# **Key Drivers of ASEAN Foreign Direct Investment**

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### Abstract:

This paper examines the determinants of inward foreign direct investment (FDI) across four sectors (extractive, infrastructure, manufacturing and service sector) in selected six ASEAN countries (Malaysia, Indonesia, Singapore, Thailand, Vietnam and Philippine). Deploying seven institutional factors as the determinants of inward FDI (voice and accountability, political stability, government effectiveness, rule of law, regularity quality, control of corruption and technology activity index), this study adopts Static Panel Data approach as an estimation method that covers 16-year study period from 2001 through 2016. The empirical findings reveal that both country-specifics and sectorial-specifics influence the relative strength of these key FDI determinants and that every sector requires a discrete policy in attracting more FDI. Furthermore, the study reveals that one specific sector cannot be subsumed with other sectors nor can the distinctiveness of each sector be ignored. Any policy study that incorporates all sectors into a single inward FDI is likely to misguide practitioners as well as policy makers.

**Keywords:** Foreign direct investment, ASEAN, sectorial level foreign direct investment, institutional forces, Panel data.

### 1. Introduction:

Increase of inward FDI across the countries is one of the most obvious signs of globalization of world's economy. FDI flows mainly to strengthen the economic relationship among different countries and the reason for this is for the government of a particular country to gain more attention from potential foreign investors and this will result in FDI being more attractive than conducting trade between two different nations/among different nations. Donciu (2013)

considers FDI "the peak" of globalization process because of the increasing flow of private capital among different countries. The growth of FDI rapidly increases since 1990s and there was a noticeable change in the economies of many developing countries

While looking into the world FDI index inward FDI which has declined about 23% to \$1.9 trillion in 2017 from \$ 2.3 trillion in 2016, there was still an increase of FDI in ASEAN by 12%. Inward FDI to ASEAN rose to a record level in 2017 that is from \$123 billion in 2016 to \$137 billion. And for this reason, ASEAN region has become the world's largest recipient of inward FDI in 2017. The rise in inflows helped ASEAN to push up the portion of FDI from 18 per cent in 2016 to 20 per cent in 2017 in developing economies and from 31% to 34%, specifically in East and South-East Asia in 2017, which makes ASEAN more attractive for further studies. A major decrease in world inward FDI was due to a decline in developed countries by a decrease of 40% inflows to the US and 92% in the UK.

In modern era, the policy makers and researchers take keen interest to find out the best policies to attract more FDI and consider it compulsory for the economic development of developing countries. This is because it helps in bringing capital, improving managerial skills, creating global links and having direct access to advanced technology of developed countries.

Multinationals invest and expand in ASEAN in a wide range of areas, from agriculture, mining, power plants, buildings and manufacturing to services, which means FDI come into this rapid economic region in many different sectors. There have been studies available related to the determinants of inward aggregated FDI including Asiedu (2001), Raza (2015), Asongu et al (2014) and Gastanaga (1998), but very little attention is given to the topic related to sector-wise inward FDI.

Earlier studies have only looked up at the relationship of FDI with different macro-economic variables considering aggregated FDI, but looking at the sectorial level relationship has been ignored. There is an observable lack of research into FDI determinants on the sectoral level, which is a point of interest for further studies and it needs to be further explored since FDI is related to industry rather than to countries (Buigues and Jacquemin, 1994)

This paper solely emphasises on the key determinants of FDI in different sectors (extractive, manufacturing, infrastructure and service sector) in six ASEAN countries namely Thailand, Singapore, Indonesia, Malaysia, Vietnam and Philippine.

## 2. Literature Review:

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Regardless of the existence of enormous data associated with determinants of FDI, findings are still insufficient. Charlton and Alfaro (2013), Alfaro et al (2004), and Nunnenkamp and Spatz (2004) indicate that one of the major causes of the vague empirical results on the factors of FDI is the utilization of highly aggregated FDI data, while the factors to attract FDI depend on sectors that collect FDI. This is due to the difference in transfer, connections, and spillover effects across the different sectors. A number of researchers discussing aggregated inward FDI shift from one country to another country or from one region to the other region, but there is a lack of study related to the shift of FDI from one sector to the other sector. This study analyses the pattern of sectoral FDI. In the early 20th century, ASEAN FDI was accumulated and was focused mainly in extractive sector (mining, quarrying and plantation) which was just limited to the resource rich countries, whereas countries with scarce resources were deprived of inward FDI. Since then, the shape of FDI has been changed and they shifted toward manufacturing sector in the late 20<sup>th</sup> century which creates opportunities for the less-resource endowed countries to prospective growth and prosperity by attracting more FDI. Recently FDI is extended from manufacturing sector to service and infrastructure sector. Therefore, this study focuses on FDI inflow in all these four sectors that include extractive, manufacturing, infrastructure and service sector. This indicates that FDI comes into ASEAN region in different sectors which lead to distinctive benefits and requires appealing policy challenges that each sector requires to be considered on its own term.

Factually, behind FDI there are several theories which have been developed based on perfect market assumptions and imperfect market assumption including neo-classical trade theory, monopolistic advantage theory, product life cycle theory, internalization theory and eclectic theory.

Theoretical background of FDI starts from 1500 where there was just a concept of mercantilism. Adam Smith (1776) was the first who developed international trade approach which states that two countries with different production efficaciously may have valuable trade with each other to satisfy their country needs. Furthermore, Ricardo (1817) suggested that trade should be focused on opportunity cost. Factor endowment and Linder hypothesis are followed by Adam Smith and Ricardo. However, previous theories based on perfect market assumptions do not exist nowadays and they reflect insufficient data to describe international trade as a result of the emergence of market imperfection theory (Osorio, 2008).

Monopolistic advantage theory presented by Hymer (1960) was the first theory based on perfect market assumptions. He was the first who worked on multinational operations and state, ownership advantages as a key factor for inward FDI. His study is followed by an internalization and product life cycle theory by Buckley and Casson (1985), Vernon (1966) and the most important and famous OLI Paradigm theory by Dunning (1987), which aims to identify the key determinants of inward FDI.

A number of studies that focus on ASEAN region, such as Masron and Abdullah (2010) study the impact of institutional factors on FDI flows into ASEAN for the period 1996-2008 by applying Panel Data model. They find an indication that improved institutional quality is the main determinant of FDI. Mina (2007) studies the location determinants of FDI flows to the six Gulf countries for the period 1980-2002 by applying Panel Data model. He unexpectedly reports that oil production, oil reserves, and oil prices could reduce FDI inflows. He also states that better institutional quality may increase FDI inflows into the country. Masron and Naseem (2017) analysis also reveals that institutional quality is an important and significant factor for attracting FDI inflows into ASEAN. However, these studies analyses aggregated data for FDI to identify the key determinants to attract inward FDI.

Irfan and Khan (2017) in their study conclude that institutional factors play an important role in attracting FDI inflows in the ASEAN region as compared to Central Asian and SAARC regions. Kurul and Yalta (2017) in their study observe the relationship between inward FDI's and institutional factor and FDI (foreign direct investment) inflow in 113 developing countries by using a Dynamic Panel model over a period of eleven years, from 2002 to 2012. The empirical results show that some institutional factors matter more than others in attracting more FDI flows.

Gani (2007) assumes that if the government improves the control on corruption, stabilizes the political system, enhances the regulatory quality, and the effectiveness of a government, these bring about positive impacts on inward FDI for some countries of Latin America.

By testing a set of institutional variables, Gastanaga et al. (1998) find that low levels of corruption increase inward FDI. Asiedu (2006) shows that inefficient institutions such as corruption, a lack of the rule of law, and political instability decrease inward FDI into the country. Daude and Stein (2007) also examine the quality of governance institutions effect

on inward FDI and find that excessive regulatory quality, and a lack of commitment of government discourage inward FDI.

Wheeler and Mody (1992) find that corruption, political instability, and government effectiveness do not affect the investment decisions of US multinationals. Findings of study of Globerman and Shapiro (2002) and Buchanan et al. (2012) conclude that the index of Government effectiveness has a positive effect on FDI flows. Skabic (2013) study suggests that among institutional factors, only corruption has significant impact on inward FDI in southeast Europe. Other factors do not have significant variables.

The results of Wang and Swain (1997) show that political stability is the major determinants of FDI in Hungary and China. However, they use aggregated FDI and consider FDI as a single phenomenon. Yong, Yew, Huang and Chin (2016) examine the determinants of inward FDI for the three regions of China. Their estimation result shows that factors affecting FDI vary among the three regions of China. However, all of the above researchers aggregated all of the FDI together to seek some relationships to the host country growth. A number of studies conducted related to natural resources including Hailu (2010), Osakwe (2006) and Aseidu (2002, 2006) suggest that FDI inflow is positively affected by natural resources of the country. Aseidu (2006) analyses 22 in Africa, using the Panel Data model from the period 1984-2000. The finding of his study concludes that countries richer in natural resources are able to attract more inward FDI. However, these studies only emphasize on extractive sector and ignore all other sectors in which FDI can flow. Similarly, these studies ignore the FDIs that drift to the other regions at the same particular time.

Walsh and Yu (2010) examine the effect of political stability and level of corruption on primary, secondary and tertiary sectors of FDI. They receive mixed result from their study and therefore, their study concludes that every variable has different effects on primary, secondary and tertiary sector. Every sector has its own factors to attract FDI (Abdul Hadi et al., 2018).

Desbordes (2007) studies the US analysis of sectoral FDI in developing countries and clarifies that political doubts concerning FDI are largely dependent upon industry. Kundu and Contractor (1999) find that political stability, which is valid as a determinant for the manufacturing sector, is not valid for global hotel chains, which are among the world's largest service sectors.

Despite the stand-alone importance of each of the sector, investigations commonly referred to benchmark studies of the determinants of FDI using aggregated data of all sectors, whereas none of the sector can be subsumed with another sector as every sector has its own benefits and harms and must be treated on its own term. This study solely focuses on factors responsible for attracting FDI in four sectors: extractive, manufacturing, infrastructure and service sector.

# 3. Methodology:

This segment of the study tries to empirically assess the determinants of FDI for the ASEAN countries using institutional forces that are voice and accountability, political stability, government effectiveness, regularity quality, rule of law, control of corruption and technology activity index. The Panel Data set is used for this analysis which covers six ASEAN major countries (Malaysia, Indonesia, Singapore, Thailand, Vietnam and Philippine) for the time period from 2001 to 2016.

The type of data used in this study is quantitative. Different number of secondary data sources are used to build up the database. The variables are obtained from existing statistics from the World Bank database (worldwide governance indicators). The data for FDI are obtained from ASEAN secretariat.

Although the scope of the model being formulated is relatively at sectoral level, it is important to explore the determinants of FDI in each sector in order to devise new wave of findings for policy makers to attract more FDI to the country. Since cross-section and time-series of both data are available, the estimated equation is as follows:

$$Y_{it} = \alpha + \beta X_{it} + U_{it} \tag{1}$$

where  $i = 1, \dots n$  and  $t = 1, \dots T$ 

 $U_{it}$  = Error term effect; i = individual effects; t = Time series effect; Total sample size = N x T In this study, i = 6 entities (countries), where each entity is observed in T = 16 years of the time period that is from 2001 to 2016, providing a total of 96 observations. If all the observations in the dataset are complete, then the Panel Data is called balanced data. Otherwise, the Panel Data is called unbalanced data (Asterious and Hall, 2007; Stock and Watson, 2015). This study demonstrates a balanced panel data as there are no missing data for any variable. Static Panel Data technique is composed of three important models, namely Pooled Ordinary Least Square Regression, FE (fixed effect) model and RE (random effect) model. The current research analyses the data by using all these three techniques within the Panel Data model.

Park (2005) states that Panel Data model detects the variables in regards to its cross section aspect and time-series aspect (within the effects and between effects) and therefore, Panel Data is worthy to use. Stock and Watson (2015) states that the most effective analytical method to handle Panel Data set is Panel Data Analysis, which consists of various entities/individuals, that can be observed at different time periods.

Panel Data considers individual or country heterogeneity, and the reason for this is that it agrees to allow a greater number of data points and it enhances the efficiency of the estimate, and the reason why it may contain the group effect, time effect, or both the group and time effects. These effects are either FE (fixed effects) or RE (random effect). A Fixed Effects (FE) model, is also called as LSDV (least squares dummy variable) model, which assumes differences in intercepts across groups or time. (Stock and Watson, 2015) state that Fixed Effects model allows each entity to control variables that are different across entities, but it will be constant over time. The second effect which is called the RE (random effects) model assumes to explore differences in error variances. (Vijayakumar et al., 2010) state that the dissimilarities between FE (fixed effects) and RE (random effects) models are that former model assumes that each individual has different intercept, while the latter model assumes that each individual has difference.

In Fixed Effects model, each entity controls variables that are constant over time but differ across entities (Stock and Watson, 2015). Furthermore, the model allows for different constants for each group, which allows a dummy variable to be included in the group. The Fixed Effects model is denoted as:

$$Yit = \alpha + \mu i + \beta Xit + uit$$
(2)

(In case of variation on 'i' and't', the effect will go to intercept)

Random Effect model handles the constants for each section as random parameters and not as fixed (Asterious and Hall, 2007; Greene, 2012).

$$Y_{it} = \alpha + \beta X_{it} + U$$
 (3)

where,  $U_{it} = U_i + V_t + W_{it}$ 

(In case of variation on 'i' and't', the effect will go to Error Term)

This study will also use Hausman Specification Test to find out whether FE or RE model is the more appropriate model for the analysis. Later, the Fixed Effects model will be tested by F-test to find either Fixed Effect model will provide accurate result or Pooled (OLS) and Random Effect model will be tested by LM-test to find either Random Effect model will provide accurate result or Pooled (OLS)

#### **3.1 Model Specification**

Based on the Panel Data Analysis, this paper studies the effect of institutional factors (independent variables) on sectoral level inward FDI (extractive, infrastructure, manufacturing and service sector) in six ASEAN countries for the time period 2001-2016.

This paper examines four models of institutional factors; each model is for each sector.

Model 1: Extractive-Sector FDI: FDI<sub>it</sub>=  $\alpha + \beta 1 VA_{it} + \beta 2PS_{it} + \beta 3GE_{it} + \beta 4RQ_{it} + \beta 5ROL_{it} + \beta 6COC_{it} + \beta 7TAI_{it} + \mu_{it}$  (4)

Model 2: Infrastructure-Sector:  $FDI_{it} = \alpha + \beta 1 VA_{it} + \beta 2PS_{it} + \beta 3GE_{it} + \beta 4RQ_{it} + \beta 5ROL_{it} + \beta 6COC_{it} + \beta 7TAI_{it} + \mu_{it}$  (5)

Model 3: Manufacturing-Sector:  $FDI_{it} = \alpha + \beta 1 VA_{it} + \beta 2PS_{it} + \beta 3GE_{it} + \beta 4RQ_{it} + \beta 5ROL_{it} + \beta 6COC_{it} + \beta 7TAI_{it} + \mu_{it}$  (6)

Model 4: Service-sector FDI<sub>it</sub>=  $\alpha + \beta 1 VA_{it} + \beta 2PS_{it} + \beta 3GE_{it} + \beta 4RQ_{it} + \beta 5ROL_{it} + \beta 6COC_{it} + \beta 7TAI_{it} + \mu_{it}$  (7)

 $\beta_0$  is the intercept, t is a time period effects; where t =1 ,...., T, i is the cross sectional effects; where i =1 ,...., N,  $\mu_{it}$  is the disturbance term or error component, FDI = Foreign Direct Investments, GE = Government Effectiveness VA = Voice & Accountability, ROL = Rule of the Law, PS = Political Stability of the country, COC = Control of corruption by the country , RQ = Regulatory quality, TAI= Technology activity Index

#### 3.2 Justification of the Model Variables

This study analyses institutional factors as well as technological factor of sectoral level inward FDI in ASEAN. Government effectiveness shows opinions of the quality of public services, civil service and their degree of freedom from political forces, the quality of government policy formulation and its implementation, and the integrity of the government's enthusiasm towards such policies. The Worldwide Governance Indicators (WGI) project report aggregates individual governance indicators for five dimensions of governance.

Rule of law reveals opinions of the degree to which representatives have assurance in and acknowledged by the rules of society. The estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, percentile rank among all countries (ranges from 0 (lowest) to 100 (highest) rank).

Control of corruption reveals insights of the degree to which power of public is implemented for personal reap, including minor and splendid both forms of corruption, as well as capture of the state by elites and personal interests. Dunning (2001) suggests that countries that are able to create a business environment that operate according to legal system can attract more FDI.

Political stability shows insights of the probability that the government will be weakened or ousted by unconstitutional or powerful means, which include politically motivated violence and terrorisms. This suggests that institutional characteristics are important in determining the location decisions of FDI.

Regularity quality is the capability of the government to implement the policies and rules and regulation that enhance private sector growth. The regulatory quality increases ease by which more FDI can flow into the country. UNCTAD (1998) demonstrated the impact of regulatory quality on FDI

Voice and accountability reveals insights of the level to which a countries residents are able to contribute in selecting their government officials, as well as independence of expression, a free media and a freedom of association in the country. Jadhave and katti (2012) study suggests voice and accountability as a key determinant of inward FDI.

Technology development index (TAI) is weighted average of three parameters.

1. workforce involved in Research & Development

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- 2. Patents and copyrights taken out (residents and non-residents)
- 3. Scientific & technical Article publications

Technological activity index (TAI) is provided by UNCTAD. Hadi and Iqbal (2016), Palit and Nawani (2007) advocate that TAI as an important factor to attract FDI in Indian subcontinent.

## 4. Empirical Results

Prior to static Panel Data model, we will analyse the relationship between variables and sectoral level inward FDI using Pooled (OLS) model (in Table 1). Findings from Pooled (OLS) estimate that factors attracting FDI may vary sector to sector. Table 1 presents the results of Pooled (OLS) which show that VA (voice and accountability) is highly significant at 1% (<0.0001) in extractive sector, whereas VA (voice and accountability) not statistically significant in other three sectors of a country. This means p-value (0.0001) indicates that VA has an effect on dependent variable FDI in extractive sector but not a potential factor to attract FDI in other three sectors (manufacturing, infrastructure and service sector) of a country. Results from Table 1 for pooled data also show that ROL ( Rule of law), GE (government effectiveness) and RQ ( regularity quality) are significant at 1%, 5% and 10% respectively at extractive sector, but they are not significant in other sectors of the country. PS (Political stability) is highly significant at 1% in extractive sector and 5% significant in infrastructure sector of a country, which means that PS (political stability) is a key determinant of FDI in three sectors but not a key factor to attract FDI in manufacturing sector of a country.

	Extractive	Manufacturing	Infrastructure	Service
	Sector	Sector	Sector	Sector
	Co-efficient	Co-efficient	Co-efficient	Co-efficient
	(P-value)	(P-value)	(P-value)	(P-value)
VA	6.64	1.04	-0.47	1.13
	(<.0001)***	(0.3011)	(0.6371)	(0.263)
PS	4.70	0.93	2.31	2.37
	(<.0001)***	(0.3526)	(0.0233)**	(0.0199)**
GE	2.10	-0.85	-1.34	0.66
	(0.0038)**	(0.3959)	(0.1852)	(0.5101)
RQ	2.80	-0.59	1.06	0.8
	(0.0751)*	(0.5566)	(0.2941)	(0.4279)

 Table 1. Finding of Pooled Data Model

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ROL	-3.34 (0.0012)***	0.35 (0.7277)	-0.79 (0.4295)	-0.38 (0.7043)
	0.91	0.81	0.65	-0.11
COC	(0.3672)	(0.4193)	(0.5147)	(0.9133)
	6.96	2.28	2.95	2.62
TAI	(<.0001)***	(0.0249)**	(0.0041)***	(0.0104)**
R-Square	0.3555	0.2361	0.4638	0.4534

Note: \*, \*\*, \*\*\*, indicate 10%, 5%, 1%, significance level respectively. Table represent coefficient and p- value (). All results are derived using Fixed Effect Model estimation as suggested by the F-test significant value. The F-test indicates a hypothesis that there are no fixed effects, and therefore, we can easily reject the null. So in this case, the OLS would not give reasonable results.

The results of Pooled OLS is insufficient because it only gives preliminary finding and ignores the problem aspect of the data. To investigate these findings further, Fixed Effect model is applied to the data.

The results of Fixed Effect model (Table 2) also show that factors to attract inward FDI are different for different sectors. The empirical results indicates that COC (control of corruption) is highly significant at 1% (p-value <0.0001) in extractive josector, whereas COC is not statistically significant in other sectors of a country, which means that COC (control of corruption) is a key determinant of inward FDI in extractive sector but not in other three sectors. The finding is consistent with a study of Hassan et al (2015) who suggests that high level of corruption has no significant impact on inward FDI. The result is also consistent with Egger and Winner (2005) and Moran (2011) who state that high level of corruption has significant effect on extractive sector of a country. Further results show that PS (political stability) is 10% and 5% significant in infrastructure and service sector, whereas PS is not a significant determinant of FDI in extractive and manufacturing sectors. These findings are in line with Hossain, Lopa and Rehman (2018) who state that apart from political instability, handsome amount of inward FDI is attracted by ready-made garments (manufacturing sector) of Bangladesh. The results of the study show that government effectiveness (GE) is significant at 1%, 5% and 5% in extractive, infrastructure and service sector respectively, whereas GE is not a significant factor of inward FDI in manufacturing sector. This finding is linked with the study of Wheeler and Mody (1992) who examine that investment decisions across the sectors may have different determinants. Regularity quality (RQ) is just significant at 1% in extractive sector, whereas it is not a significant determinant of FDI in other sectors of ASEAN. Technology activity index (TAI) is 5%, 1% and 1% in extractive, infrastructure and service sector respectively although it is not significant in manufacturing sector of ASEAN. This finding is consistent with the study of Islam and Pattak (2017) who state that technologically Bangladesh is not developed. They are still using obsolete technologies because they have to pay a huge sum of money to acquire modern technology. Although the government has given a duty free import of technology and machinery for garments, FDI in RMG (manufacturing sector) of Bangladesh still rose in 2017. This case is also similar to Vietnam, which is the 3<sup>rd</sup> attracter of FDI in RMG (manufacturing sector). Significant value of Hausman test and F-test reveals that Fixed Effect model is the most appropriate model to analyse the factors affecting sector-wise inward FDI. R-Square Value model is also high which suggests that Fixed Effect model is the best fitted model for this study.

	Extractive	Manufacturing	Infrastructure	Service
	Sector	Sector	Sector	Sector
	Co-efficient	Co-efficient	Co-efficient	Co-efficient
	(P-value)	(P-value)	(P-value)	(P-value)
VA	-0.52	1.69	1.13	1.05
	(0.977)	(0.995)	(0.9427)	(0.2972)
PS	1.33	-0.66	2.37	2.03
	(0.8891)	(0.5117)	(0.0654)*	(0.0459)**
GE	-2.85	0.38	-0.66	1.97
	(0.0072)***	(0.7039)	(0.0276)**	(0.0425)**
RQ	3.24	0.61	0.8	-0.89
	(0.0019)***	(0.5408)	(0.4473)	(0.3768)
ROL	1.28	0.75	-0.38	-0.8
	(0.206)	(0.4543)	(0.2122)	(0.428)
COC	4.21	-1.61	-0.11	-0.86
	(<.0001)***	(0.1117)	(0.8922)	(0.3929)
TAI	1.79	-0.94	2.62	3.91
	(0.0301)**	(0.3527)	(<.0001)***	(0.0002)***
<b>R-Square</b>	0.767	0.754	0.7534	0.7633
Hausman Test	<.0001	<.0001	0.0004	<.0001
F-Test	<.0001	0.0036	0.0071	0.0116

**Table 2: Results from Fixed Effect Model** 

Note: \*, \*\*, \*\*\*, indicate 10%, 5%, 1%, significance level respectively. Table represent coefficient and p- value (). All results are derived using Fixed Effect Model estimation as suggested by the F-test significant value. The F-test indicates a hypothesis that there are no fixed effects, and therefore, we can easily reject the null. So in this case, the OLS would not give reasonable results.

# 5. Conclusion

Finding of this study proposes that using aggregated inward FDI will lead to biased results and misguide the policy makers. This makes more sense because FDI in different sectors leads to different activities, diverse impacts and distinctive policy challenges. Therefore, the idea of combining them into a single inward FDI which might produce some single results do not Specifically, by analysing a country's aggregated FDI to identifying the key make sense. determinants that attract inward FDI to the host country and by implementing these policies to each sector to attract inward FDI, this will generate biased results and will misguide the policy makers. Therefore, we can say that FDI is not a homogenous phenomenon and each form of FDI comes with distinctive benefits, threats and distinctive policy challenges and that each form of FDI requires to be treated on its own terms. The results of this study support a past or previous research by Schmaljohann (2013) who examines that primary sector, secondary and tertiary sectors all have different determinates. The results of the research are also in line with Wash and Yu (2010). The results are also in-line with Moran (2011) who conclude that FDI is not a homogeneous phenomenon and every sector has its own factors to attract FDI into the country. This is because every sector is different from others in terms of its nature and characteristics. Hence, each broad category of FDI must be treated on its own terms. The results are also linked to Kreinin et al., (1999) who compare FDI across different sectors and find out that natural resources (extractive sector), manufacturing sector and services sectors have different results and determinates from each other. Polat (2015) who proposes his idea states that FDI may vary in terms of its direction across different sectors. Yeo et al. (2008) imply that the determinants of inward FDI in the manufacturing sector may differ from those in the service and other sectors.

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