy.
2020	Q4	Protest events calling for the dissolution of the parlianment and new election by anti-government, and for
		the reformation of the monarchy.

The total number of observations in the model before adjustment is 64 observations (quarters) from the period of first quarter of 2005 to fourth quarter of 2020. However, the number of observations were reduced by 4 units after modifying data according to the difference of logarithm technique.

Table 2	Variables	Symbol,	Full Name,	Source	and Type
---------	-----------	---------	------------	--------	----------

Symbol	Full Name of Symbol	Data Source	Type of Data	
FDI	Thailand FDI Inflow	Bank of Thailand	Numerical	
Lagged POLITIC	Political Events	News	Dummy	
GDP	Gross Domestic Product	NESDC	Numerical	
TRADE	Trade Openness	NESDC	Numerical	
Lagged INFRA	Infrastructure Availability	NESDC	Numerical	
Lagged FLOOD	Flood Events	EM-DAT	Dummy	
COVID	COVID-19 Pandemic	News	Dummy	

#### **Research Methodology**

The study is a retrospective study applying a multiple regression model to analyze a set of time series data.

# Unit Root Test

This research has conducted data testing to comply with the theory of the time-series data analysis. Unit root test has been conducted by using Augmented Dickey-Fuller. The result shown that there were no Unit root test problems with 95 percent confidence.

# **Multiple Regression Model**

$$FDI_{ti} = \beta_0 + \beta_1 GDP_{ti} + \beta_2 TRADE_{ti} + \beta_3 INFRA1_{t-1i} + \beta_4 POLITIC1_{t-1i} + \beta_5 FLOOD1_{t-1i} + \beta_6 COVID_{ti} + \varepsilon_{ti}$$

Where:  $\beta$  are the estimated parameters and  $\epsilon$  is an error term, t is time t, t-1 is lagged one-year period, and i = 1,...,n observation unit



One year lagged was applied for political events, infrastructure availability, and flood events due to consequences of events or projects did not immediately raise its impact, attractiveness, or risk to a host country economy. (Nigh, 1968; Asiedu, 2002; Addison & Heshmati, 2003; Kumar, 2006; Mollick et al., 2006; Kok & Ersoy, 2009; Arbatli, 2011; Khadaroo & Seetanah, 2010; Rehman et al., 2011; Escaleras & Register, 2011; Anuchitworawong & Thampanishvong, 2015; Li, 2006; Witte et al., 2016)

# Test of Linear Regression Assumption

The test of Heteroskedasticity, Breusch-Pagan-Godfrey was applied and found no problem on inconsistent variance since probability F was greater than 0.05 at 95 percent confidence. Durbin Watson stat was applied to assess if data has serial correlation. The outcome is concluded that there was no problem of serial correlation since the Durbin Watson statistic is greater than dU equal to 1.808 (k = 6, n = 59). The last testing was Multicollinearity. The result came out with no problem as no correlation exceeds 0.7 or 0.8.

#### Hypotheses

The main hypothesis in the paper was Political Events which the null hypothesis was "There is no relationship between Political events and FDI Inflow" and the alternative hypothesis was "There is a significant relationship between Political events and FDI Inflow".

Other hypotheses would be created in the same direction as the main hypothesis as follow.

# **Market Potential**

H<sub>0</sub>: There is no relationship between GDP and FDI Inflow.

H<sub>1</sub>: There is a significant relationship between GDP and FDI Inflow.

# **Trade Openness**

H<sub>o</sub>: There is no relationship between Trade Openness and FDI Inflow.

H1: There is a significant relationship between Trade Openness and FDI Inflow.

#### Infrastructure Availability Lagged 1 Year

H<sub>0</sub>: There is no relationship between Infrastructure Availability and FDI Inflow.

H<sub>1</sub>: There is a significant relationship between Infrastructure Availability and FDI Inflow.

#### Flood Lagged 1 Year

H<sub>o</sub>: There is no relationship between Flood and FDI Inflow.

H<sub>1</sub>: There is a significant relationship between Flood and FDI Inflow.

## COVID-19

H<sub>o</sub>: There is no relationship between the COVID-19 pandemic and FDI Inflow.

H1: There is a significant relationship between the COVID-19 pandemic and FDI Inflow.

#### **Cointegration Test**

This study has conducted a cointegration test by using Augmented Dickey-Fuller. The result presented that there was a cointegration between FDI Inflow and independent variables; GDP, TRADE, Lagged INFRA, Lagged POLITC, and Lagged FLOOD since probability was lower than 0.05 at 95 percent confidence.

# **Result and Discussion**

Overall, the multiple regression model showed that all five determinants of FDI were statistically significant towards FDI. As reported in Table 2, GDP, Infrastructure, natural disaster, and trade openness were significant determinants of FDI with consistent relationship with previous empirical evidence, whereas political events posed a significant but positive relationship towards FDI.

Variable Devendent	Independent	Coefficient	<b>P-value</b>		- Adjusted D. Coussed
Variable Dependent			T-stat	F-stat	<ul> <li>Adjusted R Squared</li> </ul>
	GDP	2.316	3.498***	4.498	0.342
	TRADE	-1.088	-2.739***		
FDI Inflow	Lagged INFRA	0.214	1.978*		
FDI Innow	Lagged POLITIC	0.042	$1.815^{*}$		
	Lagged FLOOD	-0.030	-1.954*		
	COVID	-0.070	-0.844		

#### Table 3 Regression Model

Note: The significance of coefficients donated by "\*", "\*\*", and "\*\*\*" refer to significance at the 10, 5, and 1 percent respectively.

In terms of Lagged POLITIC, the multiple regression showed a statistical significance level of 10 percent. Therefore, the Null Hypothesis can be rejected, suggesting that there is a relationship between Lagged POLITIC and FDI Inflow. In this case, the coefficient of 0.042208 represents that the relationship is in a positive direction. The study confirms that political event has no contemporaneous effect (The regression was performed for contemporaneous political events. Result has shown that political event (without lag) has no effect on FDI Inflow at 10 percent significant level.). According to Kurlantzick (2013), political events do not pause the economic system in the long run. Focusing on Thailand a study by Dorian (2019) also reported that political events usually lead to violence and coup d'état, government economic agencies work independently resulting in FDI policies and foreign assets remain untouched nor taken away by the government.

For GDP, the study found that this factor was statistically significant at 1 percent. Therefore, the null hypothesis can be rejected, confirming the positive relationship between GDP and FDI inflow. This finding aligns with the expectation of all the studies in the literature review that GDP is one of the key criteria of foreign investors when analyzing market growth, market size and market potential. Similarly, TRADE was statistically significant at the level of 99% confidence interval. Therefore, the null hypothesis can be rejected, confirming the relationship between TRADE and FDI Inflow. However, the coefficient value of -1.088370 (negative) suggested that Trade openness had a negative relationship with FDI inflow. These findings are aligned with the study of Khan & Akbar (2013) that Trade Openness presents a negative correlation with FDI in the upper-middle income countries; Thailand was designated as an upper-middle income country since 2011 according to the World Bank Report. However, this finding conflicted with the rest of results from other studies in the literature review.

With respect to infrastructure, the Lagged INFRA was found to affect FDI at a significance level of 10 percent with a positive coefficient of 0.214444. Hence, the Null Hypothesis can be rejected, confirming that there is a positive relationship between Infrastructure Availability and FDI inflow. In terms of economics, the findings can be supported by the view that better infrastructure availability will support the logistic system which plays an important role for businesses in exporting goods and services and importing raw materials. The findings are intuitive and consistent with previous studies of Addison & Heshmati (2003); Kok & Ersoy (2009); Rehman et al. (2011).

In terms of natural disasters, Lagged FLOOD affected FDI inflow at a significant level of 10 percent, with negative coefficient values. Therefore, the Null Hypothesis can be rejected, or it can be implied that there is a relationship between Lagged FLOOD and FDI inflow. The negative relationship between natural disasters and FDI was supported by the empirical evidence. In terms of economic perspective, foreign investors are well aware of the possible damages and business losses associated with floods in relation to assets or logistics. In the case of the



mega flood in 2011, 7 industrial areas were affected and approximately 240,000 million Baht in damages was reported for all factors within the industrial areas as per Bank of Thailand's estimation (Bank of Thailand, 2011).

Finally, COVID negatively affected FDI inflow with a negative coefficient value -0.069757. However, it is not statistically significant. The direction of impact aligns with UNCTAD (2020) and the expectation that COVID-19 pandemic deters FDI activities across the world. The reason for the insignificant result may be due to the limitations of data, in which the data did not cover the whole period of the pandemic.

According to an Engle–Granger Cointegration test (one-way), there is a long-term relationship between the independent variables, consisting of GDP, TRADE, Lagged INFRA, Lagged POLITC, and Lagged FLOOD, and the dependent variable, consisting of FDI inflow at 95 percent confidence.

#### **Conclusion and Suggestions**

This study investigates the relationship between political events and FDI inflow in Thailand with economic control variables consisting of Market Potential, Trade Openness, Infrastructure Availability and Other External Shocks represented by Floods and the COVID-19 pandemic. All data was gathered from the period of first quarter of 2005 to fourth quarter of 2020, or 64 observations in total. Upon applying the Difference of Logarithm technique with one-year lagged, 59 observations in total were used. The study found that GDP, one-year lagged of infrastructure availability, and one-year lagged of political events have a positive and significant relationship with FDI inflow. Negative impact over FDI was found in trade openness, and natural disasters. Only the COVID-19 pandemic was found to have insignificant impact.

This study notes an unexpected finding on the one-year lagged of Political Events, revealing a positive and significant effect on FDI inflow at 90 percent confidence level, which was not aligned with the studies of Nigh (1986); Li (2006); Arbatli (2011); Khan & Akbar (2013); Goswami & Haider (2014); Witte et al. (2016); Ozbozkurt & Satrovic (2018), and others. The difference might be attributed to the unique characteristics of the Political Events in Thailand; Thai political events are not as violent as other countries and rather defined as Coup Culture according to Kurlantzick (2013). Thai Political Events commonly result in a coup d'état within a year or couple of years. However, nationalization is yet to occur under a coup d'état by the Thai military government despite numerous events. Political conflicts in Thailand generally relate to a change of government rather than economic direction. In other words, the government economic agencies in Thailand operate independently to stabilize macro-economic policies (Dorian, 2019). Moreover, the government realizes that FDI is of key importance to the economic growth of Thailand (Thailand Board of Investment, 2021b) and ensures that FDI policy will remain unchanged regardless of a new government. Based on the theory that foreign investors prefer to invest in countries with political stability, the claim that coup d'état in Thailand usually results in a period of break from Political Events can be used to support the unexpected findings of one-year lagged of Political Events having a positive and significant effect on the FDI inflow of Thailand, rather than causing a negative impact similar to findings in other countries. Furthermore, FDI is a continual investment by foreign investors as shown in the UNCTAD's report 2020 where 36 trillion dollars were added to existing projects at the end of 2019. In addition, data from Thailand Board of Investment (2020) reported that approximately 53 percent of total investment in the first three quarters in 2020 was from existing projects and approximately 60 percent of the investment was FDI.

In the case of control variables, GDP as a market size and market potential positively and significantly affects the FDI inflow of Thailand. The results align with the findings of other previous studies in the literature review and aligns with all researcher's expectations. This is because GDP is a key indicator that describes the overall economy of each country, and foreign investors can use this data to invest in countries with better GDP to ensure that they will generate better performance due to larger market size, and better market growth.

The result of the relationship between one-year lagged of Infrastructure Availability and FDI inflow, and between one-year lagged of Flood and FDI inflow are as expected in terms of level of significance and relationship's direction. The results align with the study of Kok & Ersoy (2009) and Rehman et al. (2011). Infrastructure availability benefits businesses through the facilitation of logistic or transport system (Khadaroo & Seetanah, 2010). Accordingly, if basic infrastructure is improved, enterprises can generate more profit by reducing cost, increasing reliability, punctuality, and security (Mollick et al., 2006; Khadaroo & Seetanah, 2010) of exports and imports transactions. In addition, with these improvements, it is able to increase the level of accessibility for enterprises to enter new markets with the host country or a neighboring country (Mollick et al., 2006; Khadaroo & Seetanah, 2010).

As per the result of negative impact of Flood on FDI inflow, it aligns with the previous studies of Escaleras & Register (2011) and Anuchitworawong & Thampanishvong (2015). According to EM-DAT data base and the confirmation of damage provided by Bank of Thailand (2011) on the major flood in 2011, natural disaster caused damages to physical capital, labor forces and infrastructure such as railways, roadways, and airways. Without good risk management plans by public and private sectors, the threat of natural disasters will be a serious concern to foreign investors in terms of investing decisions.

Trade Openness is found to have a negative impact on FDI inflow in Thailand, which is unexpected and not in agreement with most of the studies in the literature review. This may be due to the negative growth of trade in Thailand since 2015. The study of Khan & Akbar (2013) presents a similar result for upper-middle income countries, in which Thailand belongs in the category of upper-middle income country according to the World Bank information in 2011.

Lastly, COVID-19 pandemic is found to have insignificant effect on FDI inflow in Thailand despite UNCTAD (2020) reporting an approximate 40 percent drop in global FDI under the pandemic crisis due to closed borders. In 2021, it is expected to drop further down by 10 percent (UNCTAD, 2020). Since FDI inflow in Thailand is in a downward trend, it is still difficult to state that the pandemic significantly affects FDI. Thailand started closing its border from the second quarter of 2020 but still allowed business personnel to travel in and out under strict conditions, such as quarantine (Thai Embassy, 2021). Furthermore, there were existing projects that continued to receive investment during the pandemic period, which amounted to approximately 53 percent of total investment and over 60 percent of the total investment was related to FDI projects according to a report by Thailand Board of Investment (2020). In addition, the investigation did not cover the full period of COVID-19 due to the ongoing state of the pandemic; therefore, the study may not be able to show the real impact on FDI inflow.

The results of the study show the indicators that foreign investors focus on when analyzing the possibility of investment in Thailand; the indicators that have a positive relationship with FDI inflow or drive negative impact on FDI inflow. In today's economy, Industrial 4.0 is currently shaping up to be the future and key driver of Thailand's GDP. The new chapter of Thailand industrial focuses on 10 targeted industries from the existing industries such as automobile, tourism, and agriculture to the new valued added focus on industries such as Bioenergy, Digital, and medical and healthcare. Improvement of infrastructure availabilities such as railways and airport upgrades, roadways, high speed trains, and the Eastern Economic Corridor (EEC) has been integrated to



the public policy "Industrial 4.0", as part of the government's initiative to make Thailand more favorable to foreign investors (Bank of Thailand, 2011). However, natural disasters, especially floods, need to be addressed by both private and public sectors to further increase the confidence of foreign investors in selecting the host country. Lastly, the impact of political events requires further in-depth investigation to get a better understanding on the underlying reasons.

Further study is recommended due to the unexpected results on the correlation of Political Events and the COVID-19 pandemic with FDI inflow. For future studies, a deeper investigation on the relationship of FDI inflow by sector and country is recommended to see which sectors or countries are sensitive to Political Events. Alternatively, it can be examined the context of horizontal, vertical, and export-platform FDI to Political Events. Lastly, future research is recommended to be conducted on the post-pandemic period to conclude if Thailand's FDI inflow was impacted by the pandemic or it was irrelevant.

# References

Addison, T., & Heshmati, A. (2003). The New Global Determinants of FDI Flows to Developing Countries: The Importance of ICT and Democratization. In UNU/WIDER Conference on the New Economy in Development, 10-11 May 2002, Helsinki (Discussion Paper No. 2003/45). Helsinki, Finland: UNU-WIDER. Retrieved from https://www.wider.unu.edu/publication/new-global-determinants-fdi-flows-developing-countries

Agosin, M. R., & Machado, R. (2007). Openness and the International Allocation of Foreign Direct Investment. *The Journal of Development Studies*, 43(7), 1234–1247. https://doi.org/10.1080/00220380701526410

Anuchitworawong, C., & Thampanishvong, K. (2015). Determinants of Foreign Direct Investment in Thailand: Does Natural Disaster Matter? *International Journal of Disaster Risk Reduction*, 14, 312–321. https://doi.org/10.1016/j.ijdrr.2014.09.001

Arbatli, E. (2011). Economic Policies and FDI Inflows to Emerging Market Economies (IMF Working Paper, No. 11/192). Retrieved from https://www.imf.org/external/pubs/ft/wp/2011/wp11192.pdf

Asiedu, E. (2002). On the Determinants of Foreign Direct Investment to Developing Countries: Is Africa Different? World Development, 30(1), 107-119. https://doi.org/10.1016/S0305-750X(01)00100-0

Baek, K., & Qian, X. (2011). An Analysis on Political Risks and the Flow of Foreign Direct Investment in Developing and Industrialized Economics. *Economics, Management and Financial Markets*, 6(4), 60–91. Retrieved from https://politicalscience.buffalostate.edu/sites/politicalscience.buffalostate.edu/files/uploads/Documents/baekfdi.pdf

Bangkokbiznews. (2014, June 27). Even though Thai FDI was Rose in 2013, Political was "Weakness". Retrieved from https://www.bangkokbiznews.com/news/detail/590343

Bank of Thailand. (2011). *Mega Flood 2011: Thai Flood Survey*. Bangkok: Bank of Thailand. Retrieved from https://www.bot.or.th/Thai/MonetaryPolicy/EconomicConditions/AnalysisBLP/1ThaiFloodSurvey2011.pdf



Bodea, C., & Elbadawi, I. A. (2008). Political Violence and Economic Growth (Policy Research Working Paper No. 4692). Retrieved from https://openknowledge.worldbank.org/bitstream/handle/10986/6805/WPS4692.pdf?sequence=1

Busse, M., & Hefeker, C. (2007). Political Risk, Institutions and Foreign Direct Investment. *European Journal* of *Political Economy*, 23(2), 397–415. https://doi.org/10.1016/j.ejpoleco.2006.02.003

Chanvipaswongse, S. (2020, October 9). What would Happen to Thai's Industry if Japanese Factories Moved to Vietnam. *EBCI*. Retrieved from https://ebcinext.com/archives/1540

Chewchinda, P. (2020, August 29). CIMB Thai Pointed ASEAN's Economic Gained Benefit after Japan Switching Manufacturing from China to ASEAN with 6 Factories in Thailand. *ThaiPublica*. Retrieved from https://thaipublica.org/2020/08/cimb-thai-sees-asean-strong-recovery-01/

Chueykamhang, T. (2018, June 12). To Understand Foreign Investor's Aspects throughout FDI Confidence Index and Implication of Thailand's FDI in 2018. *Bank of Thailand*. Retrieved from https://www.bot.or.th/Thai/ResearchAndPublications/articles/Pages/Article\_12June2018.aspx

Dautrey, J. (2010). Foreign Direct Investment and Thailand's Color-coded Politics: The Thai Paradox – Will it Endure? *AU-GSB e-Journal*, *3*(1), 3-12. Retrieved from http://www.assumptionjournal.au.edu/index.php/AU-GSB/article/view/403

Dorian, A. (2019, September 12). Thai Politics and Coup Culture. *OWP*. Retrieved from https://theowp.org/thai-politics-and-coup-culture/

Escaleras, M., & Register, C. A. (2011). Natural Disasters and Foreign Direct Investment. Land Economics, 87(2), 346-363. http://doi.org/10.3368/le.87.2.346

ESCAP. (2020, November 19). Promoting Inward and Outward Foreign Direct Investment in the Post-Coronavirus-disease Era. Retrieved from https://www.unescap.org/sites/default/files/CTI7\_2\_item%203\_E% 20%281%29.pdf

Goswami, G. G., & Haider, S. (2014). Does Political Risk Deter FDI Inflow? An Analytical Approach Using Panel Data and Factor Analysis. *Journal of Economic Studies*, 41(2), 233–252. https://doi.org/10.1108/JES-03-2012-0041

Hoang, H. H. (2012). Foreign Direct Investment in Southeast Asia: Determinants and Spatial Distribution (Working Paper Series No. 2012/30). Vietnam: Development and Policies Research Center (DEPOCEN). Retrieved from http://depocenwp.org/upload/pubs/30-Foreign%20Direct%20investment%20in%20Southeast %20Asia.pdf

Hussain, Z. (2014, June 1). Can Political Stability Hurt Economic Growth? *World Bank Blogs*. Retrieved from https://blogs.worldbank.org/endpovertyinsouthasia/can-political-stability-hurt-economic-growth



Khadaroo, A. J., & Seetanah, B. (2010). Transport Infrastructure and Foreign Direct Investment. *Journal of International Development*, 22(1), 103–123. https://doi.org/10.1002/jid.1506

Khan, M. M., & Akbar, M. I. (2013). The Impact of Political Risk on Foreign Direct Investment (MPRA Paper No. 47283). Retrieved from https://mpra.ub.uni-muenchen.de/47283/

Kok, R., & Ersoy, B. A (2009). Analyses of FDI Determinants in Developing Countries. *International Journal of Social Economics*, 36(1/2), 105–123. https://doi.org/10.1108/03068290910921226

Kumar, N. (2006). Infrastructure Availability, Foreign Direct Investment Inflows and their Export-orientation: A Cross-country Exploration. *The Indian Economic Journal*, 54(1), 125-144. https://doi.org/10.1177/0019466220060108

Kurlantzick, J. (2013, December 19). Thailand's Political Crisis-Not so Unique. *Council on Foreign Relationship*. Retrieved from https://www.cfr.org/blog/thailands-political-crisis-not-so-unique

Li, Q. (2006). Chapter 11 Political Violence and Foreign Direct Investment. In M. Fratianni (Ed.), *Regional Economic Integration, Research in Global Strategic Management, Vol. 12* (pp. 225–249). Bingley: Emerald Group Publishing. https://doi.org/10.1016/S1064-4857(06)12011-2

Liargovas, P. G., & Skandalis, K. S. (2011). Foreign Direct Investment and Trade Openness: The Case of Developing Economies. *Social Indicators Research*, *106*, 323–331. https://doi.org/10.1007/s11205-011-9806-9

Mollick, A. V., Ramos-Duran, R., & Silva-Ochoa, E. (2006). Infrastructure and FDI Inflows into Mexico: A Panel Data Approach. *Global Economy Journal*, 6(1). https://doi.org/10.2202/1524-5861.1094

Moosa, I. A. (2002). Foreign Direct Investment: Theory, Evidence and Practice. New York: Palgrave Macmillan. http://doi.org/10.1057/9781403907493

Multilateral Investment Guarantee Agency. (2011). World Investment and Political Risk 2010. Washington, DC: World Bank. Retrieved from https://openknowledge.worldbank.org/handle/10986/2538

Nigh, D. (1986). Political Events and the Foreign Direct Investment Decision: An Empirical Examination. *Managerial and Decision Economics*, 7(2), 99–106. https://doi.org/10.1002/mde.4090070205

Ozbozkurt, O. B., & Satrovic, E. (2018). Causal Relationship between Foreign Direct Investments and Macrolevel Political Stability in Turkey. In M. B. Beros, N. Recker, & M. Kozina (Eds.), 27<sup>th</sup> International Scientific Conference on Economic and Social Development, Rome, 1-2 March 2018 (pp. 196-205). Retrieved from https://www.academia.edu/36096239/Causal\_Relationship\_between\_Foreign\_Direct\_Investments\_and\_Macro\_ Level\_Political\_Stability\_in\_Turkey

Rehman, C. A., Ilyas, M., Alam, H. M., & Akram, M. (2011). The Impact of Infrastructure on Foreign Direct Investment: The Case of Pakistan. International Journal of Business and Management, 6(5), 268–276. http://doi.org/10.5539/IJBM.V6N5P268



Sekkat, K., & Veganzones-Varoudakis, M.-A. (2007). Openness, Investment Climate, and FDI in Developing Countries. *Review of Development Economics*, 11(4), 607–620. https://doi.org/10.1111/j.1467-9361. 2007.00426.x

Sethapramote, Y. (2020, November 10). Impact of Political Risk to FDI. *Post Today*. Retrieved from https://www.posttoday.com/finance-stock/columnist/637602

Thai Embassy. (2021). COVID-19 Guide for Travelers to and in Thailand. Retrieved from https://www.thaiembassy.com/travel-to-thailand/covid-19-guide-for-travelers-in-thailand

Thailand Board of Investment. (2020). Thailand's E & E, Food, Auto and Medical Sectors Lead Jan-Sep Rise in Investment, BOI Applications Data Shows. Retrieved from https://www.boi.go.th/index.php?page= press\_releases\_detail&topic\_id=127090

Thailand Board of Investment. (2021a, March 31). *Thailand's Advantages*. Retrieved from https://www.boi.go.th/ index.php?page=thailand\_advantages

Thailand Board of Investment. (2021b, September 9). *Thailand's Rankings*. Retrieved from https://www.boi.go.th/ index.php?page=thailand\_rankings

Thansettakij. (2020, July 26). Thailand Watching "Japan" Encourage 15 Companies Move to "Vietnam". Retrieved from https://www.thansettakij.com/content/world/443359

TNNThailand. (2019, June 20). 'Sharp-LG' were going to Relocate from Thailand and Vietnam to Indonesia. Retrieved from https://www.tnnthailand.com/news/world/10465/

UNCTAD. (2006). World Investment Report 2006. Switzerland: United Nations Publications. Retrieved from https://unctad.org/system/files/official-document/wir2006\_en.pdf

UNCTAD. (2020). World Investment Report 2020. New York: United Nations Publications. Retrieved from https://unctad.org/system/files/official-document/wir2020\_en.pdf

Walsh, J. P., & Yu, J. (2010). Determinants of Foreign Direct Investment: A Sectoral and Institutional Approach (IMF Working Paper No. 10/187). Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1662260

Witte, C. T., Burger, M. J., Ianchovichina, E. I., & Pennings, E. (2016). Dodging Bullets: The Heterogeneous Effect of Political Violence on Greenfield FDI (Policy Research Working Papers No. 7914). Washington, DC: World Bank. Retrieved from https://openknowledge.worldbank.org/handle/10986/25813

World Bank. (n.d.). *GCI 4.0: Global Competitiveness Index 4.0*. Retrieved from https://govdata360.worldbank.org/ indicators/ha03bec65?country=BRA&indicator=41472&viz=line\_chart&years=2017,2019