

Determinants of Foreign Direct Investment (FDI)

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Abstract

This study aims to identify the determinants of FDI from previous literature. It can be concluded that infrastructure can have a positive effect on FDI. It can also conclude that trade openness can cause FDI to escalate. Inflation can give negative results to FDI. Higher inflation may cause the return of FDI to be lower. Hence FDI drops. It can be said that there is a positive and negative link between corruption and FDI inflows. Market size can positively and significantly influence FDI. Therefore, the government should increase market size, infrastructure and trade openness but reduce inflation and corruption to increase FDI.

Keywords: Market Size, Infrastructure, Inflation, Corruption, Trade Openness, FDI

Introduction

According to UNCTAD (2021), foreign direct investment (FDI) refers to one of the components in a country's financial account in the balance of payments. FDI is foreign investments in owning lasting interest and control by foreign direct investors. It does not include foreign investment in the stock market. There are two types of FDI: inward and outward FDI. Inward FDI is the value of a direct investment that is made by investors who are not residents of the home country. Outward FDI is the value of a direct investment made by residents of other countries.

Inward direct investment is also called direct investment in the home country, including all liabilities and assets that belong to parent companies. This also includes the transfer of assets and liabilities between residents and non-resident companies. Outward direct investment refers to direct investment abroad, including investment in purchasing assets and liabilities that are transferred from one country to another. This also includes the transfer of assets and liabilities between resident and non-resident companies. Outward direct investment is also called direct investment abroad.

FDI is also a cross-border investment that is associated with residents in an economy that has control or a significant influence on the management of enterprises residing in other economies. Manual Balance of Payments 6th Edition (BPM6) has brought a change in the definition of direct investment by making it consistent with the definition by OECD, especially in terms of control and influences, treatment of investment chains and fellowships,

investment chains and fellow companies, and their presentation based on assets and gross liabilities, and so forth.

Figure 1.1 shows the global FDI inflows from 2005 to 2019. From the figure, it can be learnt FDI dropped significantly in 2017 and 2018 and increased back in 2019. FDI Inflows were 3% higher than in 2018 but still fell short compared to 2017, at \$ 1.54 trillion. The US received the largest FDI inflows, followed by China and Singapore. Japan, the United States, and the Netherlands are the world's largest investors. FDI inflows exceeded 2% of GDP in many economies in Eastern Europe, the Caucasus, Latin America and the Caribbean, Western, Central and Eastern Africa, Southeast Asia and Oceania.

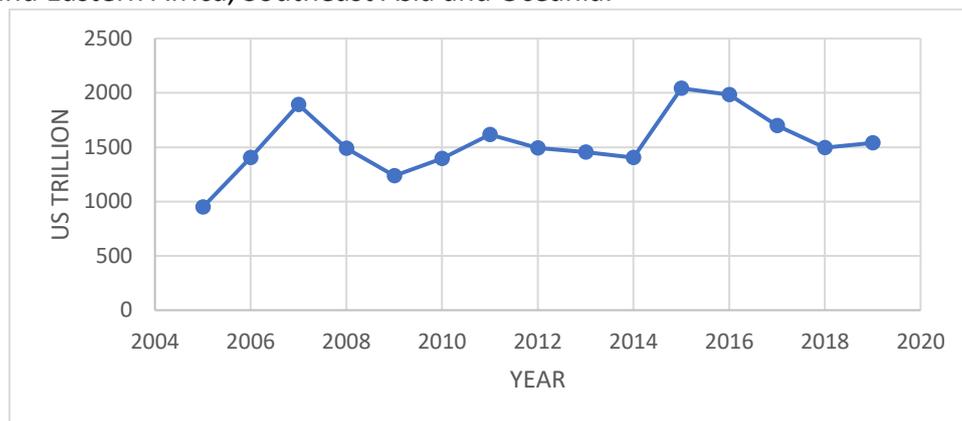


Figure 1.1: Global FDI Inflows
Sources: UNCTAD Handbook of Statistics (2020)

Figure 1.2 shows FDI inflows and outflows in 2020 across the globe. Based on the figure, it can be observed that FDI inflows were lower than FDI outflows in developed economies. In those countries, FDI inflows stood at US\$329 billion, and FDI outflows stood at US\$354 billion. In developing economies, FDI inflows were US\$670 billion and larger than FDI outflows standing at US\$386 billion. FDI in developing economies America shows that US\$ 88 billion in inflows and outflows is -4. For developing Asia and Oceania, the results are US\$543 billion in inflows and US\$388 billion for outflows.

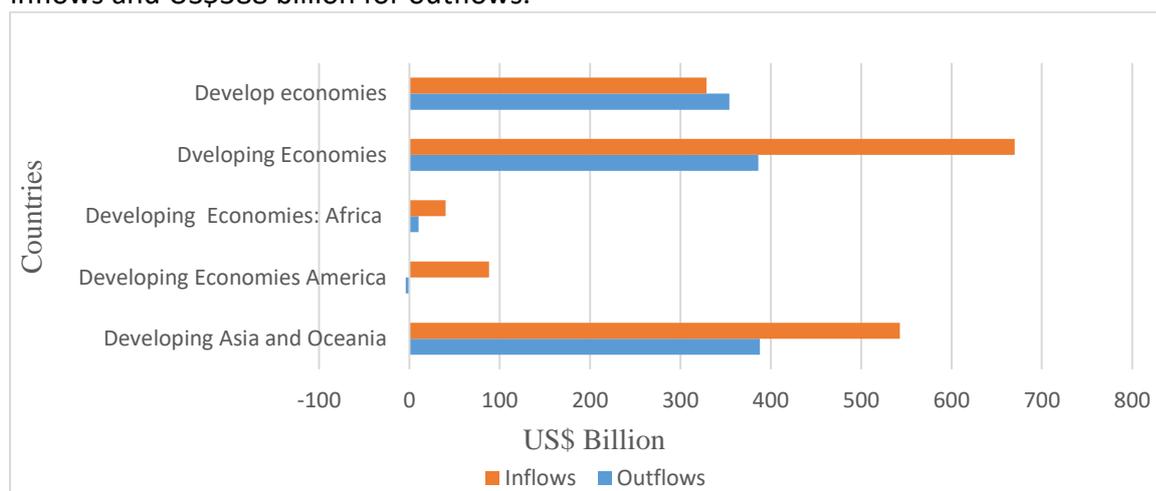


Figure 1.2: Foreign direct investment inflows and outflows (Billions of US dollars)
Sources: UNCTAD Handbook of Statistics (2020)

Figure 1.3 shows FDI outflows from advanced economies surged substantially in 2019, from US\$ 534 billion to US\$ 917 billion, a major increase over the previous year. The

resumption of outflows from North America was mostly responsible for the increase. Following a year of little negative FDI from the region in 2018, FDI from North America hit 15% of worldwide FDI in 2019. Asia and Oceania's developed economies have a similar percentage of the global economy (18 per cent). In Europe, developed economies account for twice as much as developing economies (36 per cent).

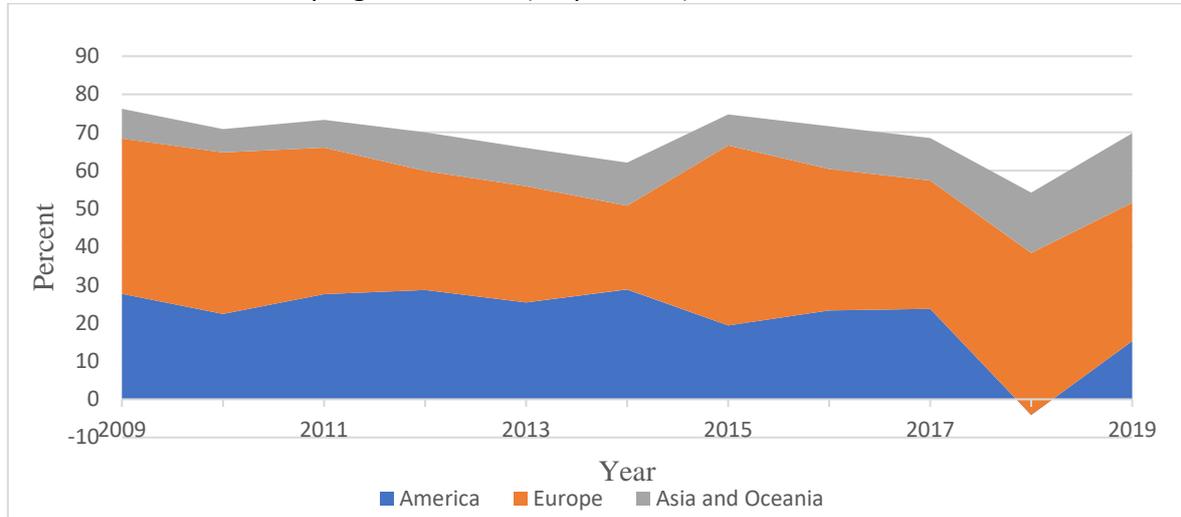


Figure 1.3: FDI outflows from developed economies
Sources: UNCTAD Handbook of Statistics (2019)

Figure 1.4 shows inflows to developing countries. Based on the figure, Asia and Oceania continue to be the most popular destinations for FDI in developing countries, accounting for 31% of global FDI. America's and Africa's developing economies receive 11 and 3%, respectively.

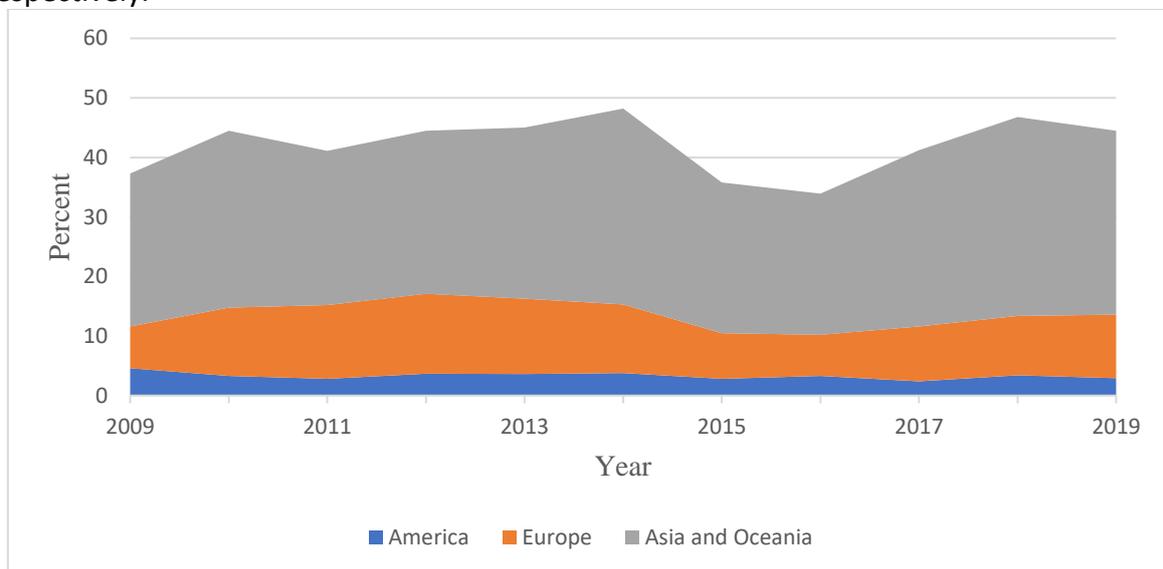


Figure 1.4: FDI inflows to Developing economies
Sources: UNCTAD Handbook of Statistics (2019)

Due to the declines in FDI inflows into many countries, especially the ASEAN+3 countries in the aftermath of the COVID-19 pandemic, it is imperative to find out the determinants of FDI inflows to ensure that it can be increased and higher economic growth can ensue. Many

previous studies have investigated the determinants of FDI however their findings are still mixed. Thus, it remains complex to formulate the right policies on boosting FDI.

Literature Review

According to Jaiblai and Shenai (2019), in their article FDI (FDI) stated that investment involves long-term relations between two countries, demonstrating a long-lasting interest. It is controlled by a resident entity from an economy (foreign direct investor or holding company) or by a resident enterprise other than FDI (FDI companies or foreign affiliates or associates). According to Polyxeni and Theodare (2017), FDI refers to the possession of capital or shaving in a country by investors from different countries. Besides, Vasileva (2018) stated that FDI is not the only robust tool in advancing the economic relationship between two other world economies. Still, it can also relate to higher productivity, employment, and GDP. FDI can pave the way for economic growth, and hence it merits attention from innumerable researchers to investigate various determinants of FDI, such as market size, infrastructure, etc. (Kumari & Sharma, 2017; Polyxeni & Theodare, 2017; Jaiblai & Shenai, 2019; Bakar, 2012). However, they produced inconsistent findings. From the review of previous literature, several factors that can potentially influence FDI, such as infrastructure, market size, inflation, corruption and trade openness, have been identified as follows:

i. Infrastructure

One of the factors that can influence FDI is infrastructure. This has been evidenced by many previous studies such as (Nguea, 2020; Sabir et al., 2019; Amune and Ogunjimi, 2019; Raghsifa et al., 2018; Wekesa et al., 2016; Ngangue, 2016; Nourzad et al., 2014; Ahmad et al., 2015; Bakar et al., 2012; Mohammadvandnahidi et al., 2012; Rehman, 2011; Seetanah and Khadaroo, 2009). They produced mixed findings on the effect of infrastructure on FDI, albeit with different methods. Rehman (2011) used the ARDL approach to analyse data from 1975 to 2008 and investigated the impact of infrastructure on FDI in Pakistan. The results revealed that there is a positive impact of infrastructure on FDI. The results were supported by Bakar et al (2012), who also investigated the effect of infrastructure on FDI. Bakar et al (2012) used a different method, namely OLS, to analyse data from Malaysia. The findings showed a strong positive correlation between FDI and infrastructure quality. From that, it means that countries with a higher level of aggregation can attract FDI since better quality infrastructure would allow multinational corporations (MNC) to operate at their optimal efficiency level.

The role of transportation infrastructure in improving the attractiveness of FDI has been investigated by Seetanah and Khadaroo (2009) in 25 African countries from 1985 to 2004. They used a dynamic panel data analysis. The analysis results showed that transport capital becomes a catalyst for making the countries attractive to foreign investors in the short and long run. Transportation and other infrastructure development are essential elements to attract FDI inflows. This study is also crucial for African countries as it shows things that need to be improved to increase FDI.

Mohammadvandnahidi et al (2012); Ahmad et al (2015); Amune and Ogunjimi (2019); Nguea (2020) used the ARDL approach to study the long-run and short-run relationships between FDI and infrastructure. Mohammadvandnahidi et al (2012) covered data between 1975 and 2007 in Iran. The results also indicated that infrastructure is vital in explaining FDI in the long run in Iran. Infrastructure has a positive impact on FDI, according to the findings. This argues that to attract more FDI, Iran needs to invest in infrastructures such as roads, airports, telephones, internet connectivity, and water,

The role of infrastructure on FDI was also investigated by Ahmad et al. (2015) in Malaysia attempted from 1980 to 2013. The study used time series data from Malaysia to determine the impact of infrastructure on FDI using the ARDL method. The study provided empirical evidence on the importance of infrastructure in attracting foreign investors. The results indicated that telecommunication infrastructure has a significant and positive impact on FDI. To ensure high-quality communication services are supplied at competitive prices, the government needs to collaborate with the private sector to invest in research and infrastructure development. The country's socio-economic development will improve if efficient telecommunication services can be achieved. Water and electricity supply are also important factors in attracting foreign investment.

Besides, infrastructure can affect FDI in Nigeria, supported by Amune and Ogunjimi (2019) using data from 1981 to 2014. The study employed the ARDL method to determine the long-run relationships between the variables. The results showed a long-run relationship between infrastructure and FDI in Nigeria. The infrastructure considered in this study is electricity production, telephone lines and tractors which are essential drivers of production in the manufacturing, services and agricultural sectors. Similarly, Nguea (2020) divided infrastructure into energy, transportation, and communication. However, mixed findings were presented. The study employed the ARDL approach to analyse data from 1984 to 2014, and the results showed that communication infrastructure could positively and significantly impact FDI in the long and short run. Energy infrastructure can also negatively impact FDI substantially both in the long and short run. Lastly, another infrastructure (transport) also has a negative and insignificant impact on FDI in the long and short run. Other than that, the findings imply that the effect of infrastructure on FDI is sensitive to the infrastructure measure used. Based on this study on Cameroon, infrastructure plays a vital role in attracting FDI inflows, as evidenced by the results on communication infrastructure that can impact FDI.

Nourzad et al (2014) investigated the relationship between FDI and infrastructure. The study used a panel data analysis on 46 countries from 1980 to 2000. The size of transportation, power generation, and telecommunications was used as a proxy for infrastructure. The results showed that the entire host infrastructure base countries, in terms of all three types of infrastructure capital, could help increase FDI slightly. However, individually, only power generators appear to make a statistically positive contribution to FDI growth, even at a relatively low confidence level. Ngangue (2016) also supported the findings of (Nourzad et al., 2014). However, the studies used electricity consumption and the number of fixed telephone lines as a proxy for infrastructure, and GDP, population, inflation and openness were treated as control variables. Based on data from 55 countries over the period 1990-2014, the results showed that electricity infrastructure contributes to the attractiveness of FDI in developing countries. However, an improvement in fixed telephones does not attract foreign investors in developing countries compared to African countries. Therefore, it is vital to encourage electricity infrastructure development to sustain energy. This will attract FDI and ensure economic growth.

The effects of infrastructure development on FDI in Kenya were investigated by (Wekesa et al., 2016). The study divided infrastructure into several types, particularly transport, energy, communications, and water and waste infrastructure development on FDI inflows in Kenya. The study used annual time-series data, and a multiple regression analysis was employed. It supported the evidence that improving transportation infrastructure, communication infrastructure, and water and waste infrastructure can influence FDI inflows

into Kenya. This is because quality infrastructure provides opportunities to investors to have a conducive investment environment, and thus they can operate well.

In Indonesia, the causal relationship between transportation infrastructure and FDI was analysed by (Raghdsifa et al., 2018). The study used time-series data from 1987 to 2017 and analysed using the Vector Auto Regression (VAR) analysis followed by the VECM analysis. In the study, transportation infrastructure can influence FDI. This indicates that if the government is trying to improve transportation infrastructure, it will affect foreign investment coming into Indonesia. However, in this research, the Granger Causality test was conducted. The results found that transportation infrastructure and growth economics variables have no causal relationship but only a one-way relationship. The government must increase the availability of transportation infrastructure in the long run.

The impact of infrastructure on FDI inflows in developed countries was investigated by (Sabir et al., 2019). The countries were categorised into high-income and upper-middle-income countries. for the period 1996-2016. The findings show that infrastructure positively impacts FDI in developing countries. Developing infrastructure will increase the country's productivity and thus attracts more FDI. The magnitude of the coefficient of infrastructure in high-income countries is more significant than that in upper-middle-income countries.

ii. Trade Openness

Several studies have ascertained that trade openness plays an essential role in influencing FDI (Duong et al., 2020; Ngo et al., 2020; Ridzuan et al., 2018; Donghui et al., 2018; Guris & Gozgor, 2015; Tahmad & Adow, 2018; Makoni, 2018). Most previous studies employed panel data analyses, and a few used time-series data analyses. However, their findings are consistent. Guris and Gozgor (2015) found that trade openness can Granger cause FDI in Turkey. Based on the results of the variables, Turkey is a country with the potential to grow along with openness. However, openness means more funding needs, which mainly meets portfolio investment. The Granger causality method was employed to analyse data from 1986 to 2010. Their findings were supported by Donghui et al (2018), who used the pooled OLS method to examine the impact of trade openness on FDI in Pakistan, Iran, and India from 1982 to 2012. FDI inflows in India, Iran and Pakistan have been influenced by trade openness.

In the Sudanese economy, Tahmad and Adow (2018) looked at the long-run equilibrium link between trade openness and FDI by sector from 1990 to 2017. The Johansen cointegration technique was used in the research. When considering trade openness in terms of exports plus imports surpassing GDP, the data revealed a long-run equilibrium link between trade openness and FDI inflows expected to be negative for the aggregate economy. An export index, or the export efficiency of funds, was applied in this research. The estimated levels of openness for the aggregate economy, agricultural sector, and industrial sector were 0.17, 0.9, and 0.55, respectively. The findings also revealed that overall trade openness determines FDI inflows into aggregate economies by sector. Furthermore, the industrial trade openness model has a significant impact, and the government should prioritise this sector in terms of exports.

The effect of trade openness on FDI using a panel data analysis on nine African countries was examined by Makoni (2018) from 2009 -to 2016. The findings revealed that trade openness has a strong impact on FDI. Trade openness has increased FDI inflows by increasing foreign investors' confidence that they will be able to transfer their revenue to their home country. Furthermore, while finding a strong but small correlation between trade openness

and FDI in this situation, they concluded that the more open a host country is in trade and capital, the higher its chances of attracting and profiting from FDI.

Then, Duong et al (2020); Ngo et al (2020) focused on the relationship between free trade openness and FDI in Vietnam. Duong et al (2020) used a panel data analysis from 1997 to 2016 from Vietnam's 17 prominent foreign investors between 2005 and 2016 from 23 Vietnam's trade partners. The study supported that trade openness can pave the way for an increase in FDI. The results showed that free trade agreements (FTAs) could spur FDI inflows to Vietnam throughout the period, with a much stronger effect on later sub-periods. This indicates that FTAs have been one of the drivers for FDI to enter the efficient country of Vietnam. Thus, the more Vietnam's involvement in economic integration through FTAs, the more likely it is to drive FDI inflows, and the more influential the FTA will be in negotiations. Based on these results, trade results, factor allocation, and interaction terms between FTAs and factor endowments indicate the dominance of vertical FDI in Vietnam, which is in line with the theoretical reasoning that shows that vertical FDI is more prevalent in developing countries.

The impact of trade openness on FDI in Vietnam was also examined by Ngo et al (2020) for panel data from 2000 to 2019. The study used the Generalised Methods of Moments (GMM) and Pooled Mean Group (PMG) techniques. The findings suggest that Vietnam should develop a policy of growing internal trade, which was represented in policy announcements to countries and other enterprises. However, the practical impact on FDI attraction is not fully demonstrated; trade openness has a short-term negative impact on FDI inflows. As a result, trade expansion should have a broad impact in many areas in the future. Furthermore, trade openness should reflect perfect legal structures for investors in general, foreign investors, and explicit transparency and rationality at all levels associated with FDI projects.

iii. Inflation

Despite many studies that have been done on the relationship between inflation and FDI (Alshamsi & Azam, 2015; Omankhanlen, 2011; Vasileva, 2018), there is still no consensus on whether inflation can affect FDI. Some studies, such as Alshamsi and Azam (2015), found no significant relationship between inflation and FDI. Alshamsi and Azam (2015) used the ARDL method to analyse data from 1980 to 2013. They found that inflation has no effect on FDI in the United Arab Emirates. As long as inflation does not exceed a certain level, inflation may not harm FDI. As a result, the government must ensure that inflation does not rise above the current or recent inflation rate, as this will harm FDI inflows.

Omankhanlen (2011) also found no connection between inflation and FDI in Nigeria by using the OLS method to analyse data from 1980 to 2009. However, Mason and Vracheva (2017) argued that inflation could reduce FDI. The study employed the fixed effects method to analyse data from developed and developing nations. The results were divided into several categories: i. a positive relationship between inflation and FDI, ii. a stronger relationship between these variables in developed than in developing nations, iii. a stronger relationship between the variables in lower-middle than in upper-middle-income developing nations. Based on the results obtained by this article, developing countries should practice this inflation targeting policy. However, Valli et al (2014) argued a long-run link between inflation and FDI inflows in South Africa, meaning that an increase in inflation would cut the level of FDI received. They used time-series data analysis to meet their research goals, using data from 1970 to 2012.

Rashid et al (2017) investigated the effects of inflation on FDI in the construction sector in Malaysia. Inflation was believed to play a significant role in FDI in the sector as it has been considered the most important factor in bringing in investment to Malaysia. If labour costs in the construction sector are too high, it is not easy to convince foreign investors to invest in the construction sector in Malaysia. Therefore, the Malaysian government must be mindful of raising the minimum wages as it can cause rising labour costs and thus prompts a decline in total FDI inflows in the construction sector in Malaysia. Therefore, any inappropriate monetary policies may affect inflation in Malaysia.

According to Mustafa (2019), there are various reasons why the dynamic interaction between FDI and inflation has to be researched. First, FDI has become one of the most important determinants of Sri Lanka's economic growth and development. Because high inflation rates hinder FDI inflows into the Sri Lankan economy and limit economic growth and development, the literature addressing the causal relationship between inflation and FDI is important. Mustafa (2019) explored the relationship between foreign direct investment (FDI) and inflation in Sri Lanka from 1978 to 2017. The Johansen cointegration, simple regression model, and Granger causality approaches were employed. The results suggested there are long-run relationships between the variables found. There is only a unidirectional relationship running from FDI to inflation.

In addition, Agudze and Ibhagui (2021) discovered a link between inflation and FDI. They looked at how inflation affected FDI in 74 countries divided into developed and developing economies. The findings revealed that the link between inflation and FDI is not linear, with evidence of threshold effects in both developed and developing nations. According to this article, the inflation threshold in the developing world is about five times greater than in the developed world. After crossing the barrier, inflation in industrial economies tends to reduce FDI. In developing countries, it negatively influences FDI even before it reaches the threshold, implying a long-run mixed relationship between inflation and FDI.

In Malaysia and Iran, Hong and Ali (2020) looked at the impact of inflation on FDI. The study's testing period spanned from 1986 to 2016. The short-run and long-run relationships between the variables were investigated using Johansen cointegration and Granger causality based on VECM approaches. Finally, the variance decomposition was carried out. The outcomes of this study suggested that inflation may impact FDI in the long run.

Given that FDI is one of the most important contributors to the country's economic growth, the government should pursue supply-side measures to lower inflation and boost FDI. The supply-side policies aim to improve long-term competitiveness and productivity. The policies can mitigate inflationary pressures in the long run. Economic competitiveness will be enhanced, and the country can increase productivity and aggregate supply. The country's increased economic competitiveness will entice more international investors to invest. As a result, FDI will rise.

iv. Corruption

Several studies support the helping hand theory suggesting that high levels of corruption can increase FDI inflows (Bellourmi & Alshehry, 2021; Moustafa, 2021; Jan et al., 2019; Karim et al., 2018). Helmy (2013) investigated the impact of corruption on FDI inflows in MENA countries. The study analysed data from 2003 to 2009 using the panel Generalized Least Square (GLS) method, and the results showed that corruption does not reduce but increases FDI in MENA countries. Employing the GMM method for 53 countries in Africa, Quazi et al. (2014) also found a positive relationship between corruption and FDI inflows, and thus this

supported the helping hand hypothesis. Jan et al. (2019) also supported the findings of Quazi et al. (2014) and Helmy (2013) as they also found a positive link between corruption and FDI inflows in East Asian countries. In the Gulf Cooperation Council countries (GCC), Bellourmi and Alshehry (2021) noted that a higher level of corruption was found to bring more FDI into the region.

In single country cases, Omodero (2019) investigated the effect of corruption on FDI inflows in Nigeria from 1996 to 2017, supporting the helping hand hypothesis that corruption can boost FDI inflows. Moustafa (2021) focused on the case of Egypt from 1970 to 2019. The results of the Johansen cointegration and VECM methods disclosed that corruption could cause positive FDI inflows. Zangina and Hassan (2020) employed the nonlinear autoregressive distributed lag (NARDL) to analyse Nigeria's data from 1984 to 2017. The results showed that corruption does not have an asymmetric relationship with FDI in the long run. However, there is a positive and significant relationship between corruption and FDI at further stages. Therefore, Nigeria needs to control corruption to attract more FDI. Omodero (2019) investigated the impact of corruption on FDI inflows in Nigeria using several control variables. This study covers a data period from 1996 until 2017. From the study's findings, it can be learned that corruption has a significant positive impact on FDI in Nigeria. This will be due to Nigeria's poor legal and institutional framework quality that helps corruption prevail in all areas of Nigeria. This situation, if persistent, may harm the younger generation.

Qureshi et al (2020) examined the dynamic relationship between corruption and FDI. This study employed the autoregressive aperture vector model (PVAR) method to determine the relationship in 54 developed and developing countries from 1996 to 2018. The study's findings found that corruption can increase FDI inflows and economic growth. Poor institutional quality and high corruption can increase investment and economic growth in developing countries. However, in developed countries, corruption can reduce FDI. This means that good institutional quality and high corruption can increase costs to foreign investors to invest in developed countries.

Gossel (2018) investigated the relationship between democracy, corruption and FDI in 30 countries in Sub-Saharan Africa (SSA) from 1985 to 2014 to determine whether the hypothesis of 'helping hand' or 'grabbing hand' was supported in this study. The results of GMM analysis showed that corruption could help FDI investors overcome democracies in the regional regulatory and institutional status, and thus 'helping hands' were supported. However, further results suggested that when democratic capital accumulates, these associations may live longer usefulness, and thus corruption as a 'helping hand' becomes a 'grabbing hand' instead. The results also indicated that the SSA countries should emphasise integration into the global economy to maintain existing financial enforcement legislation while rebuilding and strengthening anti-corruption in government institutions.

Egger and Winner (2005) examined the relationship between corruption and FDI inflows using a data set of 73 developed and less developed countries and found a correlation between corruption and FDI between 1995 and 1999. The findings showed the short-run and long-run positive effects of corruption on FDI, providing empirical support that corruption can help boost foreign investment in 73 developed and less developed countries more often, studies support the grabbing hand theory, arguing that corruption raises the cost of investing, reducing profits, and thus FDI inflows will drop (Alshehry, 2020; Luu et al., 2018; Gasanova et al., 2017). Castro and Nunes (2013) stated that reducing bribery and corruption practices was critical as it lowers the attraction of investment destinations, thus depressing FDI inflows.

Their results based on data ranging from 1998 to 2008 using the panel GLS method revealed that high levels of corruption could reduce FDI inflows in 73 countries.

Similar findings of Castro and Nunes (2013) were supported by Gasanova et al (2017), who found evidence of the helping hand theory. A significant association between corruption and FDI inflows in different group countries suggested that corruption harms investment. The study observed the pattern of FDI inflows in countries with a low level of corruption, countries with a high level of corruption and countries with an intermediate level of corruption. The findings showed that countries with a low level of corruption experienced high FDI inflows. However, there is an exception for BRIC countries as they ascertained that these countries with a high level of corruption still experienced high FDI inflows.

In the ASIA-Pacific region, the impact of corruption on FDI inflows has also been examined (Canare, 2017). The GMM method was employed to analyse 46 countries from 2006 to 2013. The overall results showed that corruption could reduce FDI inflows. However, the author failed to find significant evidence of the corruption - FDI nexus in low-income and middle-income countries. Similar results were also found by Luu et al (2018), who expanded the sample into 131 countries using the GMM method. Alshehry (2020) explored the relationship between corruption and FDI inflows in MENA countries. However, their results do not support those of Helmy (2013), who conducted a study on the same countries, providing new evidence on corruption reducing FDI inflows in the region.

A limited number of studies examined the impact of corruption on FDI inflows in the ASEAN countries. For example, Karim et al (2018) investigated the effect of corruption on FDI inflow in the ASEAN-5 countries from 1995 to 2014. The study employed the POLS method, and the results showed that corruption could reduce FDI inflows. With a combination of two methods, namely fixed effects and GLS, Kennedy (2018), who investigated the impact of corruption on FDI inflows in Indonesia, also found the same results. Chandran et al (2021) investigated whether corruption can impact FDI inflows in Malaysia. The study employed the ARDL approach to analyse data from 1995 to 2016, and the results showed that corruption would increase FDI inflows. Canare (2017) investigated the influence of corruption on FDI in 46 Asia and Pacific nations from 2006 to 2013 using the GMM estimator. The findings indicated that a reduction in corruption could lead to an increase in FDI. In general, countries with little corruption will obtain more FDI. More FDI will come into countries that execute reforms and minimise corruption. However, the link was insignificant when just low- and middle-income nations were considered in the data set. Corruption is more likely to discourage FDI. It adds to investors' costs, increases risk, and makes dealing with it more difficult, especially if investors are not exposed to it much in their home countries. Investment in nations with high levels of corruption is restricted by laws such as the Foreign Corrupt Practices Act (FCPA).

Epaphra and Massawe (2017) focused on 5 East African countries using data from 1996 to 2015. The same results were obtained with a negative relationship between corruption and FDI. However, Shaari et al (2020); Alemu (2012) argued that corruption could cause FDI to increase. Shaari et al (2020) employed the panel ARDL method and analysed data from 1995 to 2017 to examine the impact of corruption on FDI. The results showed that higher corruption could increase FDI in the long run but not in the short run. Among the ASEAN +3 countries, only Thailand shows a negative relationship between corruption and FDI. This is because corruption can make it easy for foreign investors to invest without unwieldy bureaucracy.

Luu et al (2018) focused on 131 countries using data from 2003 to 2015. The study also looked into the relationship between FDI and corruption. The results of this study showed that corruption could considerably reduce FDI inflows. However, when the two primary components of FDI, namely green farm investments and cross-border M&A, were examined independently, these findings proved conflicting. When corruption has been consistently impeding cross-border M&A, it appears to have a favourable impact on Greenfield investment. The studies investigated the impact of corruption on FDI and its modes of entry in various nations. To put it another way, this review emphasises changes in societies and economic conditions across time, allowing academic researchers, policymakers, and business practitioners to draw broad conclusions from the empirical findings.

Using the Pooled Mean Group (PMG) panel data estimate method, Karim et al (2018KA) investigated the impact of institutional and macroeconomic variables on FDI (FDI) in MENA nations (the Middle East and North Africa). The ARDL model was applied, and the study's findings revealed that corruption has a long-term detrimental impact on FDI in the MENA nations. This suggests that a higher level of corruption in the nations can boost FDI inflows. This study corroborated those of Egger and Winner (2005), who performed research in 73 developing and developing countries. They discovered that a higher level of corruption could attract more FDI inflows, particularly in low-income nations. This is because government officials have exploited discretionary administration and bureaucracy to receive benefits from foreign investors, and this wrongdoing is seen as a helping hand in the long term.

Quazi et al (2014) analysed the effect of corruption on FDI inflows in East Asia and South Asia, which both have recently experienced significant FDI inflows. With panel data from 1995 to 2011, the study used the GLS approach. The study discovered that corruption has a negative and significant influence on FDI. As a result, these countries should strive to eliminate corruption by enforcing existing anti-corruption regulations and developing new methods to attract more FDI.

Türedi (2018) applied static (fixed effect) and dynamic panel data analysis, i.e., two-step GMM difference and two-step GMM system, to examine the influence of corruption and national risk on FDI inflows in 49 developing countries from 2002 to 2015. In 49 developing nations, the empirical data revealed that lowering corruption and national risk can promote FDI. Corruption is an indicator of bad institutional quality. Hence creating an effective and high-quality functional organisational structure to control or decrease corruption is critical. This may restrict foreign corporations from operating autonomously while simultaneously increasing the efficiency of government administration. It can make it more open and accountable, and removing red tape from bureaucratic systems can reduce corruption and expenses (raising profits), making developing countries more appealing to foreign investors.

Azam (2013) investigated the impact of corruption on FDI inflows in 33 less developed countries (LDCs) for the period 1985 to 2011. The study used a panel data approach, and the results revealed that corruption is an important factor influencing FDI inflows in LDCs. Multinational companies (MNCs) tended to avoid countries with high corruption rates, resulting in less FDI flowing into the countries. These countries need to take dynamic action to reduce corruption and pay attention to constantly checking and balancing that undesirable factor. This is intended to help increase foreign investment and strengthen the economic growth of the host countries. According to Zaki (2020), the country requires FDI, but corruption is among the greatest obstacles. Theoretically, there is a negative relationship between FDI inflows and corruption. FDI inflows would be negatively impacted by corruption. This is because corruption raises costs and diminishes FDI advantages; it demonstrates that

corruption worsens the competitive trade environment; corruption discourages foreign investors by protecting domestic investors, and corruption has a detrimental influence on foreign investor productivity. As a result, countries must fight corruption to attract more FDI for long-term economic progress. Due to the mixed findings from the previous studies, it remains uncertain whether corruption can positively or negatively affect FDI. Therefore, this study is still relevant to reinvestigating the effect of corruption on FDI.

v. *Market Size*

Many previous studies concluded that market size could positively influence FDI (Amponsah et al., 2019; Nasir, 2016; Petrovic-Randelovic et al., 2017; Goh & Wong, 2011). Economic growth and GDP were used as a proxy for market size. Most studies employed panel data analyses to examine whether there is a significant relationship between market size and FDI. Nazir (2016) used the OLS approach to investigate the effect of market size on FDI in Malaysia from 1980 to 2010. The study found that market size can positively and significantly influence FDI.

Botric and Skuflic (2006) analysed market size as a determinant of FDI in the SEEC-7 from 1996 to 2002. The study found that market size can positively and significantly influence FDI. The determinant outcomes in this article can be divided into three categories: the host country's economic fundamentals, economic performance, and the country's economic attractions. FDI is influenced by the size and potential of a country's economy, natural resource availability and labour quality, openness to international commerce and access to global markets, and the quality of physical, financial, and technological infrastructure. This is how SEEC will be able to attract additional international capital. The impact of market size on FDI in this portion of Europe was explored using panel data analysis. The findings of this article showed a significant relationship between market size and FDI.

Wadhwa and Reddy (2011) examined the effects of a market search, efficiency search, and host country resource sourcing on FDI inflows in host countries using a sample of 10 Asian nations from 1991 to 2008. Using the fixed-effect approach, the study of 10 developing nations found that GDP and exports would have a substantial and positive association with FDI among the market search determinants. Only GDP and FDI were discovered to have a substantial and positive association.

Goh and Wong (2011) focused on the relationship between market size and FDI in Malaysia. Data ranging from 1997 to 2016 were employed. Using a combination of multivariate modelling and error correction approaches, the study added to the empirical literature on Malaysia's FDI outflows by examining the influence of measuring overseas markets and local international reserves. The research findings revealed a positive long-run association between Malaysian FDI outflows and important factors such as foreign market size. The key findings indicated that in addition to incentives to seek markets and implement outward-oriented policies, governments in Malaysia could also encourage OFDIs to enforce liberal policies on capital outflows. Based on these findings, we draw some policy implications for the country's economic development and the internationalisation of Malaysian firms in the era of globalisation. The results are helpful for intended government policies encouraging OFDIs from Malaysia and important for Malaysian MNCs that have the potential to use appropriate business strategies to internationalise their business activities overseas to be more advanced.

Economou et al (2017) applied standard fixed effects as well as a dynamic panel approach to study 24 Organisations for Economic Cooperation and Development (OECD) and

22 developing nations (non-OECD) from 1980 to 2012. The study considered a group of developing countries to improve their proportion of global FDI inflows. Amponsah et al (2019) supported the finding, examining the impact of market size on FDI in 85 developing countries by using the panel OLS method from 1981 to 2014. The results disclosed that market size is an essential determinant of FDI. Petrovic-Randelovic et al (2017) also employed the same method and obtained the same results. However, Akin (2009) argued that market size does not relate to FDI. The study used the panel OLS method to analyse data from developing countries, and the results revealed that a larger market size does not significantly impact FDI. Sasana and Fathoni (2019) analysed whether market size can influence FDI in the ASEAN countries, namely Cambodia, Indonesia, Malaysia, Philippines, Thailand, and Vietnam, from 2007 to 2016. The method used to analyse the data was multilinear regression. This study shows that market size positively affects FDI based on the results. This research suggests that a more expansive market size will benefit foreign investors to make more products.

Conclusion

This study aims to identify the determinants of FDI from previous literature. It can be concluded that infrastructure can have a positive effect on FDI. For example, better transportation, power generation, and telecommunications may boost FDI. The findings also show that infrastructure positively impacts FDI, especially in developing countries. It can also conclude that trade openness can cause FDI to escalate. Trade openness means more funding is needed, which mainly meets portfolio investment. Trade openness can also give negative results, as in Ngo et al (2020) studies. Trade openness has a short-term negative impact on FDI inflows. Trade expansion should have a broad impact in many areas in the future.

Furthermore, trade openness should reflect perfect legal structures for investors in general, foreign investors, and explicit transparency and rationality at all levels associated with FDI projects. Inflation can give negative results to FDI. Higher inflation may cause the return of FDI to be lower. Hence FDI drops. It can be said that there is a positive and negative link between corruption and FDI inflows. Market size can positively and significantly influence FDI. Therefore, the government should increase market size, infrastructure and trade openness to boost FDI. However, as for inflation and corruption, the government should reduce them to increase FDI.

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