DETERMINANTS OF FDOREIGN DIRECT INVESTMENT IN FIVE WEST AFRICAN COUNTRIES

BY

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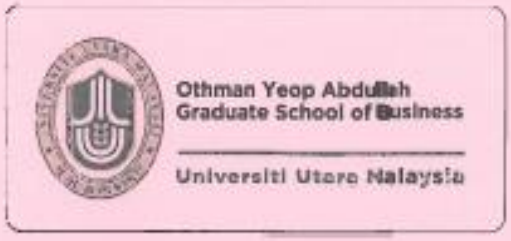
A dissertation submitted to
Othman Yeop Abdullah Graduate School of Business
Universiti Utara Malaysia
In Fulfillment of the Requirements for the Award of Master's Degree in Economics



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ABSTRAK

Kajian ini menguji penentu-penentu aliran pelaburan langsung asing (FDI) di negara-negara Afrika Barat (WACs) bagi tempo 1998 - 2013. Analisisi kajian menggunakan data sekunder yang diperolehi daripada Bank Pembangunan Dunia, Petunjuk Gabenor Bank Dunia, Persidangan Bangsa-Bangsa Bersatu Menganai Perdagangan dan Pembangunan, Transparency International, dan Heritage Foundation. Dalam kajian ini, Dunings's (1980) electic paradigm telah digunakan dengan ubahsuai beberapa pemboleh ubah tambahan. Secara emperik, Model Kesan Tetap (FEM) telah dicadankan oleh keputusan ujian spesifikasi Hausman sebangai model pilihan dalam penganggaran. Dapatan kajian menunjukkan rasuah tidak menpengaruhi aliran FDI ke dalam WACs. Secara khusus, rasuah dan kelemahan institusi pembuat dasar tidak mengalakkan pelabur-pelabur asing. Faktor-faktor lain seperti saiz pasaran, inflasi dan keterbukaan perdagangan juga didapati mempengaruhi aliran FDI secara positif dan signifikan. Dapatan kajian juga mencadangkan bahawa WACs perlu melaksanakan pengubahsuaian institusi bagi menarik lebih banyak alian FDI dan faedah kasan limpahan positif yang oleh aliran FDI kedalam sesebuah Negara dan sebuah kelestarian pembangunan ekonomi yang umum. Berkaitan dengan penentu-penentu FDI, keputusan empirik menunjukkan bahawa potensi permintaan pasaran domestik sesebuah negara dan keterbukaan perdagangan adalah penentu utama aliran FDI di WACs.

ABSTRACT

This study examines the determinants of foreign direct investment inflows (FDI) in West African Countries (WACs) for the period 1998 - 2013.Analysis of the study used secondary data which obtained from World Bank Development indicators, World Bank Governors Indicators, United Nations Conference on Trade and Development, Transparency International, and Heritage Foundation. In this study, Dunning's (1980) eclectic paradigm was used but with modification to include some additional variables. Empirically, Fixed Effects Model (FEM) was suggested by the results of Hausman's specification test as a preferable model in the estimation. The finding shows that corruption does not influenced the level of FDI inflows into WACs. Specifically, foreign investors were rather discouraged by both corruption and poor regulatory institutions. Other factors like market size, inflation and trade openness of the economy were also found to be positively significant. The findings suggests that governments in WAC need to reform their institutions in order to attract more FDI and benefited from the positive spill overs that accompany FDI inflow into a country. With regards to FDI determinants, the empirical result indicates that the domestic country potential market demand and trade openness are the main determinants of FDI inflows in WACs.

ACKNOWLEDGEMENT

بِسْمِ ٱللَّهِ ٱلرَّحْمَٰنِ ٱلرَّحِيمِ

In the name of Allah, Most Gracious, Most Merciful. All praise to Allah the Owner of the Worlds, and blessings and prayers is upon the Great Prophet (Peace be Upon Him), his family members, friends and those who follow them sincerely till the Day of Judgement. Thanks be to Allah because of Taufiq and Hidayah, has allowed me to complete this thesis.

I owe a deepest gratitude to my abled supervisor, Assoc. Prof. Dr. Sallahuddin Hassan, who has been extremely generous with his time, concern, valuable suggestion and hospitality throughout my study. His academic support, his guidance but most of all his patience even in the most difficult times were the most precious support for me.

I am very grateful to the lecturers of School of Economics, Finance & Banking especially who taught me Dr. Nor Azam Abdul Razak, Assoc. Prof. Dr. Russayani Ismail and Dr. Soon Jan Jan for allowing me to share from their bounties of knowledge to become a matured person and a useful student who can contribute to Islam, race and nation, every time and everywhere.

I am also registered my sincere gratitude to Sheik Umar Sani Fagge and Mallam Alkasim Zakariyya for the care, guidance and valuable suggestions always giving to us. My sincere gratitude also go to my Father who concerned about me in all the time, my gratitude also go to my brothers and sisters like Ishaq (Baffa), Zulaihat, etc. who always are support in me as well as my friend Sulaiman Muhammad Zubair, Mansur Farouq Sa'ad, Idris Wada Adamu and Ibrahim Abubakar who gives continuous encouragement and impressive ideas in completing this study successfully. I will not also forget my special thanks to the teachers and students in both Tarbiyya Islamiyya and Darikunnajati Islamiyya Yankaba for their prayers and concern.

My special thanks go to His Excellency Engr. DR. Rabi'u Musa Kwankwaso Governor of Kano State, Nigeria for the full sponsorship of my Master Degree at Universiti Utara Malaysia for his sacrifice and dedication for the actualization of this wonderful programme. In addition, I have to express my gratitude to my colleagues Universiti Utara, Malaysia.

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LIST OF ABBREVIATIONS

COC:	Control of Corruption
CPI:	Corruption Perception Index
ECOWAS:	Economic Community of West African States
FDI:	Foreign Direct Investment
FEM:	Fixed Effects Model
FFC:	Freedom from Corruption
GDP:	Gross Domestic Product
GMM:	Generalized Moment of Method
LM:	Lagrange Multiplier
IMF:	International Monetary Funds
MNC:	Multinational Companies
OLI:	Ownership Location Internalization
OLS:	Ordinary Least Square
REM:	Random Effects Model
TI:	Transparency International
UN:	United Nations
UNCTAD:	United Nations Conference on Trade and Development
US:	United States
SSA:	Sub-Sahara Africa
VAR:	Vector Autoregressive
vif:	Variance Inflation Factor
VECM:	Vector Error Correction Model
WACs:	West African Countries
WDI:	World Development Indicators
WGI:	World Governance Indicators

CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

This chapter consists introduction, background of the study, problem statement which followed by research questions. The discussion of this chapter also comprises objectives of the study, and then scope of the study.

1.2 BACKGROUND OF THE STUDY

Foreign direct investment (FDI) is a forum through which transfers of new technology, global markets, increase in competition, human resources formation, employment, economic growth and development could be achieved (Anyanwu, 2006). This is especially for the developing economies. During the 1990s, FDI became the major external source of financing for the most economies (Alemu 2013). Ultimately, FDI is viewed as an essential fuelling channel for raising required capital at a critical time as an assets or a means of financing during deficit. FDI is defined as an investment made to get an ownership interest of 10 per cent in the voting stock in a business undertaking operating in a country other than that of investor (World Bank, 2014).

FDI is perceived to have valuable impacts on local firms and economy as a whole by encouraging technological and managerial skills, international export and import by developing economies and creating opportunities for jobs (Javorcik 2004; Liu, 2008 & Kinda 2014). It has been noted that FDI has helped several countries when they faced economic hardship. For instance, during the Asian financial crisis in

1997 the volume of FDI was held steady in these countries while the other parts of cash inflows suffered by facing very serious setbacks in the economic transitions. Similarly, the same observations had been made for Latin America and Mexico in 1994 and 1995. In the African society, the outlook of economic growth in sub-Saharan African (SSA) has worsen in 2009, as projected by International Monetary Fund (IMF) SSA economic growth slowed from just five per cent in 2008 and three quarter per cent in 2009 over three per cent points less than forecast in a year ago, there is a declined in fiscal balance by about six per cent of Gross Domestic Product (GDP) (IMF 2009).

However, progress in the technological advancement and globalization continuous to keep trade very easy among countries. Developing countries for example are considered as the remarkable players by undertaking several financial and structural changes in which African countries are structured to be the biggest square of the worldwide economies. Moreover, countries selected are the role model in terms of FDI in SSA in general and West Africa in particular. Among others, Nigeria is considered as the "giant of Africa," and "most populous" nation. Also, it has the biggest economy in Africa that attracted more FDI inflows and the most corrupt country in the region (Ernst & Youg, 2012). However, prior to investing in a particular economy, several factors should take into consideration such as the size of domestic market, infrastructural facilities, viability of investment, quantity of labour, stability of microeconomic environment and the power of regulatory institutions in the decision making process. Therefore, the inflow of FDI to an economy is determined and restricted by many factors, one among which is corruption. Furthermore, corruption is considered as a bottleneck and undesirable element that prevents foreign investors from investing into a particular economy due to the fear of

the consequences of disastrous corruption effects. Since there is no consensus about the universal accepted definition of corruption, it is defined by several scholars from different perspectives. However, the definition given by Transparency International (TI) is commonly used in the literature which defined corruption "as the abuse of entrusted power for private gain." Therefore, corruption can happen in anywhere, at the point when law makers put their own interests over that of the citizens in general. When officials request cash and favour from the citizens for service that is to be provided free. Corruption is not only an envelope loaded with cash despite the fact that these officials make decision that influence our lives (Ernst & Young, 2012).

Invariably, corruption is affecting the private marginal product of capital by reducing its volume thereby reducing the private investment as well as lowering economic growth of a country (Mauro 1995; Knack & Keefer, 1995). Similarly, corruption has turned into a significant distraction among policymakers and economists. Previous literatures have indicated that corruption curb investment and growth (Mauro, 1995), increases inequality (Li, Xu; & Zou, 2000) and causes inappropriate provision of public services (Mauro, 1998). In relation to this, corruption can be caused by both economic and institutional factors. It is also confirmed that variables influencing corruption vary between developed and developing countries. Therefore, corruption is antagonistic to good purposes of free market system which attribute wealth to working and allurements of their work treat possession as sacredness and ensure private cycle. Developing economies is the place where performing administration functions with something that does not belong to individuals but to bearer of function benefits of others originates form and in this circumstances people utilize their position for personal benefits and endanger the very foundation of economic and authoritative power (Dion, 2010).

However, it is very difficult to measure corruption level of particular country but several studies employed several measures of corruption among which are corruption perception index (CPI), freedom from corruption (FFC) and control of corruption (COC) as the measure of corruption level of a particular country. Therefore, with regard to these measures of corruption for a clear understanding and a reference could be made much more to CPI in this research. Moreover, CPI is an index which is complex by nature and it is based on the other survey which measures the level of public sector corruption perception among 177 countries in the globe (TI 2013). The score result of corruption indicates that a country's level in terms of the corruption in that country and its rank, the list indicates position for each country that covered during the survey period. Similarly, there is the need of complimentary analysis to explain the reasons for a country certain level of CPI. Based on the expert opinion the score of CPI, FFC and COC are categorized from 0 to 10, 0 to 100, and -2.5 to 2.5, where zero or -2.5 score indicates high corruption level while 10 or 2.5 or 100 score means the cleanest from corruption level. Therefore, a country that scored zero or an index closer to zero is consider as the most corrupt country and a country that score 100 or an index closer to 100 is consider as the cleanest country in terms of the level of corruption. Consequently, two third of 177 countries covered in 2013 CPI survey scored less than 50, this indicates the need for transparency and accountability in most of the institutions (TI, 2013).

Nevertheless, corruption varies across the globe some regions are characterized with high corruption levels which leads to attract low FDI inflows while regions that characterized with low levels of corruption attracts more FDI inflows. Therefore, results of the global CPI ranking of corruption shows that about 70 per cent of the countries scored below 50 out of 100 score with the average of 43

score and this remain a growing problem which must be rectified for the sanity in the international transactions (TI, 2013). Similarly, the level of corruption varies across the globe (regions) in which regions as well as the countries are classified base on their rank of CPI score. Afterwards, most of countries in the East and Western Europe are considered clean from corruption with about 80 per cent of countries scored more than 50 of the total corruption score, Asia Pacific countries are characterized with relative score of corruption in relation to other regions where 64 per cent of countries scored less than 50. While 66 and 84 per cent of countries in the Americas and Middle East and North African regions scored less than 50 respectively. Lastly, 90 and 95 per cent for countries in the Eastern Europe and SSA scored less than 50 and this indicates the regions as the most corrupt in the world (TI, 2013). But surprisingly, despite their high levels of corruption but they still attract more FDI inflows.

Corruption exists in the world and there is no any country both developed and developing countries that will claim a zero score of corruption level. However, in recent time greater attention have been paid to corruption on how to resolve it, several conferences and summits have been organized to find the solutions. Among which are Berlin conferences in Germany and recently a summit organized by US government on the problem of corruption and insecurity in Africa in 2014. Furthermore, in Africa corruption has become a preoccupation topic of discussion among scholars and public officials. It also becomes a developmental issue, countries in Africa cannot bear the burden of corruption which distort their growth and development and then it makes regulatory agencies inability to reduce poverty (Lawal, 2007). TI identified Africa as among the most corrupt region in the world

where SSA identified as the most corrupt region. However, among the listed 10 most corrupt countries in the world six are from SSA (TI, 2013).

Notwithstanding, there are two schools of thought with the regards to the effects of corruption on FDI inflows namely; "grabbing hand" theory of corruption or "sandy the wheels" corruption hypothesis and "helping hand" theory of corruption or "greasing the wheels" corruption hypothesis. Researchers whose their findings are in support of the "grabbing hand" theory of corruption concluded that corruption impedes FDI inflows, it increases the cost of doing business, it discourages competition, it creates poverty and inequality and it is also reduces productivity. On the other hands, there are scholars whose their research findings are supporting the view of corruption as "helping hands" theory of corruption, they concludes that corruption encourages FDI inflows and trade that would not have occurred because of the rigidity of economic policy and lumbering bureaucratic procedure as such promote efficiency by permitting private entities to go around the regulations (Leff 1964 & Wei, 2000).

However, by considering FDI inflows as an essential engine that facilitates international transactions and the driver for growth and development which is also considered as a source of financing for many economies especially developing countries. The global FDI inflows fluctuated over years where it is deteriorating from 2000 ($1.4 trillion) up to $604 billion in 2003 and $738 in 2004 to $738. It reached peak in 2007 which also accounts for $2.0 trillion, after then due to global financial crisis in 2008 the inflows in FDI faced a setback which it deteriorates from $1.8 trillion in 2008 to $1.7 trillion in 2011 to $1.3 trillion in 2012. But after it slumped in 2012, FDI inflows return to growth and it increases by nine per cent which contributed $1.6 trillion in 2013 (UNCTAD, 2014). Similarly, it is not only global

crisis that led the fluctuations in FDI inflows but also factors like corruption, government efficiency, political stability, etc. the deviations in FDI inflows was also caused by the changes in the global corruption perception index over the sample periods. Equally, with regard to the selected countries for this research work, FDI inflows still play a vital role as a source of finance to these economies. Based on the World Investment Report from UNCTAD (2014) stated that Nigeria appeared as the biggest receiver of FDI inflows which is followed by Ghana and then Liberia, then Sierra Leone while Gambia becomes the fifth economy in attracting more FDI inflows, this can be explain as follows:

1.2.1 Foreign Direct Investment Inflows and Corruption Level in Gambia

Gambian economy is an economy which relied on Agricultural products for its revenue. Recently, the economy has run into a substantial trade and deficits in current account due to macroeconomic instability (reflected from the rise in the inflation rate) that largely is financed by loans and increasingly FDI inflows. However, among these economies, Gambia has the worst and minimum amount of FDI inflows and it is highly corrupted which reflected from the country's transparency level than can be observed in Figure 1.1. It can be seen that the inflows in FDI is characterised by random shocks in relation to the level of CPI, which around 1998 FDI inflows rise from $23.7 million to $49.5 million in 1999 but it start fluctuating downward which is drastically decreased to $14.9 million in 2003, in these periods the FDI inflows decreased due to decline in the macroeconomic performance reflected from the loose impact of fiscal policy and likewise, its transparency level decreased to 2.5 in 2003. Since then, the CPI continuous deteriorating and became worst in 2008 by scoring only 1.9. But despite the fall in

transparency level, FDI inflows continuous to increase where it reached peak in 2007 by contributing $76.5 million. Because of the effects of financial crisis in 2008, inflows in FDI continuous declining up to 2013 with the inflows in FDI as $25.3 million despite the improvement in the country's level of CPI from 1.9 score in 2008 to 2.8 score in 2013. Therefore, the CPI for Gambia is also presented in Figure 1.1.

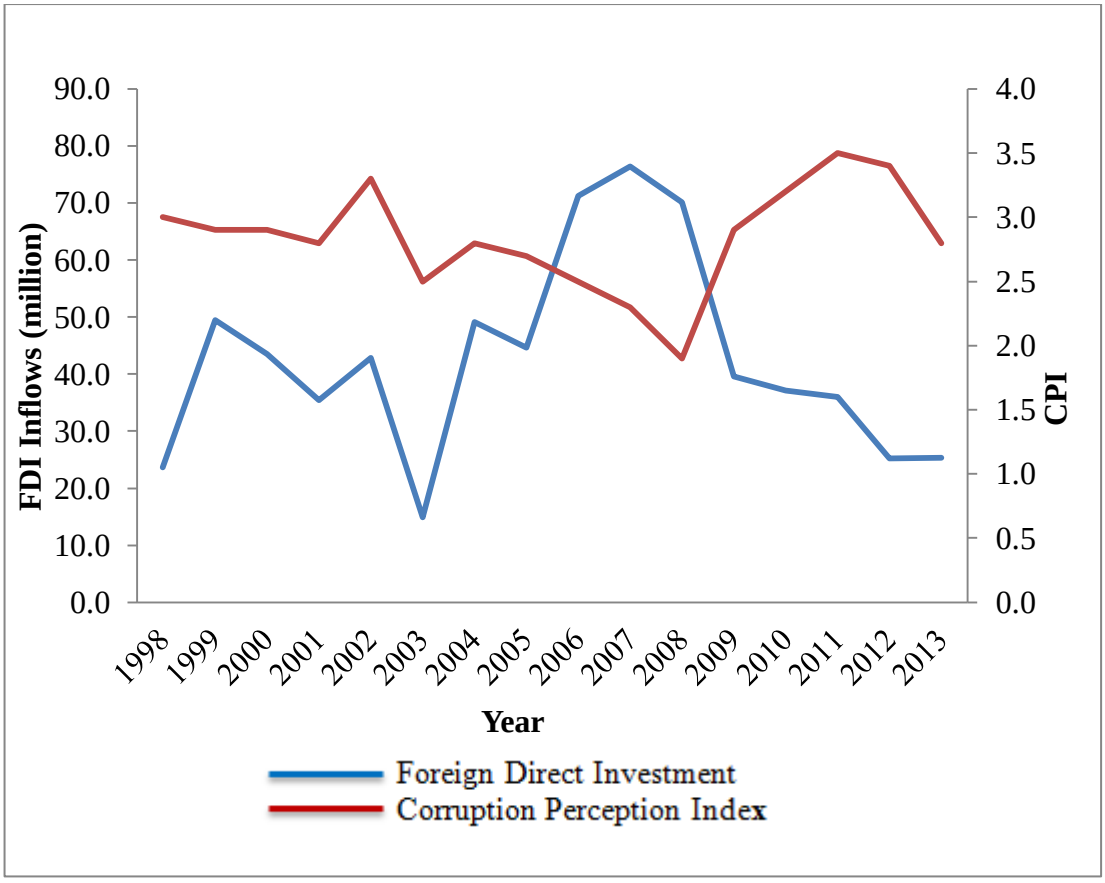


Figure1.1: FDI Inflows and Corruption Perception Index of Gambia, 1998-2013

1.2.2 Foreign Direct Investment Inflows and Corruption Level in Ghana

In Ghana, corruption continuous to widespread where most of the businesses consider corruption as a vital obstacles that hinders their business advancement, a request for corruption in Ghana become a common phenomenon to both public and

private sectors. However, with discovery of oil in Ghana, foreign investors focused their attention to invest in the Ghanaian economy and this led to increase in FDI inflows over the years. Similarly, the country enjoys stable increase in FDI inflows at the time when its regional tight neighbouring countries like Nigeria, Liberia and Sierra Leone are in constant stage of conflict, insecurity and instability. However, the increase in the Ghanaian FDI inflows and CPI trend can be depicted in Figure 1.2. This figure indicates the FDI inflows of Ghana from 1998 to 2013. The inflows of FDI into remain almost stable with slight fluctuation from 1998 to 2005 with a dwindling corruption level unless between 2001 and 2002 when it increases from 3.4 to 3.9 leading to fall in the level of FDI inflows from $89.3 million to $58.9 million. Despite the increase in the level of corruption over years, FDI inflows continuous to increase especially from 2007 when the offshore oil is discovered in commercial quantity which led inflows in FDI to increase from $8554 million in 2007 to $2897 million in 2009 while corruption fluctuated from 3.7 to 3.9 in both 2008 and 2009. But due to the effects of global financial crisis, the inflows in FDI shocked to 2527.4 million in 2010 and in the subsequent years continuous to fluctuate upward where it reached $3226.3 million in 2013 despite the improvement in CPI from 3.9 in 2009 to 4.6 in 2013.

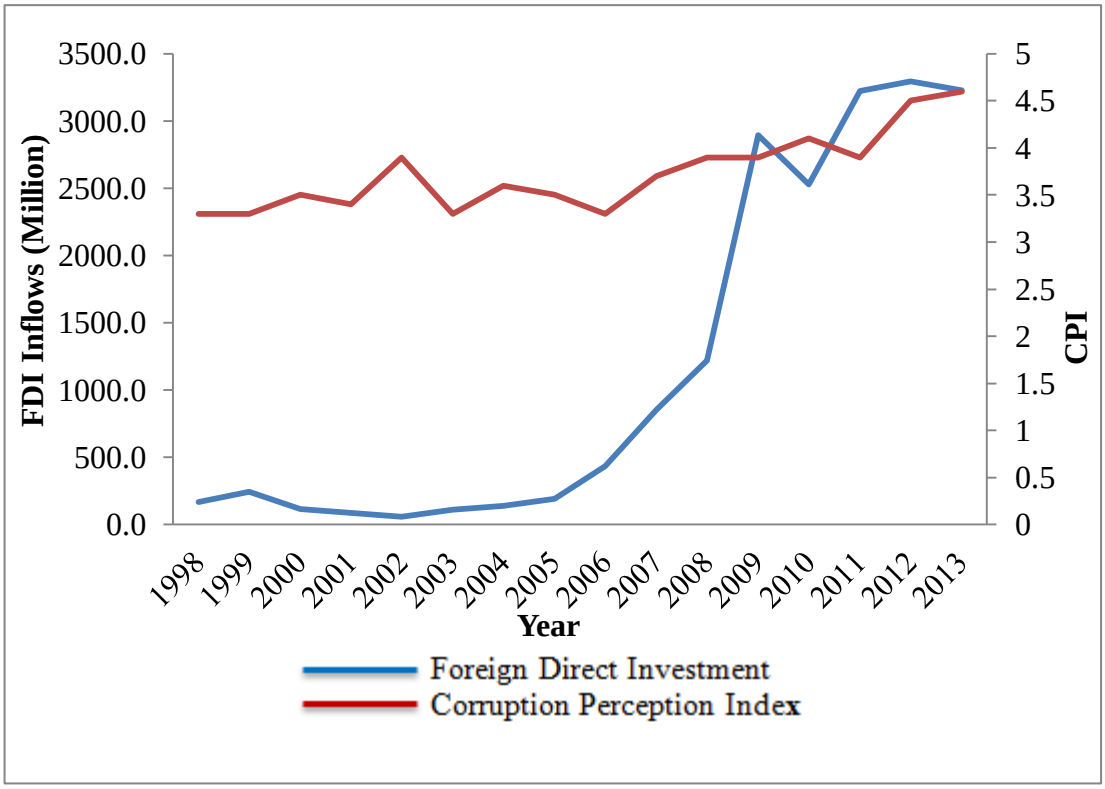


Figure 1.2: FDI inflows and Corruption Perception Index of Ghana 1998-2013

1.2.3 Foreign Direct Investment Inflows and Corruption Level in Liberia

Liberian economy faced a serious setback during eight years of civil war, high level of political and economic instability, and international sanctions that mainly destroyed large businesses and pooled out several foreign investors and this derived down the level of FDI inflows over years. Liberia is also a country that characterized with the weak regulatory authorities and lack of transparency as well as accountability, unfortunately FDI of the several sectors have restricted by the government therefore financial sectors remain vulnerable and this destructed the development of FDI inflows. Therefore, the trends of the inflows of Liberian FDI together with CPI are shown in Figure 1.3. The trend of Liberian FDI inflows fluctuate upward with the improvement in the corruption level in some years, then FDI inflows increase from $190.3 million in 2008 to $256.3 million in 1999 but it

falls drastically to $20.8 million, $8.3 million and $2.8 million in 2000 to 2002. In 2003 increases to $372.2 million but suddenly fall to $75.4 million and these are the periods when country is in civil war but after the war periods the Liberian FDI inflows continuous to fluctuating upward from 2004 up to 2013 though corruption levels also continuous deteriorating from 2005 to 2007 but it improves up to 4.1 score 2012 which fall to 3.8 score in 2013. Similarly, FDI inflows increased from $508.0 million in 2011 to $ 1061.3 million accounted for oil extraction (World Bank, 2014).

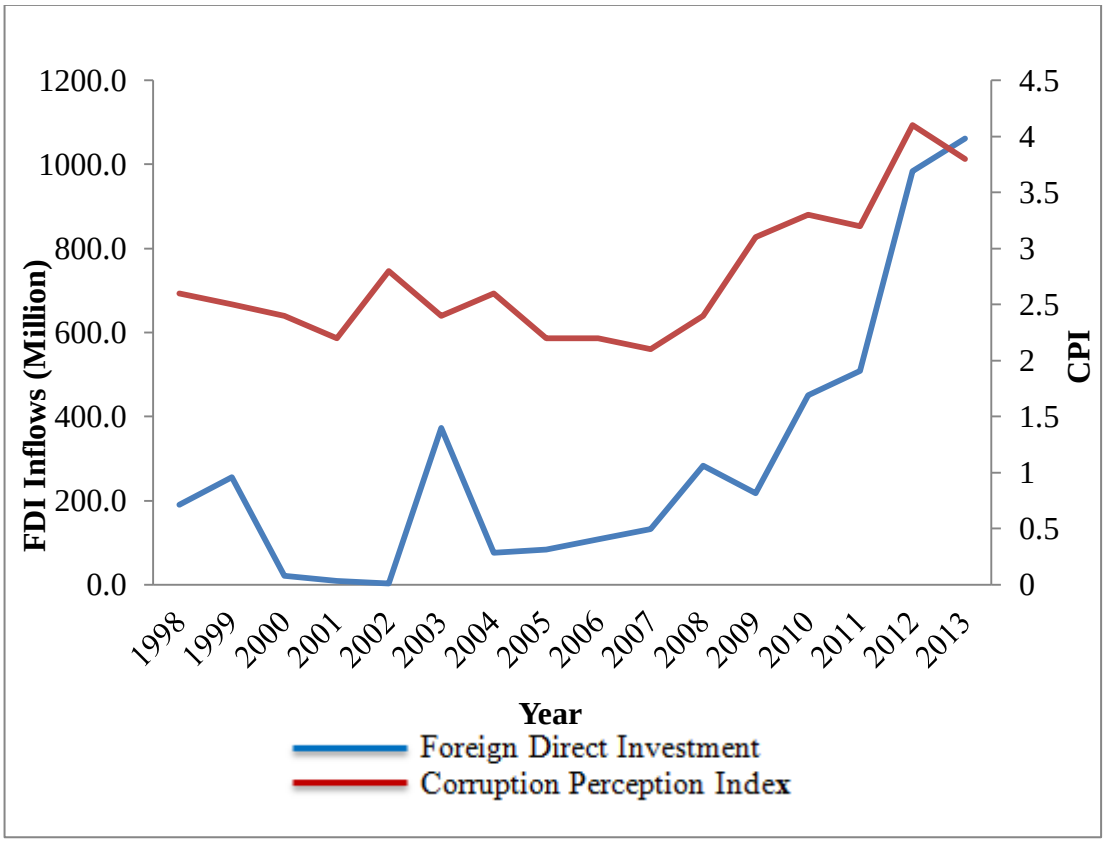


Figure 1.3: FDI inflows and Corruption Perception Index of Liberia 1998-2013

1.2.4 Foreign Direct Investment Inflows and Corruption Level in Nigeria

One of the major obstacles to the growth rate of FDI inflows to Nigeria is corruption. Nigeria is overrun by corruption and it becomes chronic which continues to impede growth and development. In Nigeria, corruption is endemic in both public and private sectors and the country has been consistently ranked low (highly corrupt) in the TI corruption annual survey. Therefore, fortunately for the country as its CPI continuous fluctuating upward while keeping its FDI inflows also continuous moving upward over years and this can be shown in Figure 1.4 and CPI can also be depicted in Figure 1.4. Similarly, Figure 1.4 shows the trend that depicts behaviour of Nigeria's FDI inflows in relation to CPI from 1998 to 2013. Initially, FDI inflows fluctuated in almost constant rate from 1998 to 2000 where the CPI is also stable but after 2001 when regulatory authorities start becoming unstable corruption starts increasing but despite the increased in corruption level FDI still continuous to contribute significantly to the percentage share of GDP from $1.27 million in 2001 to $8.65 million in 2009. Around these periods (2010 & 2011) the level of corruption remain stable but the level of FDI inflows continuous to deteriorate from $8.91 million in 2011 to $5.61 million in 2013 and the corruption level improves 2.7 in 2012 though it falls to 2.5 in 2013 this is not because of only level of CPI but the country is faced with serious political, economic and social instability ranging from emergence of crisis in Niger Delta, boko haram insurgents etc. However, according TI (2014), Nigeria give rooms for the activities of terrorists organizations to flourish.

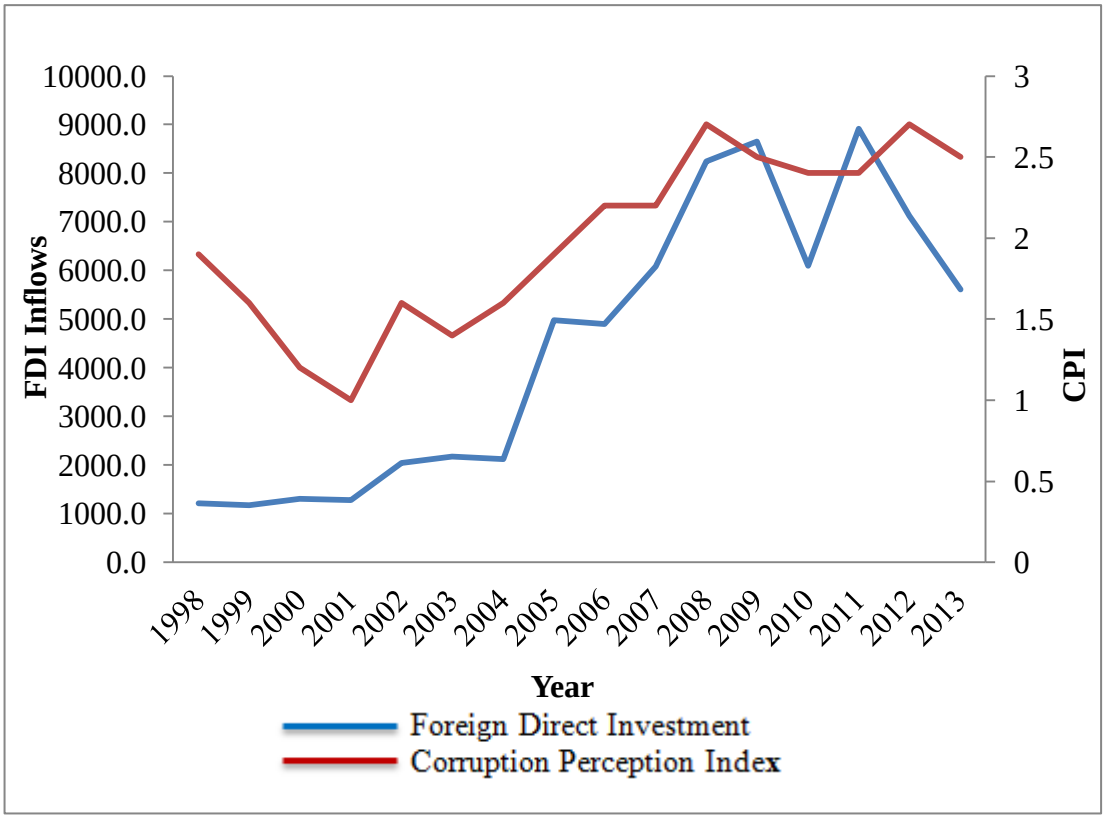


Figure 1.4: FDI inflows and Corruption Perception Index of Nigeria 1998-2013

1.2.5 Foreign Direct Investment Inflows and Corruption Level in Sierra Leone

Sierra Leone like Liberia experienced economic disaster caused by the civil war that lasted for at least 11 years which bring down almost all economic transactions at local and international levels and this resulted to a very minimum amount of FDI inflows over the years. However, during the post-war periods, government moves from post-war reconstruction to a long term strategic development. Sierra Leone economy which heavily depends on agriculture and the government made it a priority as part of the overall strategy to attract a sustainable amount of FDI inflows from agriculture. This led to the design of several agricultural policies such as National Sustainable Agriculture Development Plan (NSADP) in 2010, Smallholder Commercialization Programme (SCP) in 2012. But the country has a very high level

of corruption perception that also contributed to the fewer amounts of FDI inflows into the country. Therefore, trend of inflows in FDI is shown in Figure 1.5. Based on this figure one can observed that FDI inflows in 1998 and 1999 is almost $0.1 billion but increased in 2000 to $38.9 billion then declined in 2001, 2002 and 2003 with highly corruption level but from 2004 which is $61.2 million continuous fluctuating up to $110.8 million in 2009 therefore, this low level of FDI inflows resulted during the civil war which ended around 2002. But during the post-war periods together with commitment by the government to improve the inflows in FDI with the introduction of NSADP and SCP, FDI inflows rose from $238.4 billion in 2010 to $950.5 billion in 2011. But despite the improvement in the CPI level inflows in FDI fluctuate and deteriorate to $579.1 billion in 2013. CPI for Sierra Leone can also be shown in Figure 1.5.

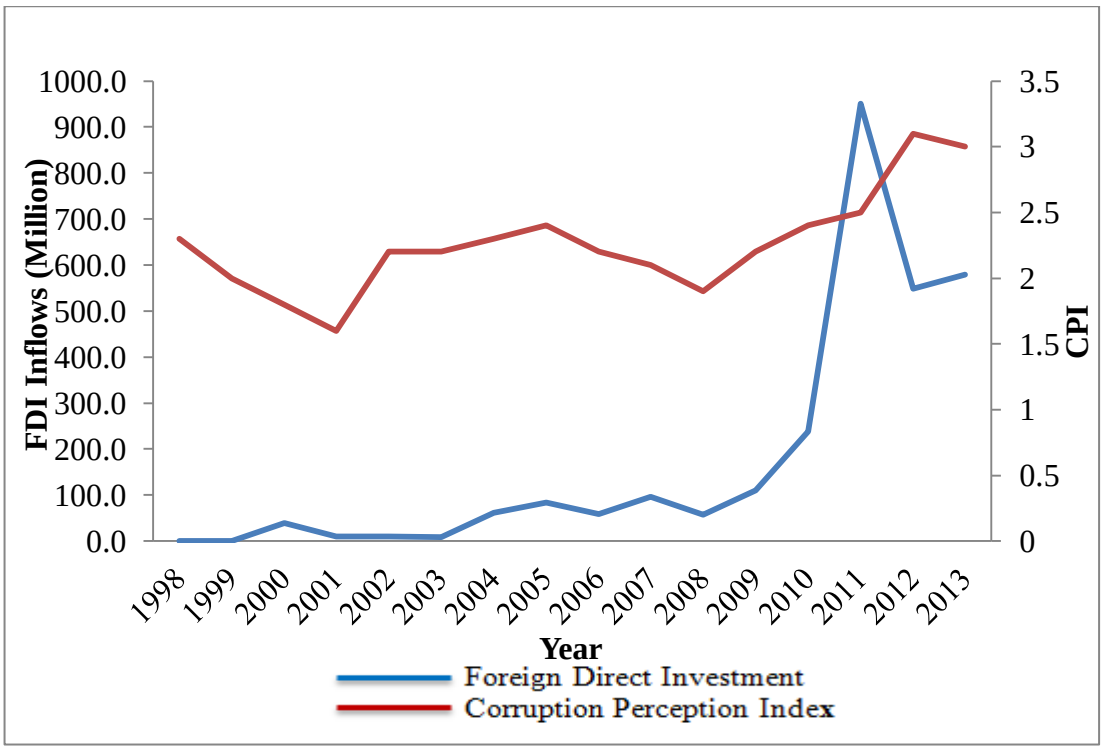
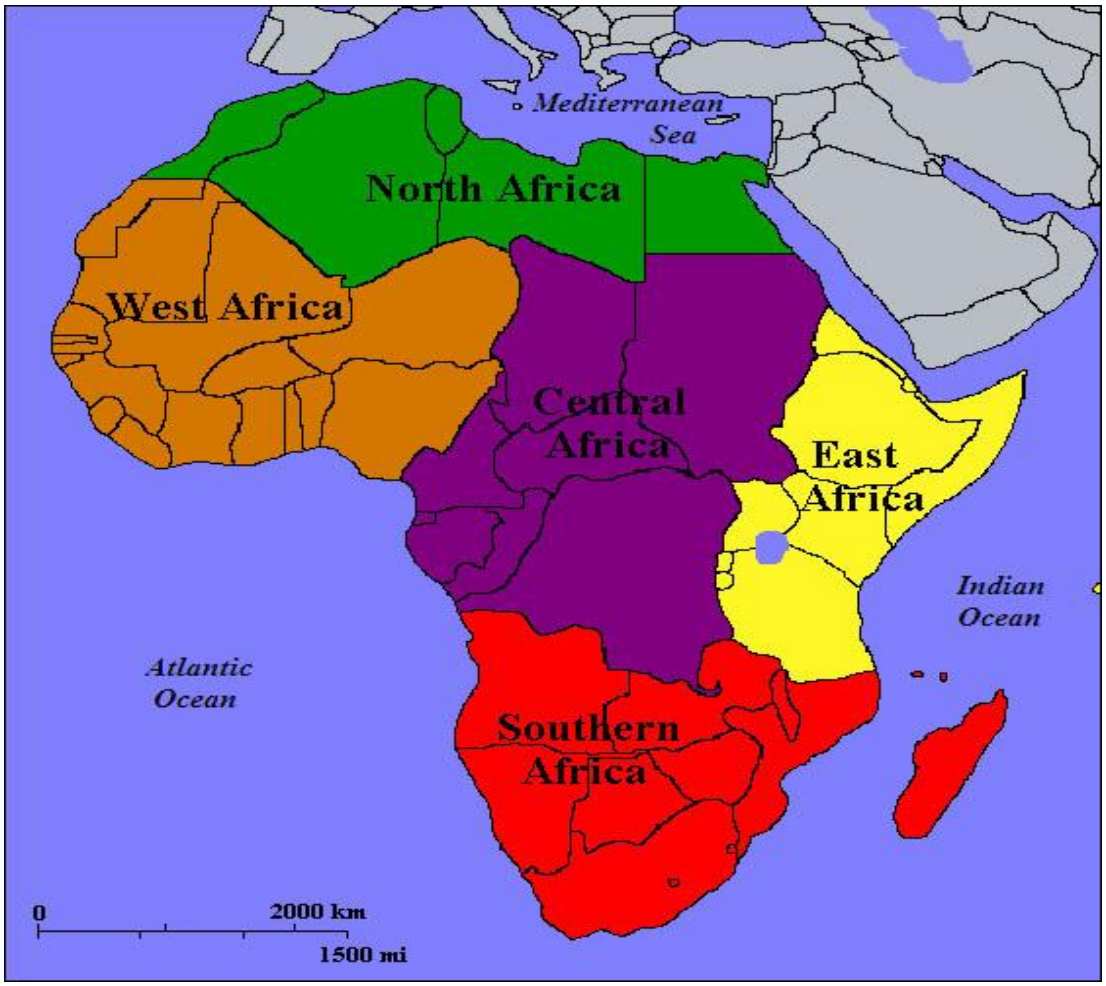


Figure 1.5: FDI inflows and Corruption Perception Index of Sierra Leone

1.2.6 West Africa Region

West Africa is also called Western Africa, is the westernmost subregion of African continent that comprise 15 countries namely; Burkina Faso, Cape Verde, Cote D'ivore, Gambia, Ghana , Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo. The region characterized with agricultural activities, started with sedentary farming as well as the domestication of cattle. However, the ironworking technology allowed for the expansion of agricultural productivity which then inter-regional trade began to appear. The domestication of camel allowed for the development of trade across the regions, the major export includes gold, cotton cloth, mental ornament and leather goods which were exchange for horse, salt, textiles and other materials. Nowadays, several countries in the region where attracting a huge amount of FDI inflows into their economy. For instance, Nigeria and Ghana attracted large amount of FDI inflows into the mining sector while Gambia, Liberia and Sierra Leone attracted large share of the inflows of FDI into agriculture. Below it is the African map that could be help to easily locate West African subregion.



Source: http://wereghanatalkaboutafrica.weebly.com/geography-and-imperialism.html

Figure 1.6: African Map

1.3 PROBLEM STATEMENT

FDI and corruption are conflicting variables that affect global business activities, FDI inflows as a source for financing that enables transfer of new technology and generating employment. But corruption as a distortive factor destruct the activities and smooth running of FDI inflows in many economies, most especially in the context of developing economies in which they are characterized by weak regulatory authorities. However, for foreign investor to invest in an economy, should consider

the level of corruption, the institutional power, macroeconomic stability as well as the size of the market of such an economy.

Corruption as a complex phenomenon was profound in private and public institutions (World Bank, 1997). Empirical evidence indicates that corruption have several adverse economic effects such as slowing growth in FDI inflows and economic growth (Habin & Zurawicki 2002; Mauro 1997, 2004; Shera et al., 2014). It causes decrease in both productivity and amount of investment (Mauro 1995, 1997; Tanzi & Devoodi, 1997), discourages investment (Wei, 2000; Al-Sadiq, 2009) and it weakens the government efficiency and infrastructure (Bellos & Subasat, 2011). In many cases, corruption does not only depressed educational quality but also creates worsen income inequality via the scarcity of resources to student from the high income families (TI, 1997). While others consider corruption as a lubricated instance that slacked the rigidity of regulatory institutions. Therefore, corruption compensated bad governance and encourage more FDI inflows (Wei, 2000). This suggests that as low quality of government coincides with corruption, corruption can lower the problems emanated from government inefficiency.

Therefore, because of the above issues raised due to the critical role of FDI inflows in relation to many countries, only few studies were conducted around the world and particularly with regard to developing economies by some few researchers such as Wei (2000), Al-Sadiq (2009), Porters (2010), Alemu (2012), Tosun Yurdakul and İyidoğan (2014), Leff (1964) Bellos and Subasat (2012), Quazi, Vemuri, and Soliman, (2014), Tosun, Yurdakul and Varol (2014). However, most of these studies present inconclusive and contradictory results over the effects of corruption on FDI inflows and as such more studies are needed in this area and this justify the need for

this research. Additionally, there is the need also to re-examine the domestic governments in terms of its role into the business environment.

Currently, there is an increasing attention paid to corruption as a major factor that distorts or impedes FDI flows, economic growth and development of any economy. A series of cases of corruption have been identified in many countries including selected countries. In recent years most of the developing countries have registered as countries with the highest rate of corruption. The World Bank asserted that corruption is among the most problematic variable that impedes economic and social development. That is, it has significant effects on economic activities of a country which in turns distort FDI inflows. United Nation Development Programme (UNDP) in 2013 reports that corruption undermines human development and rule system of the country, it lessens access to public services by redirecting public asserts for private ownership. Corruption is overall sensation and it is widely perceived as the one of the world most prominent challenge, it is major hindrance to sustainable growth and development and excessively affects the poor community also in burning on the extreme fabric of society. The impact of corruption of private sector is likewise critical; it obstructs financial economic growth, distorts competition and includes serious and legal reputational risks. Corruption is also increase the cost of doing business in most parts of the world (World Bank 2014).

In the same way, due to adverse effects of corruption which always escalating, world leaders where take part in the discussion of the causes, effects and how to resolve it for the prospect of economic growth and development brought about by the FDI inflows into their regions. According to Anne Gearan the US Vice President Joe Biden on August 6, 2014 while addressing the African leaders during a summit organised by US government, on the issue of corruption and insecurity in

Africa that “Corruption is a ‘cancer’ that blocks opportunities for African nations seeking international investment”(Washington D.C. 2014). Likewise, in October 9, 2014 former president of Malawi Joyce Banda in her statement during Global Women Forum in August, 2014 said that “corruption is just impediments which need to be tackle for economic growth and development”(Nyasa Times Malawi 2014). Therefore in Daily trust Newspaper, former military Nigerian Head of States Gen. Muhammadu Buhari on 16 October, 2014 decleared that Nigerian government is the most corrupt government in Africa. According to him “The economy continues to deteriorate while government continues to announce fantastic growth figures but manufacturing is down, agriculture is down, commerce is down simply because you sell oil and steal part of the money. That does not entitle you to cook figures and announce phantom economic growth when all the major indices namely, employment, manufacturing, farming, trading are demonstrably on the decline”.

In addition, most of the African economies especially SSA economies are bedevilling with the problem of corruption as it causes deterioration in their FDI inflows among which are Gambia, Ghana, Liberia, Nigeria and Sierra Leon. Likewise, the report of TI indicates that these countries in one way or the other are facing with the serious challenges of corruption that caused adverse impacts of FDI inflows. Ultimately, According to TI ranking in 2013 Nigeria scored 25 of the corruption score that indicates Nigeria as the most corrupt country among these economies which ranks it as 144 in the world, Gambia also scored 28 which classified also as the most corrupt country that ranked 127 in the world corruption ranking, it was followed by Sierra Leone which is ranked as 119 in the global ranking with corruption score as 30, Liberia has been ranked as 83 in the world with corruption score as 38. Ghana among these countries appeared as the cleanest

country with corruption score as 46 and it was ranked as 63 country in the globally. Nevertheless, referring to discussion above, this study will attempt to answer the following questions:

i. What are the impacts of corruption on FDI inflows in some selected WACs?
ii. Does government effectiveness have any significant effects on FDI inflows in the selected WACs?
iii. Which factors that determined of FDI inflows in some selected WACs?

1.4 OBJECTIVE OF THE STUDY

Generally, the objective of this study is to assess the effects of corruption as well as other determinants of FDI inflows in some selected WACs namely; Gambia, Ghana, Liberia, Nigeria and Sierra Leone. Specifically, this study has the following specific objectives as:

i. to examines the impacts of corruption on FDI inflows in some selected WACs,
ii. to evaluate the effect of government effectiveness on FDI inflows in some selected WACs,
iii. to identify the determinants of FDI inflows in some selected WACs.

1.5 SCOPE OF THE STUDY

The scope of this study limit itself to investigate the determinants of FDI inflows into five selected WAC. Precisely, this study examines countries such as Gambia, Ghana, Liberia, Nigeria and Sierra Leone. The study also covers the period from 1998 to 2013 due to the availability of the data. Equally, the study would investigate the variables that could influence the decision to invest by MNCs.

Based on this study, it is believed that the selected sample might represent the entire WACs and it is also believed that data will be very much accurate by providing sufficient and reliable information that can be useful when taking decisions by both local and foreign investors as well as the government at large.

1.6 SIGNIFICANCE OF THE STUDY

Essentially, the research evaluates the impacts of corruption on FDI inflows thereby given important information to policy makers. Policy makers need information on how corruption level affects the inflow of FDI into their economy in order to take appropriate measures to ameliorate the situation. Equally, it is also important to other stakeholders such as foreign and domestic investors because it will help them to determine the risks associated with their investment. The study will also contribute to the existing literature, because unlike previous studies that rely on cross country cross sectional data, it will employ panel data technique which takes the heterogeneity nature of the countries into consideration to estimate effects of corruption on FDI inflows.

1.7 ORGANIZATION OF THE STUDY

The study consist five chapters, Chapter One comprises the background of the study, the problem statement, research questions, objectives of the study, scope of the study and organization of the study. Chapter Two includes reviews of the related and relevant conceptual and empirical literature concerning the determinants of FDI inflows in Africa and effects of corruption on FDI inflows. Chapter Three contain the theoretical framework, methodology use to achieve research objectives. Chapter Four is concern about data analysis of the empirical results. Lastly, Chapter Five which

include summary, conclusion, recommendations as well as the implication for further research.

1.8 CONCLUSION

The background of this study discussed extensively FDI as a channel of transferring technology and employment into the target countries. This chapter predominantly described the contributions of FDI inflows in WACs and how corruption level and other deterministic factors are influencing the inflows of FDI over the periods of time. In addition, the problem statement highlights the effects of corruption on FDI which was conducted in respect to developing economies. But few or no study has conducted with the regard to the effects of corruption on FDI inflows in WAC. It also identified the research questions that the study would try to answer and objectives with which this study try to achieve. The scope of which this study would cover as well as significance and organization of the study have also presented in this chapter.

CHAPTER TWO

LITRATURE REVIEW

2.1 INTRODUCTION

This chapter includes the explanation of definition of the key concepts which comprise meaning of FDI, meaning and types of corruption, theoretical and empirical review of FDI and determinants of FDI inflows with regard to African countries. The literature on the role of corruption either as "grabbing-hand" or as "helping-hand" theories of corruption are also discussed and then finally concluded by summarizing the reviewed literature.

2.2 DEFINITION AND TYPES OF FOREIGN DIRECT INVESTMENT

This section comprised the definitions of FDI and then followed by different types of FDI by some scholars.

2.2.1 Definition of Foreign Direct Investment

World Bank (2014) defined foreign direct investment as the net inflows of venture made to obtain a lasting 10 per cent interest or voting stock in an operating enterprise in a country outside that of investors. According to IMF (2004) FDI "refers to an investment made to acquire lasting or long-term interest in enterprises operating outside of the economy of the investor." The investment is said to be direct due to fact that the investor is seeking to manage or to influence managerial decisions over the foreign enterprise by acquiring voting interest.

2.2.2 Types of Foreign Direct Investment

Generally, with Regard to the different types of FDI, there are three types that can be categorised based on their distinctive and basic characteristics such as based on motive, direction and targets (Bellos, 2010).

Based on the motive, Sichei and Kinyondo (2012) identified three types of FDI namely; market-seeking FDI, resource-seeking FDI and efficiency-seeking FDI. While Dunning (1993) classified types of FDI into market-seeking FDI, resource-seeking FDI, efficiency-seeking FDI and strategic-seeking FDI. Market-seeking FDI this occurs when the primary purpose of a company is to serves the local market as to take advantage of new markets. Meanwhile, resource-seeking FDI occurs when a company's primary aim is to gain access to resources in the host country which are not available in their home country resources such as raw materials, low cost of labour and natural resource because some countries are strategically endowed with natural resources than others. Similarly, efficiency-seeking FDI this happens when the foreign firm could gain when the government in the host are efficient and presence of large economic scale. However, Okurut Narayana and Chidozie (2012) argued that the efficiency-seeking company also needs to take advantage of efficiency and quality of infrastructure, skilled and cheap labour force. Strategic-Asset Seeking FDI is consistently realized as a result of the presence of strategic alliance with some firms or activities that could force barriers to the competitors and to ensure their market position is protected.

Furthermore, in terms of directional type of FDI, it classified as inward and outward FDI. By inward, it is where the foreign capital is invested in the domestic or local market. While outward FDI is that investment in which the local capital is invested in the foreign markets.

Meanwhile, the following are the types of FDI based on target as. Greenfield investment, these are the direct investment which intends to establish new facilities or expand existing ones, for instance, the building of new plant for production, the launch of new production line in an operating factor or they are concerned with the imitating of a totally new firm in the host nation. While horizontal investments are those investments that take place in the sector or industry that is the same as the one in which the investing firm operates in its home country. Lastly, there is vertical type of FDI, that further divided into two namely; forward vertical FDI and backward vertical FDI. Forward vertical FDI are those investment that is provides products to another firm abroad in order to sold in foreign markets. Whereas backward FDI are those investments that provide inputs to the foreign firm that could be used in the production process.

2.3 DEFINITIONS AND TYPES OF CORRUPTION

There is no unified single definition of corruption due to its complexity and problematic. Several scholars define the concept of corruption from different point of views so it is no easy to come up with either single meaning of corruption or how to measure it. Though the act of corruption can easily be recognized when it observed and the lack of consensus on the universal definition of corruption has led to the several definitions. United Nations (2001) defines corruption as:

> *'Abuse of public power for private gain that hampers the public interest. This may be indirect or direct · · · corruption entails a confusion of the private with public sphere or an illicit exchange among the spheres, corrupt practices involves public officials acting in the best interest of private concern regardless of, of against the public interest'* (P.7).

However, TI defines corruption in a way which gives more details than that of United Nation because it covers many areas by reference of 'civil servants,' as political power and 'politicians'. Therefore, TI defines corruption as

> *"Behaviour on the part of officials in public sector whether politicians or civil servant in which they improperly and unlawfully enrich themselves or those closer to them by abuse of public power entrusted to them. This as well as corrupt practices such as bribery, extortion or influence peddling"* (P.37).

Moreover, Asian Development Bank (2009) defines corruption which includes private sector as

> *"Abuse of public power to promote private benefits. Thus, a public employee who abuses his/her public position to derive benefits for one self or friends, relatives or political associates is engaging in an act of corruption." (P.4)*

Based on the definitions above whether it encompasses the public or private sectors or it includes public officials or private official does not matter. In terms of corruption the public and private, they are almost the same both their actions has an impact on economic activities and it has to take into account.

Additionally, Tanzi (2006) defines corruption as "international act of non-compliance with the purpose to deceive for deriving advantage to one self-base on the arm's length principle". Moreover, Budima (2006) defines corruption as "a private gain at the public expense". Primorac Primorka and Smoljic, (2011) argued that corruption is a social defect that exhibits lack of social norms and values that are inevitable for normal function of a free market economy. Aidit (2014) defines corruption as act of using power of public office for private gain in a procedure that contradict rule of the game. Therefore, corruption manifests in many ways as bribery, nepotism, extortion, fraud, influencing peddling or speed money. In summary,

corruption is the manifestation of poor esthetical standard, institutional weakness, skewed incentives and inefficient enforcement.

2.4 TYPES AND OF CORRUPTION

Susan (2006) summarized the following common types of corruption which are identified in the literatures, namely; grand corruption and petty corruption.

2.4.1 Grand Corruption

This is the type of corruption in which frequently is found where high public officials who are responsible for taking decision in favour for their personal benefits. It is also an integrated section of the political, economic and social system of any economy which involves a large amount of money. It is also consider as when a highly placed person deviate by exploiting his position for the selfish interest in which he embezzled a huge amount of money from public treasury into private account bank. For example, this happens when MNCs pay a high government officials or politicians millions of dollar to get a business contract. Therefore, sometime this is also termed as political corruption.

2.4.2 Petty Corruption

This is corruption in which the lower government official whom was underpaid depends upon public funds to paid their pockets and to take care of their families. It involves relatively small amount of money. However, despite the amount a minimal but pretty corruption can be added up to make a huge amount. Therefore, little grand

corruption with huge amount of pretty could outset and squandered whatever a project a government embarked on.

2.5 NATURE OF CORRUPTION

Corruption it is not only happed particularly in developing countries like Ghana, Nigeria, India, China and Malaysia, but it is also generally happened in the developed countries like United States of America (U.S.), United Kingdom, Germany and France. Corruption has long been bedevilling factor which distorts FDI inflows in many economies. Corruption is connected with the misuse of resources by public officials for personal gain, late liquidation cases, for instance, WorldCom and Waste management displayed that corruption is not only limit to public officials. There are numerous distinctive types of corrupt practices in the private sector and this increment in worldwide literature and organizations that manage this corrupt practices, it has reveals corruption engineered a lot of economic distortion and keeps on drawing attention of the public. For instance, corruption impedes the improvement in business sector, heads out investment and undermines the principle of law. Additionally, corruption is wide spreading in the present economic activities in the most of developing economies; therefore we have private-to-private and private-to-public corruption.

Socially, corruption demoralizes people to work together for the benefit of everyone it causes social vices. In Nigeria, specifically requesting and paying bribes has turn to be tradition which in nowadays becomes social inequality by creating disparity among the rich and poor. It increases poverty and insecurity between the citizens and foreigners. Finally, with this in mind, present literatures on the effects of corruption on FDI inflows still provides mixing results which means there is no any

unified base for making a general conclusion (Asiedu 2006; Asiedu Jin & Nandwa, 2009). This however, implies that there is more need to conduct more investigations in this area.

2.6 THEORIES OF FOREIGN DIRECT INVESTMENT

Primarily, this section is aimed to presents the theoretical basis behind FDI. Also secondarily to highlight the basic stages of the factors that determine the FDI inflows according to the theoretical approaches presented. Therefore, this theoretical review would provide an insight into the nature and the ways through FDI is operated. Generally, this section would provide the categories of FDI determinants that could enhance the effectiveness of the empirical analysis presented in the following chapters. The following are the theories of FDI in which the researchers usually adopted in their studies such as Neoclassical Trade Theory, Monopolistic Advantage Trade Theory, Eclectic Theory, Product Life Cycle Theory and Gravity Model Approach.

2.6.1 Neoclassical Trade Theory

This theory is built under the assumption of a perfect competitive market in which the MNCs will locate a business in foreign economies where the investment return is very high. This assumption is not realistic in actual sense because the market is imperfect by its nature. This theory is developed from the work of Heckschers-Ohlin where FDI was seen as of international capital market based on a $2 \times 2 \times 2$ general equilibrium framework and this implies that there are only two countries (foreign and home), two factors of production (labour and capital) and there are only two

competitive goods in a perfectly competitive goods and factor markets. The theory also assumes constant return to scale. The theory is also argued that a country's trade is determined primarily by its own endowment of factors and that output of each good is primarily determine by the production functions and the production function for the whole countries are the same. Mundell (1957) investigated the effects of factor movement in two countries, two countries and two sectors (2 x 2 x 2) Heckscher-Ohlin model. His findings shows that inflow of capital decreases import (i.e. capital movement and trade are found to be substitute). Therefore, his argument can be concise as "trade in factors is substitute for trade in goods". Moreover, Zhang and Markusen (1999) provide a model as 2 x 2x 2 in an oligopoly framework (Cournot) where they introduced cost of transport which is absent in the neoclassical theory and their model predicts the positive association with the number of vertical MNCs and host country size. This was also supported by (Brainard 1997).

In contrast, instead of examining factor movement like in Mundell (1957) and MacDougall (1960) investigate the simplest case of the inflow of capital into the one sector economy and he found that FDI inflows is lower than capital rent in the domestic economy, though it increases labour productivity. Therefore, FDI is thought best as movement of firms instead of simple capital movement (Navaretti & Castellani, 2004; Freenstra & Kee, 2004). In addition, Hymer (1976) argued that MMNCs could be benefited by locating their investment in an economy where there is high comparative advantages, such as cheap labour, technological know-how, productive assets and economies of scale over the domestic firms. Hymer disposition neoclassical theory of not been able to explained the FDI because in his view the structural market imperfection needed to flourish.

2.6.2 Monopolistic Advantage Theory

This is an approach in international transactions that explained the reasons for MNCs to enter into competition with local firms in foreign settings. According to this theory MNCs has advantage in the foreign markets over its local counterpart competitors by earning more profits than local firms. According to Hymer (1966), MNCs has comparative advantage of ownership over strategic resources by producing and sell at lower price than local firms. He also dispositioned the assumption of neoclassical theory of perfect competitive market that cannot explain FDI. He also argued that the foreign markets are imperfect and this market imperfection results in comparative advantage for MNCs in a specific market (Dunning & Rugman 1985). Therefore, it is the market power that provided advantage, MNCs enter into foreign market because of their size and they do have considerable competitive advantage over local firms. Kindleberger (1969) argued that imperfection exist in the absence of perfect competition condition, to him if there is perfect competition the domestic firms would have advantage against the foreign firm because of the closeness of their decision making centres to their operation. Therefore, foreign market operation could not survive, so there has to be market imperfection in terms of goods and services for the FDI to flourish.

However, this theory highlight the comparative advantages of foreign firms over local firms, in which firms that characterized with economies scale, superior in technology, or high marketing skills will have advantage on others by producing at lower cost and then dominate the market. Therefore, FDI take place because of the product and imperfection of the market. Unfortunately, this approach emphasized the centralization of capital in the hands of few individual because the theory advances

the emergence of monopoly power in the foreign markets. Therefore, FDI is made by firms that possessing technical power.

2.6.3 Eclectic Theory

Dunning (1980) present a unified theory of MNCs as Eclectic Theory or Ownership, Location and Internalization Advantage Theory (OLI) in 1980 and it is the most widely accepted theory of FDI. He suggests that firms have three advantages as; ownership (specific) advantage, location advantage and internalization advantage. Therefore, decision of FDI depends on the combination of three factors. These three factors of Eclectic Theory each has an important in investment with the regard to the decisions of MNCs (Williams 1997). Therefore, this comprises the following advantages as:

Ownership specific advantages are basically the immediate assets that firm have privilege to access. According to Dunning "any kind of income generating assets which make it possible for firms to engage in foreign production" Ownership advantage address the reasons why some firms move abroad due to facts that a successful MNCs have specific advantages that allowed it to operate and then to overcome the operating costs in the foreign countries. Advantages include copyright, trademarks, patent right, trade secrete also it comprise market control, superiority marketing skills, information and technology, entrepreneurship skills and economies of scale. Similarly, location advantages relate to both source country of MNCs and host country for which to invest. It allowed the foreign firm to locate its firm in the foreign market where it will gain the influence by country's locational advantages such as government policies, institutional arrangements, and political, legal, and cultural environment. Moreover, Dunning (1988) explained the reason for MNCs

chooses to operate in a specific home country for direct investment. While in the internalization advantages the firm that inherent capacity and flexibility to produce and market via its internal subsidiaries and theory originated from the market failure. There are three reasons for internalization. Firstly, risk and uncertainty, emanating from risk management process firm internalizing risk. Secondly, firm in an imperfect market with economies of scale. Thirdly, absence of transaction pricing externalities in the market (Williams, 1997).

Moreover, the works of Corner (1991), Wernerfelt, (1995), Sethi and Guisinger (2002) all their arguments are consisted with Dunning Eclectic Theory and argued that Dunning Eclectic Theory in the combines theories such as location advantages of Vernon (1966), Ownership advantages of Hymer (1976) and internalization advantages of Buckley and Casson (1998).

2.6.4 Product Life Cycle Advantage

This theory was developed by Vernon (1966), Vernon developed trade and FDI theory of product life cycle as a gradual process of a sequential development use by MNC to perforate into foreign markets. He asserted that decision to invest is a decision between exporting and investing as a product move in a gradual process via life cycle which gives a cost based reason to move from exporting to investing (i.e. FDI). According to Vernon, the first stage is the new product base which firm produce by skilled labour at a relative high cost. Therefore, investors enjoy monopoly power. The second stage according to Vernon is the phase of mature product in which certain level of standardization is achieved, demand for a product increases as the production knowledge spread and becomes large-scale. Barriers to

entry remain the source of market power. The last stage is the standardised product stage where the product become highly standardized, the process of production become common and price is the main factor of determining the competitive outcome.

Vernon, (1979) tested empirically the dispersal of innovations from firms in America. The finding is consistent with the product life cycle hypothesis. Technology is first transferred to the countries in which their per capita income is high and extensive manufacturing industries. Moreover, barriers to trade really accelerate transfer of technology to host countries, while restrictions on FDI slow them down due to screening. Davidson (1980) observationally test the dispersal of innovations from U.S. firms and their results are consistently in line with product life cycle theory.

Contrarily, Vernon (1979) himself recognizes the weakness of his model as it loses predictive power of firm in terms of the condition of trade. Hirsch (1976) for instance, investigated the circumstances that may influenced firm decisions in deciding whether to engage using FDI or export for serving foreign markets where Hirsch in his model takes the cognisance of managing costs of producing abroad. In addition, Dunning (1979, 2000) used the analysis of Hymer (1976) put an existing element in a unified framework in a coherent manner. Dunning proposed three conditions before firm engaged in FDI rather than the export as ownership, location and internalization advantages and these constituted the basic condition of Eclectic Theory.

2.6.5 Gravity Model Approach

The gravity model has been used for decades in international trade, its origin date back to 1687 which was based on the universal law of gravitation in Physics that developed by Isaac Newton in 1687 and its applicability in the field of international trade also date back to 1962. The popularity of the model in terms of modelling has been over the years and it is commonly applied in the today's modelling trade flows in international economies. The law explain the force that exists between the two masses regarding the distance that lies among them Newton (1687). $\boldsymbol{F_{ij} = G\frac{M_i M_J}{d_{ij}^2}}$, the gravitational force is the percentage to the product of the two masses *Mi* and *Mj* which are inversely proportional to the square distance dij that holds the masses apart from each other. G is the gravitational constant is an empirically determined value. International economics modifies the universal law of gravitation to suit applicability into economic context.

Furthermore, assuming that the trade volume exist between two economics say *i* and *j* is Y_{ij} therefore economic masses is defined as $\boldsymbol{Y\frac{X_i X_j}{D_{ij}}}$. This simplified the version of gravity equation into the context of international trade. However, Y_{ij} consider as the export volume from country *i* to *j* whereby the economical masses are heavily represented by each country's GDP and geographical distance between the two economies is regarded as distance (Head 2003). Gravity has been widely used by many scholars in the field of international trade and FDI due its extraordinary high goodness of the fit which account for empirical success (Mccallum, 1995; Anderson 2011). A relatively adaptation of gravity equations has a diverse scope of flow modelling and it accounts for the reason why researchers often use gravity equations in their analyses most especially in relation to FDI like in work of Linden and

Ledyaeva (2006), Rahman (2006), Paniagua (2011), Anderson (2011), Bellos (2011), Subasat and Bellos (2013) and Salvatici (2013). Deardorff (1998) argued that gravity model has been considered as a "fact of life" in the field of research. Equally, there are several methods used for estimation under gravity theory among which is Ordinary Least Square (OLS). OLS is normally used to estimate the parameters of the gravitational relationship among the variables. In the original version of the equation by Tinbergen (1962), the model was expressed in the form of log to measure the elasticity of the parameters of the trade flows with the respect to explanatory variables.

2.7 THEORETICAL REVIEW ON DETERMINANTS OF FOREIGN DIRECT INVESTMENT

There has been several literatures discussed on the determinants of FDI but ambiguously there is no consensus among the factors that explained the determinants of FDI are limited. Few scholars have presumed that abundant of natural resources, market size, cheap labour cost, developed infrastructures, and nearest of the host country to the source are the critical variables that influenced FDI inflows decision. Different researchers are of the view that fiscal policy, trade openness, inflation, political stability are also the important factors that influenced FDI inflows. However, the variables identified as the determinants of FDI inflows vary from one study to another and from one economy to other. Therefore, it is very difficult to compile a single list as determinants of FDI inflows because some of the variables in the literature reviewed gained or lost important over time. However, following are the theoretical and empirical literatures of the determinants of FDI

The theoretical literature on the determinants of FDI can be traced from the doctoral dissertation Hymer (1976) which was followed by Dunning and Rugman (1985). Dunning (1980, 1988) where they provides a comprehensive analytical framework for the determinants of FDI as Ownership, Location and Internalization. He examines the driver of FDI as market size, labour cost as well as location advantages. Moreover, gravity model theory also offers greater theoretical contributions in the determinants of FDI where he considers market size and geographical distance as the major components. Several researches like Onyeiwu and Shrestha (2004), Bartels Kratzsch and Eiccher (2008), Suliman and Mollick (2009), Anyanwu (2011), Sichei and Kinyondo (2012), Asiedu (2013), Rogmans and Ebbers (2013) and Yusuf et al. (2013) identified other factors as theoretical dominants of FDI such as market size, trade openness, infrastructure, economic stability, corruption level, labour productivity, economic freedom and government effectiveness.

2.7.1 Market Size

The argument about market size as the determinant of FDI is straight forward due to the facts that the purpose of the most of the foreign firms is to get markets for their products. Market size represents the potential domestic demand of goods and services and economic conditions of the domestic country which is critical for FDI. GDP per capita, real GDP and real GDP growth are used as a proxy for measuring market size and it is expected to have a direct association with FDI (Alemu, 2012).

2.7.2 Trade Openness

The degree of openness to trade with other countries is considered as key element of attracting more FDI into the domestic country. Therefore, countries with restrictive trade policies and resources control tends to attract less FDI. Sum of export and import as ratio of GDP, trade as ratio of GDP or percentage of GDP are used as a proxy of openness and it is expected to have a direct relationship with FDI. Most of the studies in the developing economies openness exhibits positive relation with FDI (Morisset 2000).

2.7.3 Infrastructure

This is considered as the bedrock of attracting FDI by the domestic country. In particular, telecommunications influences FDI which it increases economic growth Canning and Bennathan (2000). Infrastructure is expected to contribute to FDI directly. It is peroxided by telecommunications, military expenditure, water, transportation and electricity (Sichei & Kinyondo, 2012).

2.7.4 Macroeconomic Stability

Countries that have favourable and conducive economic environment tend to attract more FDI than a volatile economy. Inflation rates, exchange rates and interest were used to proxy or measure economic stability. For instance, inflation increases cost of production/user cost of production thereby affecting the profitability of FDI negative (DE Mello, 1997).

2.7.5 Corruption Level

Corruption level in the targeted country usually influences the decisions to invest in the domestic country by foreign investors, because corruption impedes profitability of any investment thereby discouraging the investors. The following measures are usually used as a proxy while measuring corruption level of a particular economy such as CPI (Transparency International), control of corruption indicator (Worldwide Governance Indicator) and Freedom from Corruption (Heritage Foundation & World Street).

2.7.6 Labour

The argument between labour and FDI is straightforward, before deciding whether to undertake or to invest MNCs would consider the labour availability in the domestic country. The more productive, the more abundant and costless labour is, the more that location would attract more FDI. Therefore, labour availability is another important factor that determines the level of FDI inflows. However, Labour is expected to have positive association with FDI (Mathur Singh, 2013). Therefore, a country with higher labour productivity tends to attract more FDI.

2.7.7 Economic Freedom

This is an estimate by the Heritage Foundation and the Wall Street Journal since 1995 usually used to measure economic freedom in the studied area (i.e. to measure investment climate in the area of interest by the researcher) and it can be defined as "the fundamental right of every human to control his or her own labour and property". In an economically free society, individuals are free to work, produce, consume, and invest in any way they please, with that freedom both protected by the

state and unconstrained by the state" (www.heritage.org). The index is usually measured by using ten economic freedom components like trade freedom, labour freedom, fiscal freedom, business freedom, monetary freedom, financial freedom, investment freedom, property right and government spending. The index is based on the scale from 0 to 100, where zero index mean less freedom and 100 maximum freedom and it is expected that more freedom high investment. Therefore, by restricting economic freedom means less competition and then it discourage FDI.

2.7.8 Government Effectiveness

Government effectiveness in the targeted country usually influenced the decisions taking by foreign investors where they should consider the decisions taking by the government in the targeted economy that may influenced their activities. Therefore, efficient government is likely to attract more FDI inflows. However, "effectiveness captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies" (WGI, 2014). This is normally used as a proxy of quality of regulatory environment and it is expect to have a positive sign.

2.8 EMPIRICAL REVIEW ON DETERMINANTS OF FOREIGN DIRECT INVESTMENT

In addition to the above discussion, the following is the empirical literature on the determinants of FDI inflows. Sichei and Kinyondo (2012) conducted a research on the determinants of FDI inflows using panel data of about 45 African countries, they found that the African wide environment have been conducive and favourable for to

FDI inflows since 2000. They consider agglomeration economies, real GDP growth, natural resources as also the determinants of FDI to Africa.

Asiedu (2005, 2006) used panel data regression to examine the role of market size, natural resources, government policies, institutions, and political instability to determine FDI in African countries. The author uses fixed data model on a panel data of 22 SSA and the results shows that market size, natural resources stock and quality of infrastructures are the most important variables in determining foreign investment to African markets. However, Onyeiwu (2004) conducted an empirical study for 29 African countries between the period 1975-1999 which assessed the factors that invariably and significantly affecting the MNCs decisions about the FDI inflows to SSA and its determinants. The result provides that availability of natural resources, openness, and low rate of inflation, economic growth and reserve found to be significant for FDI inflows in Africa.

Naude and Krugell (2007) conducted an investigation on whether geographical distance and institutions play role in determining FDI inflows to Africa using cross-country econometrics approach and dynamic one step generalize method of moment (GMM). The findings indicated that geographical factors do not have a direct influence on FDI inflows to Africa because to the author re-exporting motives will dominate while suggesting different specifications are significant with different policy instruments which support the importance of best polices made by good institutions. Frank and Bartels (2008) investigates location decisions and determinants of FDI inflows in SSA the result of the findings show that energy endowment has inversely influenced FDI inflows to SSA while GDP per capita and fuel prices have a direct influence over the FDI inflows.

Moreover, Okurut et al. (2012) they conducted a study over the determinants of FDI inflows into Economic Community of West Africa States (ECOWAS) using panel data and dynamic OLS model for the member countries which covers the periods between 1975-2007. They also consider development in financial sector, investment returns, openness and infrastructures as key players in determining FDI inflows into ECOWAS member countries. The result suggests that the variables have a positive and significant influence over the FDI inflows and they concludes that in general most investors of FDI inflow in ECOWAS countries are natural resources seeking investors. However, this result is applicable to the area investigation as the panel data normally captured the individual characteristics of the variable under study as most of West African countries have been endowed with abundant natural resources like Ghana, Nigeria, Sierra Leone and among others. Therefore, availability of natural resources is considered the major determinant of FDI inflows and the result is in line with area of the study.

Rogmans and Ebbers (2013) aimed to test the appropriate determinants of FDI inflows in some regions in Africa using "Dutch diseases" concept. Base on their analysis they found that FDI inflows was impeded by the abundance of energy endowment while GDP per capita, and trade openness are encouraging FDI inflows to Africa and environment risk management are not differentiating factor from between countries in the region.

In contrast, this result is contrary to the results of Okurut et al. (2012) and Asiedu (2006). Dutch disease concept as an evident that shows the relationship between the increment in the financial development of natural resources and a decrease in the manufacturing sector cannot capture the specific characteristics of the economies unlike panel data. Therefore, Dutch disease is an inappropriate method

adopted for this investigation. There are extensive literatures both theoretical and empirical that identified the impact of FDI on economic growth and development of any economy either negatively or positively (Asiedu & Lien 2011).

Umoh, Jacob and Chuku (2012) conducted an empirical study about the relationship between economic growth and FDI in Nigeria in the period of 1970-2008. They employed simultaneous equation model to integrate on whether there is any feedback relationship among economic growth and FDI in Nigeria. Therefore, the result indicates that FDI and economic are determined jointly in Nigeria and the feedback is positive form growth to FDI and from growth to FDI. Authors suggest that as a policy implication there is the need to pursue and reinforce policies that will attract more foreign investment to the economy like greater openness of the economy and to more private participation. Contrarily, this method of estimation was inappropriate in measuring the impact of economic growth on FDI inflows or FDI inflows on economic growth and to make generalisation about the results. However, Granger causality is more applicable in this kind of situation because one has to know that is that an impact goes from economic growth to FDI or from FDI to economic growth (Gujarati, 2009).

Moreover, the result of Nurudeen, Wafure and Abdullah (2010) is more robustness and reliable because the authors employed Granger causality as well as Johansen co-integration methods to investigate the causal relationship and direction among the variables. They result found that there is co-integration among the variables and the granger causality is unidirectional and it is running from FDI to economic growth. Onakoya (2012) analysed the impact of FDI on Nigeria's economic growth, the research come up with a macroeconomic structural equation comprising four blocks which consist of private demand, supply, external sector and

government. Three Stage Least Square (3SLS) was adopted and simultaneous equations of the macroeconomic model in order to capture the disaggregating effect of FDI on the other sectors of the economy. The result shows that FDI has a positive and significant effect on economic growth but the effect of FDI growth effect differs over the sectors. The research recommends that sector-specific policies, import substitution strategy, and to offer incentive to local and potential foreign investors to enhance the growth and development of the country.

Anyanwu (2011) the author employed panel data sets of African which the covers the periods from 1980-2007. The model includes variables like GDP, per capita openness, financial development, government consumption, exchange rate, inflation, infrastructures, political right, urban population, oil exporters and region. Investigation result reveals that trade openness; large size of the market and high government expenditure has a positive effect on FDI inflows to African countries. The result also indicates that high remittance and availability of natural resources have a positive impact on FDI inflows but there is inverse relationship between financial development and FDI inflows.

Sharma and Abekah (2007) conduct empirical analysis on the relationship between FDI inflows and economic growth employed Cobb-Douglass production, GDP growth rate was use to proxy economic growth in order to estimate growth equation. The result found that there is a positive effect of FDI on economic growth in Africa. Therefore, FDI inflows are highly attractive in African countries. Inversely, the result face a setback where it only employs only OLS to estimate the growth equation and the result could be biased by not having a rigorous data analysis like cointegration or Vector Autoregressive (VAR) to estimate the relationship

because OLS cannot solely depends on and make generalization about the entire results.

Michalowski (2012) the research examines the impact of FDI inflows in SSA and its effect on economic growth. The paper found that there is a mixed result regarding the impact of FDI inflows on economic growth into SSA because most of the activities of FDI are taking place in the mining sector in relation to the other sectors of the economy where backward and forward linkages are limited. Therefore, SSA countries should focus their decision in adopting wise development strategies. That is, it is not only to attract or encourage FDI inflows but also to reduce barriers to FDI effectiveness. The author adopts meta-analysis approach in the study and one of the potential pitfalls of this kind analysis is the reliance of the availability of the published studies which might create biased about the result. However in meta-analysis the author may include materials that are irrelevant, bad studies may be included, summarised data might not be homogeneous, including several causal factors that lead to meaningless estimated effects and finally the overall result to become biased.

Hassen and Anis (2012) investigates the relationship among FDI inflows and host country economic growth. The research covers the periods from 1975-2009 and utilizes modern time series analysis of stationarity, co-integration and Error Correction Models (ECM) which includes the variables as FDI, GDP, openness, human capital, and financial development.

The empirical finding reveals that there is significance relationship between FDI inflows and home country economic growth and the result of Hassen and Anis (2012) suggest that FDI inflows could help to boost the process of long term economic growth. This result however, in reliable and appropriate to make an

inference about growth process in terms of short run and long run because the result first test for stationary of the variable as in the case of testing Johansen co-integration, variables must be stationary at the same level otherwise the result could be inappropriate.

Azman-Saini, Baharumshah and Law (2010) make their study on the systematic linkages between FDI, economic freedom, and economic growth by using the panel data sets of 85 countries. The research utilizes the Generalized Method of Moment (GMM) system estimator. The empirical result indicates that FDI itself does not have positive impact on output growth but there is a contingency effect on the level of economic freedom in the home country. Therefore, countries encourage and promote freedom of economic activities which will result in gaining the significance from the MNCs. Notwithstanding, this result is more consistent and robust because employing GMM provides a general framework of statistical inference which encompasses many estimators while conducting econometric analysis of a data.

Finally, determinants of the FDI inflows to Africa differ from one economy to other and from one period to another depending on the situation and the objective of the research. Thus, it is impossible to generate a unified list of these determinants and anticipated to be applicable to each and every country in the region. In addition to this, in accordance with the theoretical literature and economic point of view variables such as market size, GDP growth, openness, levels of infrastructures, human capital, population growth, and inflation in all can said to be accepted and considered as important determinants of FDI inflows to any country in Africa. But there are some variable this study will employ. Moreover, it is recognizes that FDI inflows helps in boosting economic growth and also brings flourishing to the host economies. This is the essential motivation behind the reason why developing

economies is undertaking FDI accommodating approaches to attract foreign capital to their shores. Therefore, these selected economies keep on executing different reforms to this effect, but yet the effect of these reforms has not brought about a change in the improvement of the country's economic development or an elevated growth and their high consumption levels is also distort.

2.9 EFFECTS OF CORRUPTION ON FOREIGN DIRECT INVESTMENT INFLOWS

The effects of corruption in SSA vary from one economy to other depending on the strongest regulatory authority. Corruption undermines institutional power, causes conflicts and damages lives and communities; it leads to the failure of government to provide essential infrastructures it increases cost of doing business. However, with the regard to the effect corruption on FDI inflows, empirical results indicates that corruption impact FDI inflows either negative or positive, inversely or directly which in turns has an effects on economic growth and development in general. Additionally, the inverse effect of corruption on the level of FDI inflows is adversely affecting the economic growth and the population at large. The economic effects if corruption resulted in the misallocation of public resources inappropriately at the expense of the population and this create a wider gap between rich and poor and end in creating poverty. Corruption demolishing economic environment when economic activities are dwindling and accomplished by bribery, embezzlement and extortion that creates distortions in the business environment.

Therefore, there are two main theoretical models that can describe the impact of corruption on the FDI inflows of any economy namely; "Grabbing Hand" theory of corruption and "helping hand" theory of corruption. Firstly, the "grabbing-hand"

theory of corruption supported by economists like Mauro (1995), Zurawicki (2002), Mathur (2007), Shera Adela, Dosti and Bernard (2014), Bliss and Tella (2014). This view claims that corruption in an economy increases the cost of doing business (irregular tax), distorts equitable distribution of resources and then lead to the decrease in the output generating capacity of investment. Thus, corruption is considered as a "Sandy the Wheels" approach. Secondly, the "Helping-Hand" theory of corruption viewed corruption rather than obstacles that deter FDI inflows but efficiently lubricating the rigidity of economic regulation thereby encouraging the attractiveness of FDI inflows. This view however suggest that as low quality of governance and corruption coincide, corruption can reduced the problems by speeding up the processes of the sluggish government by providing incentive to badly compensated civil servants. Therefore, bad governance can be compensated by corruption and attract more FDI. Thus, corruption is considered as a "grease the wheels" approach. This view is also supported by scholars like Lui (1985), Bellos (2012), Subasat and Bellos (2013) and Quazi, (2014).

2.9.1 Negative Effects of Corruption on FDI Inflows

These are related literature that viewed corruption as an obstacle that deters FDI inflows. While according Aidit (2003) majority of the empirical literature on the effects of corruption are in support of the "Grabbing Hand" theory of corruption.

Mauro (1995) investigated about the relationship between corruption and investment with sample of 67 countries. The author take the index of corruption from business international where he employs the ordinary least square and two stage least square models. Index of ethno linguistic fractionalization was used to control the problem of endogeneity and nine indicators of institutional efficiency. Therefore, the

estimated result reveals that high level of corruption lead to the low level of investment to the GDP and economic growth in a countries' cross section, the result is in line with findings of Wei (2000), Habib and Zurawicki (2002). In contrast, the author employed only ordinary least square and two stage least square models of the countries cross section. Therefore, this result is suspicious to be biased because it does not account for the individual heterogeneity among the units of observation which affects the validity and consistency of this finding. Therefore, this finding does not provide reliable evidence as a basis for effective economic policies.

Furthermore, Pupovic (2012) conducted his study in Montenegro to examines the corruption effects on FDI inflows by incorporating a link between investment inflows and corruption. The research employed gravity model where the author used FDI inflows and CPI as the dependent and independent variables respectively. The research also utilized questionnaire as a means to get reliable information, it was distributed to public institutions, students, citizens and private companies, the result shows that at low level of corruption FDI inflows tend to be very high, That is, the corruption distorts capital flows in the Montenegro by the decreasing the share of FDI inflows is in favour of capital flows in the short term. Therefore, this finding confirmed corruption as a sandy the wheels hypothesis. However, by considering the gravity model or gravity equations, the major component of analysis are market size (captured by GDP per capita as a proxy) and distance (captured by using information and transport costs or transport cost only) but unfortunately this findings does not use any of these. The analysis also utilizes primary data instead of secondary data in which most of the studies employed like Dunning and Rugman (1985), Bellos (2011) and Subasat and Bellos (2013). With this in mind, this finding considered as inconsistent and inappropriate to make an inference.

Porters (2010) investigated the relationship between corruption and FDI inflows by the panel data of countries between the periods 1995 to 2007. Corruption perception index was used as a proxy of corruption level, variables like GDP, trade openness (percentage of GDP), human capita and inflation rate are all employed in the analysis to measure whether the relationship exist. The results indicate that there is negative and significant impact of corruption upon FDI inflows. This means that with the less corruption level FDI inflow tend to be more attractive. Invariably, this study is suspected due to consideration of the variables included in the model where the authors silence about the control variables which also has an influence about the result and in addition, apart from CPI there are other indices that can use to measure the effects corruption which will make the findings to be more reliable and consistent.

Furthermore, Alemu (2013) conducted an investigation of 16 Asian economies from the period 1995 to 2009 to verified an insight about the effects of corruption on FDI inflows in the sample area of study. The author argued that one per cent increase in the corruption level will stimulate a decrease in FDI inflows by 9.1 per cent. Therefore, despite the high level of corruption in these sampled economies, corruption does facilitate FDI inflows and make it to be more attractive because in most cases regulatory authorities in developing economies are considered to be weak when carrying their activities. In contrast, the study has some kinds of limitations: in terms of measuring corruption level and its effects on FDI inflows there are other variables that may influence this result, variables like natural resources, inflation, and population. The author supposed to use other indices of corruption perception for the validity and consistency of his findings.

Al-Sadiq (2009) aimed to examine the empirical effects of corruption on FDI inflows over 117 economies between the periods of 1984 to 2004. The study employed panel data analysis as against cross-sectional analysis adopted by the previous studies which author believed that such results cannot take the cognisance of a country specific effect which corruption might be correlated with. Therefore, the level of corruption in the host country is adversely affecting the level of FDI inflows by making it to be unattractive. That means as the corruption level increase say by one per cent will destruct the FDI inflow by about 11 per cent. The panel data result indicates the disappearance of the impacts of corruption by controlling the institutional quality of the host country. Thus, foreign investors consider institutional quality over corruption level because weak political institutions lead to the high corruption level. In addition, when democracy and rule of law variables as a proxy of institutions included in the model the negativity effects of corruption on FDI inflows will vanish. Additionally, Al-Sadiq further identified corruption as bribery paid to corrupt public officials to get favours that accomplished with their desire in terms of tax assessment, police protection and licences.

Fortunately, this study is accurately conducted by introducing two econometric methods, a wider set of control variables, and different set of panel data. Firstly, this study utilizes cross-sectional regression as was used by the previous researches and the result is line with the previous researches which assert that corruption destruct FDI inflows. Secondly, the author employs the analysis of panel data that resulted in the vanishing of negative effects of corruption as the home country's institutional quality is controlled. Therefore, the validity of this result is more reliable and consistent as against the previous studies in which they did not take account the effect of individual heterogeneity.

Khamfula (2007) conducted a study on the role of corruption in terms of FDI inflows and economic growth in the export promotion and import substitution countries sand the study recognize the Bhagwati's framework. The study employed simultaneous equation, fixed effect model for the analysis of 17 countries between the periods from 1994 to 2004. The result found shows that the corruption is more dangerous in attracting FDI inflows in import substitution economies than that of export promotion economies. This finding also reveals that as corruption level is elevated it results a negative and significant effects on FDI inflows in both import substitution and export promotion economies. But the result changed as the corruption is interacted with the domestic investment which shows significant and positive effects only for import substitution countries. Fortunately, this finding is more accurate and sound, the result is robust as rigorously analysed by economic tools of fixed effect regression as well as simultaneous equation models and result is in line with the previous study of sandy the wheels corruption. But the shortcomings of this study it does not tested the impact of corruption on FDI flows with the other corruption perceived indices a part from CPI.

Habib and Zurawicki (2002) examines the effect of corruption on FDI inflows by considering 89 sample countries and two different methods employed in the analysis namely; OLS regression and PROBIT models. The data includes variables as FDI, CPI, GDP, labour, political stability and export. Corruption in the host countries distorts FDI inflows as foreign investors shun corruption because as morally wrong which create operational inefficiencies. Therefore, there is negative effect of corruption over the FDI inflows in the sample countries. However, they picked OLS due to their use in terms of continuous variables, for example FDI and perceived corruption index and the perfect difference in corruption measured by

absolute difference in corruption perception index. The study believed that there is still an issue with the measuring of corruption due to the characteristics of corruption; however corruption perception index is still a standout amongst the most generally utilized estimation of corruption by researchers in general. In other words, PROBIT was utilized to clarify the contrast between the home economy's share of the world FDI inflows and the economy's share of the specific host economy's FDI inflows. The findings of this study are appropriate and consistent with contention that corruption is a genuine hindrance for investment; both at the levels of corruption in the home economy and host country have an inverse significant effect on foreign direct investment.

However, Umur (2014) investigated the empirical result on the causal effects among corruption, political risk and industrial production index as a proxy to GDP, the study cover the periods from 1992 to 2010. The approach of Shin and Smith (2001) bound co-integration and error correction models as well as Pesaran means was employed. The result shows that corruption distorts FDI inflows in the sample country both in the long run and short run periods. Thus, there is negative relationship between FDI inflows and corruption in Turkey. In addition, increase in the political risk contributes a lot to the reduction of FDI inflows in the short run which is contrary to their expectations. Contrarily, the result of this study is suspicious base on the following shortcomings; (a) the study employed time series data which has only nine years observations, where in time series analysis the minimum number of observations should at least not be less than 30 observations (Gujarati 2009), (b) the best way to obtain a sound and reliable result is by employing panel data model and this result is not consistent with that of (Bellos and

Subasat 2012), where the author employs a gravity panel data and causality analysis and found that corruption do not deter FDI inflows in the host country.

Mathur (2007) assessed whether corruption have any effect on the level of FDI inflows in the developing economies, the study employed a panel data set of 29 countries and focussed on these variables as CPI, FDI, market size, skilled labour, infrastructures and degree of openness to assessed the effects of corruption in which it covers the periods from 1980 to 2000. The result shows that countries with less corruption and high democratic levels tend to attract more FDI inflows. Therefore, the implication of this is that countries that characterized by weak regulatory agencies and weak democracy will deter foreign investors because they very much care with political system in the host country. However, the result of this study is consistent as it employed basic determinants variables that captured the individual specific characteristics of the sampled countries. Thus, result is said to be sound as it employs panel data for rigorous analysis.

Marie (2012) examines the relationship among economic growth, FDI and corruption by considering sample of 42 developing countries and 28 developed countries. The study utilizes Panel Dynamic Ordinary Least Square (PDOLS) methodology for the real output long run and error correction models. The finding of this analysis reveals that FDI inflows contributed immensely in terms of economic growth in the long run and in the short run also for both developed and developing economies. But contrarily, in the case of corruption for developing economies it shows that corruption has a negative effects on the level of FDI inflows which in turns affect economic growth indirectly (negatively). On the other hands, lower corruption levels augment the impact that FDI has on economic growth. In contrast, the study employed cointegration and error correction models in the analysis but

these methods are inappropriate while measuring relationship like this due to fact that these models does not consider the cognisance influence of individuals specific effect. Therefore, the result is suspicious.

Notwithstanding, Kusum (2005) conducted analysis on the effects of corruption upon FDI inflows and tax revenues in the 54 developing and developed economies. The finding shows that a one point marginal improvement in the levels of corruption would generate at least additional FDI inflows of about 0.5 per cent out of GDP. This shows as the country becomes more corrupt it will discourage the attractiveness of the FDI inflows into that country. Lastly, the result shows the advantage of FDI inflows in the economy which will lead to generate additional revenue through taxation. However, based on the models construction, the author does not differentiate which models is employed, whether it is time series or cross section or panel data. Secondly, the study utilizes only OLS in measuring the relationship between variables and this make the result to be biased. Because model like co-integration or panel data are appropriate methods in measuring relationship among these variables.

A study conducted by Hossain, Peters and Keep (2012) on the empirical relationship between corruption and FDI inflows by introducing moderator of bilateral tax treaties to describe the impact of corruption in the level of country's FDI inflows. That is, this paper includes corruption and tax treaties to explain the inward FDI levels of an economy. The study employed cross sectional data in the analysis and the result indicates that there is a statistical and significant moderating effect of bilateral tax treaties on the country's corruption level in determining the level of FDI inflows. This means there is negative effects of corruption on FDI inflows which would deter FDI inflows. The result further indicates that the rule of

law should be enforced for the countries to maximize their untapped market potentials. However, this study employs only OLS tools in the analysis and this make findings to be suspected. There are other methods which are more reliable and accurate like Johansen cointegration test, VECM and Granger causality. Secondly, most in this case whether is this only corruption or tax or both have an influence over the level of country's FDI inflows.

Tamilla, Dawna and Thomas (2013) their study based on the 129 cross countries with the purpose to examine the role of human development, global competitiveness and corruption level to forecast the level of FDI inflows. The study employed the Dunning's location specific and stepwise multiple regression for the analysis of 129 cross section countries. The result provides the evidence that global competitiveness and corruption level are the significant variables that predicts the in inward levels of FDI while the index of human capital did not contribute to the overall findings. Therefore, global competitiveness is the country's economic environment and it is the capacity of achieving a sustainable prosperity and growth.

A study conducted by Brada Drabek and Perez (2012) in the Eastern Europe transiton countries base on the effects of host-country as well as home-country corruption level on FDI. The result indicate that the decision to invest depends largely on the level of corruption in both home and host countries. Therefore, the authors found a linear and negative relationship between host-country corruption and the probality of MNCs to loctae their investment. Thus, countries with less corruption would attract more foreign investment. In contrast, though these studies Tamilla *et al.* (2013) and Brada *et al.* (2012) where theoretically sound but the authors employed cross sectional data analysis for multiple regression models, the result was not rigorously analysed instead for cross section analysis, panel data

analysis would be more accurate and reliable because it takes into account the effects of individual heterogeneity. Therefore, the finding consider as inconsistent and misled into a wrong conclusion.

Dinko et al. (2011) assessed the effects of corruption on the inward FDI with the aim to to pinpoint the significance of FDI and corruption as a main factor in terms of rejection of potential foreign investors. The utilizes meta analysis and the result of the finding indicates that corruption together with the low levels of rule of law and poor quality in the public adminitration are the major obstacles that prevent foreign investors.

In summary, the prevoius literatures reviewed ensured tha the effects of corruption on FDI inflows is negative. That means as the high corruption level would deter FDI inflows and this confirmed that corruption is a “Grabbing Hand” to foreign investment or corruption is considered to be “Sandy the Wheels” hypothesis in which it distort the FDI flows due to the weaknesses of the regulatory agencies. However, frequently corruption is responsible for increment in the cost of goods and services to the overall population, it causes scarce public resources to uneconomic high profiles projects, corruption also leads to the diversion and misallocation of resources, transform public assets into personal and private property, it nourish high inflation, it leads to imbalance economic development, debilitates hardworking attitudes, impedes development in market structure and empower unnecessary competition thereby deflecting reasonable competition between market players. Extensive scale of competition harms the economy and devastates the whole population.

Socially, corruption disengaged people from work together for the benefit of everybody, uncommonly requesting and paying bribes has turned to be tradition in these selected countries which becomes a social disparity by enlarging the gap among

the populace. This on-going research is needed in this area as the subject matter becomes very important. How corruption does affect the well-being of economic transaction of a country? Or how corruption level does impact the levels of FDI inflows in the developing countries Nature of corruption?

2.9.2 Positive Effects of Corruption on FDI Inflows

Alternatively, there are some literatures which are contrary with the above opinions in which they provides evidences where corruption is considered as "helping hand" that encourages FDI inflows. The scholars with notation believed that corruption is a "greasing the wheels" hypothesis where it facilitates the smooth running FDI flows. The following are the litratures that are supporting this argument.

Egger and Winner (2005) conducted their study which covers the periods from 1995 to 1999 using panel data sets of 73 developing countries. The result clearly shows a positive effect among corruption and FDI in both short and long run on FDI inflows. That is, corruption encourages FDI inflows and this study is consisted with grease the wheels theory of corruption. However, this result is reliable and consistent as the authors consider dynamic panel data analysis to test the cointegration among the variables and this is more reliable than that of time series cointegration. Equally, Christopher and Watson (2004) examine the impact of corruption that is associated with the level change of inward FDI. The research utilizes Ordinary Least Square (OLS). Corruption perception scores generated by transparency international was use as proxy to the corruption level of an economy and research covers the period only 1999 and 2000. The finding shows that regardless the increase of corruption indices the level of FDI inflows still growing to a higher level. Therefore, this result disproves the notion that corruption deters FDI

inflows because in as far as the increase in corruption no matter how foreign investment still remains attractive. Thus, corruption is grease the wheels hypothesis.

In contrast, this study adopts only OLS to test the result which is inefficient to capture this kind of relationship in which result becomes suspicious. Secondly, the do not control the individual specific characteristics which may affects the final result. Thirdly, this study covered only year period of analysis. Therefore, a finding with nature is considered to be biased and inconsistent.

Mudambi et al. (2012) conducted their study by employing the integrated approach to assessed the impact of corruption on FDI inflows, the integration enables the model to link national institutional factors to magnitude of the cross country flows of FDI. The study covered about 55 cross-countries from 1986 to 2000 which is four distinct periods. In terms of panel nature of the data the variables are considered as time-varying and this enables the institutional variables to vary over time. Therefore, the authors utilized time period observations instead of annual observations. Their empirical result shows that corruption does not have direct influence over FDI inflows independently. Thus, it is level corruption together with the economic regulation consider as the major determinant that influenced the level of FDI inflows. Contrarily, in terms of the model employed, the variables in the model rendered the result to be suspicious because it did not capture the individual specific characteristics nature of a unit of observation. Variables like infrastructure, natural resources endowment, institutional factors might influence this findings but are not included in the model. Secondly, the authors complicated the procedure of measuring corruption levels as they proposed time period observations instead of annual observations but they proceed to use annual data of corruption perception index computed by Transparency International. Lastly, the variable used to capture

economic regulation is correlated with corruption. Therefore, this findings is suspicious and biased and it is not consisted with the findings of (Bellos and Subasat 2012). But empirical study of Cuervo-cazurra (2008) reveals that corruption level has a meagre negative effect on the inflows of FDI into the transition economies in relation to the other countries. This view tries to show the reason why foreign investors invested into the transition economies with a higher corruption level. Assuming that these transition countries are experiencing specific similar problems, therefore countries provides better opportunities with a high corruption level to the foreign firms.

According to the findings of Bellos and Subasat (2011) whom they employed a panel gravity model to examined the impact of corruption level on FDI inflows with regard to 15 transition economies. The result shows that despite whatever the level of corruption is, corruption does not deter FDI inflows. Subasat and Bellos (2013) conducted their study on the impact of corruption on FDI flows in both source country and host-country in the case of transition countries. The study adopts the model of Bellos and Subasat (2012) but with slightly and more advance model in which it includes corruption from both source and home countries and the study uses the same variables in the analysis. The study covers the periods from 1985 to 2008 over 24 targeted countries and 31 source countries. The finding indicates that corruption is considered as enhancing factor to FDI flows between the countries. Therefore, this findings support the argument that corruption is grease the wheels hypothesis. However, based on the findings of Bellos and Subasat (2012) and Subasat and Bellos (2013) there is model specification error because variables such as infrastructures, institutional factors, natural resources; most especially natural endowment has a greater influence over FDI inflows in this area of study but where

omitted in the models. These render findings to be inconsistent, biased and suspicious.

However, Quazi (2014) conducted the study to investigate the effects of corruption and regulatory agency on FDI inflows over the panel data set of 53 African economies and the research utilizes Feasible Generalized Least Square model in the analysis. The result reveals that corruption does not deter FDI inflows to Africa but rather it facilitates and encourages foreign investors. The result also found that regulatory environment is weak in Africa and this result validate the helping hand hypothesis and finally result shows that SSA are suffering from locational disadvantage in attracting FDI inflows in relation to other continents.

The study of Larraín and Tavares (2004) assessed the impact of openness on corruption level by taking FDI inflows as proxy of openness. The study employed cross sectional data of the countries under study over the periods 1970 to 1994 and the study test the causality between the new instrumental variables set of cultural and geographical distance among the FDI exporting and recipient economies. However, the study found that FDI as a GDP share is relate significantly with lower levels of corruption. Therefore, with regards to the quantitative effects both FDI and corruption appeared to be in the same order of magnitude as far as that of GDP per capita.

2.10 CONCLUSION

This chapter discussed in detail the related previous studies on the impacts of corruption on FDI inflows, the chapter consists introduction, definition of the key concepts, nature of corruption, determinants of FDI inflows in relation to sub-Sahara Africa and the related literature on the effects of corruption on FDI inflows that

supports either “grabbing hand” and “helping hand” theories of corruption. However, it is also explored theories that tried to explain various forms and reasons for MNCs to engage in FDI. Theories give an insight about the procedure that enables firms to invest in abroad. Therefore, it can be said that each theory has informative power to explain international investments by firms. Based on the discussed it appears that OLI theory gives a finer design framework for a single general theory of MNCs which has the power of examining (a) what encourages MNCs to engage in FDI, (b) what are the purpose behind different forms of investment in abroad and (c) what empowers the MNCs to go another country and be successful? In this literature the author discussed the related literatures on the effects of corruption on economic growth as “Grabbing Hand” or “Helping Hand” theories of corruption.

CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

This chapter describes the overall methodology of this study which aims to investigate the determinants of FDI in some selected West African English speaking countries. It consists theoretical framework, specification of the model, justification of the variables, data, method of data analysis and conclusion.

3.2 THEORETICAL FRAMEWORK

The framework was developed based on Dunning OLI model known as eclectic paradigm because it is considered as the most influential empirical framework to examine the effects of FDI over the decades. OLI framework provides a holistic framework that includes the most influential factors that determines the operations of MNCs. Then, MNCs invest in an economy with the purpose either as market-seeking, resource-seeking or efficiency-seeking MNCs. Market-seeking investors are attracted by the market size in the targeted country. An economy which is characterized with high demand would definitely require more markets for goods and services thereby encouraging investment. Moreover, increased in investment in an economy could attract more investors thereby engaged in competition to acquire large market share and hence this would encourage and make FDI more attractive. Similarly, increasing investment would increase GDP per capita which is used to measure market size.

Moreover, as demand of more goods and services increased in an economy thereby attracting more foreign investors and this will lead to open-off of the economy by flowing more goods and services across economies hence export and import could be increased/encouraged (openness). Therefore, as a country becomes an open door free economy the probability of investing would increase thereby attracting more foreign investors and perhaps FDI could also become more attractive. Despite high demand and greater openness an economy is, macroeconomic stability must be ensure for favourable and conducive business environment and this is reflected through relative and stable inflation and exchange rates. But, if business environment is not stable with high inflation or exchange rate volatility, foreign investors could discourage and hence FDI become less attractive.

In the same way, an economy that characterized with strong and efficient regulatory institutions which is measured by government effectiveness could attract more foreign investors which could increase FDI. That is, an economy characterized with strong civil service, efficient public services, high degree of independence and efficient policy formulation could encourage more FDI and attracted most especially efficiency-seeking investors. Dunning (2002) argued that FDI in the developing economies has moved from resource or market-seeking FDI to efficiency-seeking FDI. However, the level of corruption in the targeted country became a serious issue to foreign investors, countries with high level of corruption they may likely attract or discourage FDI inflows. Therefore, if corruption coincides with weak regulatory institutions, corruption would compensate bad institutions and make FDI to become more attractive. Additionally, a favourable investment climate in the target country increase the probability of investing in such economy and this is measure by economic freedom. Further, the more an economy become liberalized the more

viability of investing in that economy and hence the more FDI become more attractive. Moreover, despite the inspired performance of investment in attracting more FDI but it has been prerequisite with the available quantity of labour. Availability of labour means high quantity of labour and this lead to the low cost of labour, cheaper labour means foreign MNCs has capability of employing more labours, employing more labour would increase investment thereby productivity would increase and perhaps FDI could be more attractive. Lastly, the argument between efficient and qualitative infrastructure with FDI is straightforward. Provision adequate and efficient infrastructure such as good roads, bridges, electricity, communications, railways, ports and all these could encourage investment thereby stimulating productivity and hence FDI become more attractive. Indeed, for all that can be observed in Figure 3.1.

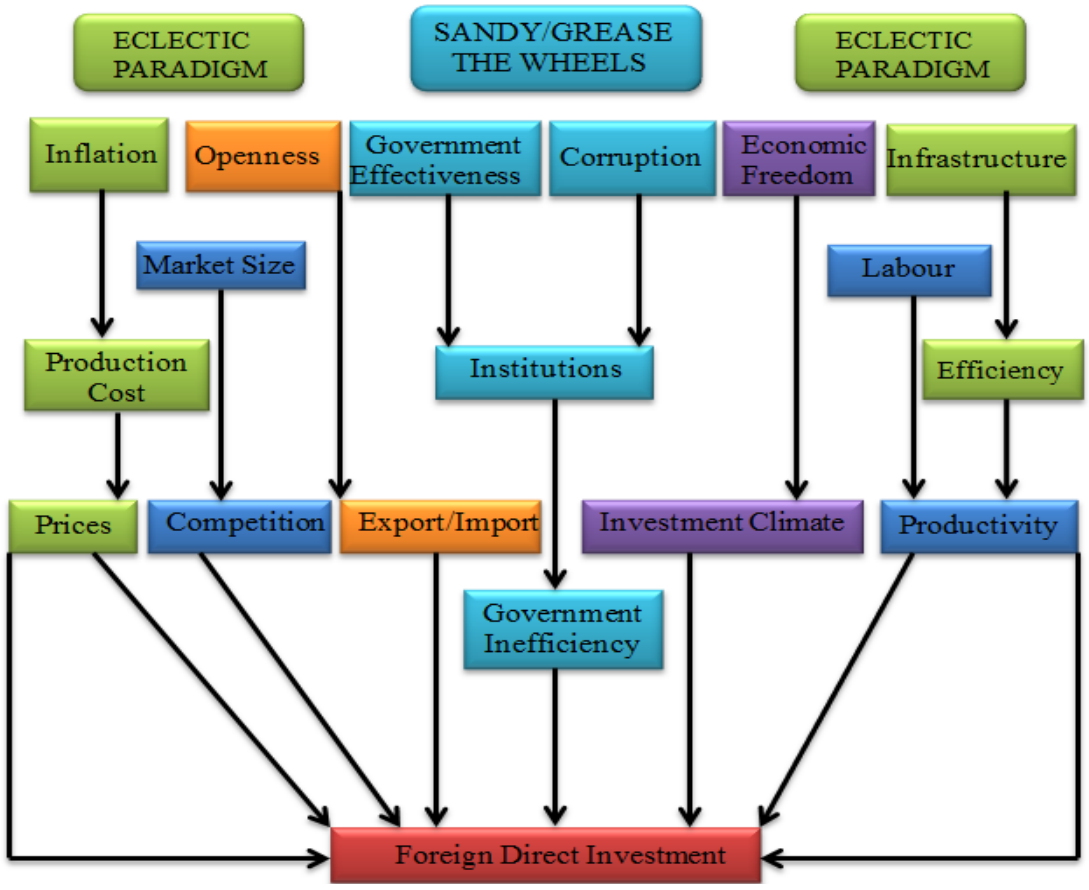


Figure 3.1: Theoretical Framework

3.3 SPECIFICATION OF THE MODEL

The empirical model is based on the theoretical argument in the literature reviewed. Therefore, the empirical model follows Dunning (1980, 1988), Al-Sadiq (2009) and Quazi, Vemuri and Soliman (2014) with a slight modification. The adoption of this model is because it described the association among dependent and independent variables. The empirical model can be further expressed by Equation [1].

[1] $$FDI_{it} = \beta_0 + \beta_1 LCORP_{it} + \beta_2 LMKTS_{it} + \beta_3 LOPEN_{it} + \beta_4 LINFR_{it} + \beta_5 LABR_{it} + \beta_6 LINFL_{it} + \beta_7 LGOVE_{it} + \beta_8 LECOF_{it} + \varepsilon_{it}$$

where,

FDI	=	Foreign Direct Investment
LCORP	=	Log Corruption Level
LMKTS	=	Log Market Size
LOPEN	=	Log Trade Openness
LINFR	=	Log Infrastructure
LABR	=	Log Labour Force
LINFL	=	Log Inflation Rate
LGOVE	=	Log Government Effectiveness Index
LECOF	=	Log Economic Freedom Index

Moreover, *βs* are the unknown parameters to be estimated, *i* is the country's cross-country dimension, *t* is the country's time series dimension, and ε is the random disturbance term. The control variables are to be explained in section 3.4.

Six separated models have been estimated based on the measures of corruption level. That is, Model 1 could be estimated by using CPI as measure of corruption level, the estimation of Model 2 reports the estimated results while FFC as a measure of corruption level is used and Model 3 presents the estimated results while COC is used as measure of corruption. Whereas Model 4 estimates FDI inflows into specific countries while using CPI as a measure of corruption level, Model 5 employed the use of FFC as a measure of the level of corruption for estimation of FDI inflows into specific WACs and Model 6 presents specific results of FDI inflows into WACs while using COC as a measure of corruption.

3.4 JUSTIFICATION OF VARIABLES

3.4.1 Foreign Direct Investment

FDI it is amount of capital invested by foreign investor in an economy. It represents the net inflows of FDI to a country with which the investment is made. Therefore, FDI is measured by FDI per capita, which is measured by

$$FDI = \left(\frac{FDI}{total\ population}\right).$$

3.4.2 Corruption Level

Corruption level (CORP) is used as a measure of corruption in a targeted country in order to assess the effects of corruption on FDI inflows in the home country. There is no universal procedure of measuring corruption due to its secretive nature. Three measures as CPI, FFC and COC employed to assess the level of corruption of a particular economy. These measures are widely used by several researchers in their

studies and it is considered as the well accepted measure of corruption in the targeted country. Likewise, it is expected to have a positive or negative sign. If it is negative, it means corruption deter FDI inflows in the targeted country and this is in line with the work of Mauro (1995), Wei (2000), Habib and Zurawicki (2002), Al-Sadiq (2009) and Alemu (2012, 2013). While, if the coefficient sign appeared to be positive it means corruption encourages more FDI inflows into the targeted countries. This is line with the work of Christopher and Watson (2004), Samanta (2011), Bellos and Subasat (2011), Subasat and Bellos (2013), Alemu (2012 & 2013) and Quazi et al. (2014).

CPI is the scale between 0-10 from 1995 to 2011 but it was changed in 2012 to the scale of 0-100. Therefore, this study reversed this scale to 0-10 by dividing the index with 10, so that it could be similar. FFC is scaled from 0-100, zero means a country is more corrupt while 100 means less corruption. Similarly, COC is also scaled between -2.5 to 2.5, where -2.5 indicates higher corruption level a country characterized with while 2.5 indicates the cleanest a country is from corruption.

3.4.3 Market Size

Market size (MKTS) is the measurement of the overall volume of a given market. The hypothesize market size argued that FDI inflows in the host country is a function of home country market where GDP per capita is usually used to measure it. Therefore, the domestic demand in the home country plays an important role in attracting more FDI inflows where the basic objective of MNCs is to secure and serve the home country markets and this means more business to MNCs and domestic firms. GDP per capita is used as a measure to market size. Many empirical studies such as Wei (2000), Quazi (2007, 2014), Al-Sadiq (2009), Porters (2010),

Freckleton, Wright and Craigwell (2011), Bellos and Subasat (2011), Baxamusa and Jalal (2014) and Subasat and Bellos (2013) used market size of the domestic country. They found a positive relationship between market size and FDI inflows. Inconsistent with the studies of Mauro (1995), Tanzi (1998), Habib and Zurawicki (2002), Anyanwu (2006), Dreher and Gassebner (2011) found a negative relationship between market size and FDI inflows. Therefore, it is expected to have a positive sign with the inflows of FDI.

3.4.4 Trade Openness

Trade openness (OPEN) refers to the sum of total export and import of goods and services to the investing partner usually in a year. Openness is measured by the sum of import and export of goods and services as a ratio of GDP. This measured the degree at which an economy is opened to trade with the rest of world. Therefore, a significant positive coefficient implied high degree of openness to attract more FDI inflows. In addition, the more an economy is opened to doing business, the more incentive for MNCs need to trade to that economy. But a negative coefficient such an economy imposes trade barriers which may discourage FDI inflows. The study of Habib and Zurawicki (2002), Anyanwu (2006), Al-Sadiq (2009), Porters (2010), Alemu (2013) and Quazi *et al.* (2014) found a positive relationship with FDI inflows. It is expected to have a positive sign with the FDI inflows.

3.4.5 Infrastructure

The availability in the provision of infrastructure in an economy could be an important influential factor that determines the inflows of FDI into the targeted countries. However, infrastructure such as provision of good roads,

telecommunication, electricity, seaport and railways could attract more FDI inflows into the home countries. Provision of good infrastructural facilities would increase productivity thereby stimulating more FDI inflows. This study uses telephone lines and mobile subscribers to measure infrastructure. Afterwards, studies like that of Asiedu (2002), Anyanwu (2011), Alemu (2013), Mathur and Singh (2013) and Quazi (2014) found the relationship of infrastructure to be positive. On the other hands, the studies of Bellos and Subasat (2011) and Quazi et al. (2014) found negative relationship among the infrastructure and FDI inflows. It is expected to have a positive sign with the FDI inflows.

3.4.6 Government Effectiveness Index

Effective government in the targeted country plays a critical role in attracting FDI inflows. It influences the decisions taken by MNCs where the managers of MNCs should take into consideration the decisions taking by the home country government that can influence their activities. Domestic country is likely to attract more FDI inflows if the government is strong and effective. However, government effectiveness captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies (WGI 2014). This variable would be used to measure quality of regulatory institutions (environment). Similarly, Turan and Subasat (2013), Breen and Gillanders, (2012) and Quazi, (2014) includes this index in their analysis to measure institutional quality. It is expected to have a positive sign with the level of FDI inflows.

3.4.7 Economic Freedom Index

Growing index of economic freedom (ECOF) is considered as the unequivocally about accomplishing greater overall prosperity that goes beyond materialistic and monetary measurements of prosperity (Heritage Foundation 2014). This is used to measure the quality of investment climate. This can play a vital role in attracting FDI inflows to the home country. Studies by Subasat (2011) and Quazi (2014) found the relationship with FDI inflows as positive. But the study by Quazi (2007) and Quazi et al. (2014) found the relationship with the level of FDI inflows as negative. It is expected to have a positive relationship with the level of FDI inflows.

3.4.8 Labour Force

Labour force (LABR) is measure the available quantity of labour force in the home country for producing goods and services. This is the portion of population of labour force participation whom their age ranges from 15-16 and they are considered as economically active. Labour in abundance means the MNCs can expect to have lower cost of labour inputs and it is expected to have a positive sign with FDI inflows. Most of the previous studies used total population as a proxy to the quantity. This is in line with the studies of Habib and Zurawicki (2002), Bennett (2005) and Shera, Dosti and Grabova (2014).

3.4.9 Inflation

Inflation (INFL) is the persistent rise in the general price of goods and services usually in a year. Previous empirical studies indicate that a relative lower of level of inflation means lower macroeconomic risks, therefore higher FDI inflows is anticipated. Inflation rate is measured by the consumer price index. This variable is

employed as a measure to control economic stability (macroeconomic stability) in the home country and it is expected to have a negative sign relationship. Therefore, the high rate of inflation in the home country indicates higher macroeconomic risks and inconsistency of economic policy. This means a bad signal to FDI inflows in the home country because it causes uncertainties in the business environment and it increases cost of production which it renders economic environment unstable. Al-Sadiq (2009), Porters (2010), Bellos and Subasat (2012) and Hossain et al. (2012) includes this variable in their studies. Summary of these variables is presented in Table 3.1.

Table 3.1: Summary of Variables

Variables	Definition	Source	Expected Sign
Foreign Direct Investment per Capital. (FDI)	It is the inflow of FDI into the targeted country. It is expressed in term of ratio of the total population	UNCTAD 2014	Dependent variable
Corruption Perception Index (CPI)	CPI it is an index used to assess the level of corruption of a particular country usually in a year.	Transparency International 1998-2013	+ or -
Freedom from Corruption FFC	FFC it is also used to assessed the country's level of corruption in a year	Heritage Foundation 2013	+ or -
Control of Corruption (COC)	COC captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption.	World Bank WGI 2014	+ or -
GDP per capita (GDPC)	The value of country's goods and services usually produced divided by the total population in a year	World Bank WDI 2013	+
Trade Openness. (OPEN)	The total goods and services for export and import to the investment partner as a proportion of GDP.	World Bank WDI 2013	+

. . . Continue Table 3.1: Summary of Variables

Variables	Definition	Source	Expected Sign
Infrastructure. (INFR)	This is the provision of infrastructure which is measured by telephone and mobile subscribers per 100 people.	World Bank WDI 2013	+
Government effectiveness index. (GOVE)	quality of public services, civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.	World Bank (WGI) 2014	+
Economic freedom index. ECOF	This is the measure of investment climate in the home country	Heritage Foundation 2014	+
Labour force (LABR)	This is the available quantity of labour for producing goods and services.	World Bank WDI 2013	+
Inflation. (INFL)	The persistent rise in the general price level in a country usually a year. This measures overall macroeconomic stability	World Bank WDI 2013	-

3.5 DATA

The study basically utilizes secondary data; mostly from World Bank (i.e. World Development Indicators and World Governance Indicators), United Nation Conference on Trade Development (UNCTAD) and Heritage Foundation. This is the panel study that utilizes the secondary data of 15 years, time frame covering the periods from 1998 to 2013.

Moreover, Baltagi (2008) identified the following importance of using panel data as. Firstly, panel data control individual specific heterogeneity. Since the panel data analysis is considering countries, firms, individuals, etc. these units are bound to be heterogeneous. Therefore, the researcher has the ability to control variables for

time invariant and country invariant. Secondly, panel data analysis combines both time series and cross-sectional observations. Therefore, it provides more information, less collinearity among the variables, more efficiency, more degree of freedom and more reliability in the result of the parameters. Thirdly, panel analysis is subject to dynamics of adjustment. That is, by observing the repeated cross sectional dimension which can results in eliminating biases in countries aggregation and nonstationarity. Fourthly, panel can measure and detect the effects which cannot do so in time series or cross section observations.

3.6 SAMPLE OF THE STUDY

A total of five West African English speaking countries were included in the study namely; Gambia, Ghana, Liberia, Nigeria and Sierra Leone. They are members of Economic Community of West African States (ECOWAS) with headquarter in Nigeria at Lagos. They are part of SSA region and part of the low income countries category. The countries are almost regional tiers with the regional proximity to trade among each other. This is in particular the motivation and encouragement for selecting these countries thereby analysing them for meaningful and robustness analysis. However, the availability of data on corruption influences the choice of time frame for this study.

However, panel data is a set of observations that consists time series for cross-sectional series in a set of data. This consist a panel of five WACs with the 15-year time dimension. Therefore, estimation panel data is considered as an analytical efficient method for handling econometric data and it could be balanced or unbalanced. Balanced panel is an observation that has the same time periods for each variable and each individual

However, model design, measurement errors and data collection are considered to be the major problems researchers are facing when using panel analysis due to the facts researcher is estimating dependent variables on a set of independent variables and unlike in time series analysis it suffers from short period of observations like in annual data for a unit of observation.

3.6 METHOD OF DATA ANALYSIS

The study utilizes traditional panel data techniques that could be used to test the relationship among FDI inflows and other selected variables included in the models. Method of the data analysis is classified into Pooled OLS, Fixed Effects Model (FEM) or Random Effects Model (REM).

3.6.1 POOLED OLS REGRESSION

Pooled OLS is a method of estimating the true population parameters from a given sample in a regression analysis in which it neglect time series and cross sectional nature of the observations. Therefore, in this study pooled OLS could be conducted to observe the effects of independent variables over FDI inflows as the dependent variable. Pooled OLS for instance, consider WACs as the same which has no difference because it assumes homogeneity in terms of the observations of the cross-country. The model can be specified below in Equation [2].

$$[2] \quad FDI_{it} = \beta_0 + \beta_1 LCORP_{it} + \beta_2 LMKTS_{it} + \beta_3 LOPEN_{it} + \beta_4 LINFR_{it} + \beta_5 LABR_{it} + \beta_6 LINFL_{it} + \beta_7 LGOVE_{it} + \beta_8 LECOF_{it} + \varepsilon_{it}$$

Equation [2] considers all the countries as the same by ignoring individual countries specific effects (heterogeneity) while estimating a common constant coefficient.

3.6.2 FIXED EFFECTS MODEL

FEM is a model where individual countries among the WACs would be allowed having their separate intercepts which is time invariant. That is, each country effects would be held constant for a period of time. In addition, FEM examines the association among dependent and independent variables within each country and when running FEM each country might have impact on the dependent variable and this is controlled for. Moreover, before examining the validity FEM an appropriate F-test should be conducted against pooled OLS (i.e. common constant method). The null hypothesis (H_0) assumes that all WACs have a common constant (homogeneity) and pooled OLS is more appropriate. But rejecting the H_0 confirmed that FEM is more appropriate and consistent. Then FEM is presented in Eq [3], Eq [4] and Eq [5]

$$[3] \quad FDI_{it} = \beta + \beta_1 LCORP_{it} + \beta_2 LMKTS_{it} + \beta_3 LOPEN_{it} + \beta_4 LINFR_{it} + \beta_5 LABR_{it} + \beta_6 LINFL_{it} + \beta_7 LGOVE_{it} + \beta_8 LECOF_{it} + v_i + \varepsilon_{it}$$

$$[4] \quad FDI_{it} = (\beta + v_i) + \beta_1 LCORP_{it} + \beta_2 LMKTS_{it} + \beta_3 LOPEN_{it} + \beta_4 LINFR_{it} + \beta_5 LABR_{it} + \beta_6 LINFL_{it} + \beta_7 LGOVE_{it} + \beta_8 LECOF_{it} + \varepsilon_{it}$$

where v_i is countries specific effect and it is time invariant. It is varies by the individual countries but it does not change over time and ε_{it} is the disturbance term.

$$[5] \quad FDI_{it} = \beta_0 + \beta_1 LCORP_{it} + \beta_2 LMKTS_{it} + \beta_3 LOPEN_{it} + \beta_4 LINFR_{it} + \beta_5 LABR_{it} + \beta_6 INFL_{it} + \beta_7 LGOVE_{it} + \beta_8 LECOF_{it} + \varepsilon_{it}$$

where Equation [5] is consider as the FEM that allows for different constants for each country.

3.6.2 RANDOM EFFECTS MODEL

The alternative measure of estimating a model is REM it assumes that the variation is random and uncontrolled to the predictor across the countries in the model. This model can be use when countries have some influence on the dependent variable. Moreover, the term of intercept is considered as random variable which has a common mean value β_0 for the economies.

$$[6] \quad FDI_{it} = \beta_0 + \beta_1 LCORP_{it} + \beta_2 LMKTS_{it} + \beta_3 LOPEN_{it} + \beta_4 INFR_{it} + \beta_5 LABR_{it} + \beta_6 LINFL_{it} + \beta_7 LGOVE_{it} + \beta_8 LECOF_{it} + (v_i + \varepsilon_{it})$$

Where v_i is the individual country specific effect which is time invariant and it is uncorrelated with the controlled variables in the model and ε_{it} is the disturbance term across the cross-country

$$[7] \quad FDI_{it} = \beta_0 + \beta_1 LCORP_{it} + \beta_2 LMKTS_{it} + \beta_3 LOPEN_{it} + \beta_4 INFR_{it} + \beta_5 LABR_{it} + \beta_6 INFL_{it} + \beta_7 LGOVE_{it} + \beta_8 LECOF_{it} + u_{it}$$

Where $u_{it} = v_i + \varepsilon_{it}$ which is called an idiosyncratic term because it is varies over the cross-country as well as time.

Notwithstanding, in the case of the multicollinearity, the variables found to be highly correlated would be dropped from the analysis. Data is to be tested for heteroscedasticity, serial correlation and autocorrelation by employing appropriate estimation methods. Generally, to decide on which model is more appropriate, necessary tests could be conducted such as F-test or Wald test for FEM and Breusch-Pagan Lagrange Multiplier (LM) test for REM. In addition, a Hausman test could be conducted for FEM rather than REM or REM for FEM. That is, Hausman test would assess whether FEM or REM to be choosed for appropriate analysis. If the tested results are significant, then the regression error terms are correlated then the FEM should be preferred. Table 3.1 shows the summary and result for these tests.

Table 3. 2: Summary of the Tested Hypotheses

Fixed effects (F-test or Wald test)	Random effects (Breusch-Pagan LM test)	Model
H_0 is not rejected (No fixed effects)	H_0 is not rejected (No random effect)	Data are probable. **Pooled OLS**
H_0 rejected (fixed effect)	H_0 is not rejected (No random effect)	**Fixed effects model**
H_0 is not rejected (No fixed effects)	H_0 is not rejected (random effect)	**Random effects model**

3.7 CONCLUSION

This study aimed to examine the factors that determined the levels of FDI inflows into WACs, the study employed traditional panel data analysis across the observed countries over 15 years of observations (1998-2013). Theoretical framework as well as model specification where developed based on the Dunning Eclectic Theory with also the adoption of Dunning, Al-Sadiq and Quazi model but with a slight

modification. Several measures of corruption could be used to assess the robustness of the findings.

CHAPTER FOUR

DISCUSSION OF RESULTS

4.1 INTRODUCTION

The aim of this chapter is to discuss the empirical analysis results on the factors that influenced the level of FDI inflows in WACs. This includes descriptive statistics, correlation analysis, estimation results of FEM, consistency of the FEM, REM and pooled OLS models, analysis results on the determinants of FDI, diagnostic tests, estimates of the FDI inflows for the specific country and conclusion.

4.2 DISCRIPTIVE STATISTICS

The descriptive statistics are presented in Table 4.1. This table reports the overall mean, standard deviation, minimum and maximum values for all the variables used in the analysis.

Table 4.1: Descriptive Statistics

Variables	Mean	Standard Deviation	Minimum	Maximum
FDI	44.32	51.67	0.03	260.05
CPI	2.71	0.75	1.00	4.60
FFC	23.78	9.67	7.00	50.00
COC	-0.73	0.42	1.01	0.06
MKTS	608.15	421.88	173.11	1279.96
INFR	28.00	30.87	0.24	109.24
OPEN	0.22	0.19	0.03	0.99
INFL	348.96	376.37	29.56	1891.36
LABF	2.92	1.02	0.85	7.34
GOVE	0.21	0.41	0.17	0.48
ECOF	53.81	5.92	39.40	69.00

Table 4.1 shows that all the variables are relatively closer to their mean values except for FDI, MKTS, INFR and INFL. For instance, the dispersion between the mean observations of CPI is just 0.75 while the variation for FFC and COC based on their standard deviations are 9.67 and 0.42, respectively.

4.3 CORRELATION ANALYSIS

The correlation analysis was conducted as a preliminary assessment of the relationship among the dependent and independent variables. The result of this analysis is presented in Table 4.2.

Table 4.2 Correlation Analysis

	FDI	CORP	FFC	COC	GDPC	INFR	OPEN	INFL	LABR	GOVE	ECOF
FDI	1.000										
CPI	0.519	1.000									
FFC	0.659	0.610	1.000								
COC	0.485	0.739	0.521	1.000							
MKTS	0.592	0.419	0.332	0.298	1.000						
INFR	0.463	0.506	0.322	0.306	0.622	1.000					
OPEN	0.279	0.016	0.142	-0.027	-0.440	-0.182	1.000				
INFL	0.232	0.093	-0.244	0.022	0.005	0.192	-0.117	1.000			
LABR	-0.065	-0.129	-0.008	-0.294	-0.286	-0.150	0.251	0.230	1.000		
GOVE	-0.517	-0.156	-0.244	-0.059	-0.404	-0.361	0.263	-0.077	0.216	1.000	
ECOF	0.041	0.396	0.416	0.127	0.266	0.222	0.083	-0.376	0.276	-0.047	1.000

Table 4.2 presents correlation analysis among FDI and other selected variables included in the model. FDI inflows have a positive and strong correlation related to FFC, MKTS and CPI, but the correlation among FDI and GOVE is strong and negative. Moreover, there is a weak and positive correlation between FDI and COC and INFR. Also, correlation of FDI inflows with regards to OPEN and INFL is fairly weak and positive. However, LABR and ECOF have a very weak correlation with FDI and LABR is negatively correlated.

4.4 APPROPRIATE MODEL SELECTION

Table 4.3 presents Breusch-Pagan LM and Hausman tests. Therefore, through these tests that the best appropriate models could be selected for the estimation of the six models included in this study.

Table 4.3 The results of probability tests

Model	Test	χ^2-stat	*p-value*
Model 1	Breusch-Pagan LM	28.83	0.029*
	Hausman	57.66	0.000*
Model 2	Breusch-Pagan LM	25.92	0.036*
	Hausman	37.46	0.002*
Model 3	Breusch-Pagan LM	10.83	0.029*
	Hausman	81.30	0.019*

Note: *Significance at 5% level

The consistency of the best appropriate model between FEM, REM and pooled OLS could be confirmed through a gradual process of probability tests. Breusch-Pagan LM test could assist to decide between pooled OLS and REM while Hausman test results could assist to make choice among FEM and REM on which model is more consistent and appropriate as compared with the other model. However, the Breusch-Pagan LM tests were conducted and the probability is appeared as statistically significance at five per cent level for the three models. Based on evidence from these tests, the H_0 was rejected and therefore confirmed that the REM is more appropriate compare to the pooled OLS as per as this study is concerned (i.e. individual specific heterogeneity exists). Moreover, based on these tests, it is not enough to conclude that REM is just more appropriate and consistent estimates but rather a test for Hausman could also be conducted to compare between FEM and REM and based on the probability tests the best fitted models could be

choose. Therefore, a Hausman tests was further conducted and probabilities are also statistically significance at five per cent level. Meaning that the H_0 is rejected and concludes FEM is more consistent and efficient estimates than the REM. Therefore, based on the evidence of the tests conducted for this study, the analysis for the three models would be based on FEM.

4.5 ANALYSIS RESULTS ON THE DETERMINANTS OF FOREIGN DIRECT INVESTMENT

4.5.1 Model 1

The estimation results of Model 1 are presented in Table 4.4. As can be seen from Table 4.4, coefficient of LCPI is statistically significance at five per cent with a negative relationship to FDI per capita inflows at five per cent level. By controlling all other independent variables included in the model, one per cent increase in the corruption level causes a decrease in per capita FDI inflows by $65.70 million at five. This result confirmed the previous existing literatures as corruption is a "grabbing hand" theory of corruption, this negative association of high corruption level with per capita FDI inflows is attributed due to the rigidity of regulatory institutions where these countries are characterized with. Perhaps corruption discourages foreign investors as well as attractiveness of FDI inflows into these countries. For example, Sierra Leone, Nigeria and Gambia has very serious problem of corruption which continuous to deteriorate over years. Among these countries, it is only Liberia and Ghana's corruption level is improving. Foreign investors are discouraging with some level of corruption to continuous investing. This result is consistent with the findings of Habib and Zurawicki (2002), Kusum and Ketkar

(2005), Al-Sadiq (2009) and Tosun et al. (2014). Based on their findings, it shows that corruption deters the inflows of FDI into the targeted countries due to their strong regulatory institutions. However, his result is inconsistent with the findings of Larraín and Tavares (2004), Christopher and Watson (2004), Porters (2010), Bellos and Subasat (2012), Subasat and Bellos (2013), Quazi, Vemuri and Soliman (2014) and Quazi (2014). All of them found that despite the high level of corruption in the domestic countries, corruption do not deter FDI inflows.

Moreover, the result shows that the coefficient of government effectiveness is strongly and statistically significance at five per cent level with negative relationship to FDI per capita inflows. The coefficient deviated from the expected sign. By controlling all other independent variables, one per cent increase in the index of government effectiveness causes a decrease in FDI inflows by $14.93 million at five per cent level. However, this result shows that these countries are characterized with very weak institutions. This is because institutions in these countries are not allowed independent in formulating economic policies but rather they are influenced by dictatorship power of the military leadership. Secondly, the reason that led to this negative relationship of government effectiveness with per capita FDI inflows is that most of the countries in WACs such as Liberia, Nigeria and Sierra Leone spend several years in civil war and this led to ill functions of several economic and political institutions in which it lead to the weak public services. Thirdly, these countries undergo a long periods of military coup d'état as well as long military rule in which most economic decisions are taking by the military council which is not assigned to the appropriate institutions per se.

In addition, Cuervo-Cazurra (2008) argued that in the case of the transition economies, the transition process from socialist system to capitalist system needs to deregulate the previous institutions under socialist system and to initiate the new one under the new system of capitalist that simultaneously take place. Therefore, in deregulating the previous one and new one are not fully developed and implemented this will create a high transition costs and institutional gap, in all while there would be no institutions or clear rules or rules and regulations that would guide the activities of investors. Similarly, this can almost be applicable with regards to WACs in which they undergo several years of civil war and military rule with a dictatorship leaders where transforming process of previous institutions and rebuilding of these institutions take time which inevitably creates institutional gap or high transforming costs and at the same time there would be no clear rules and regulations that would guides the activities of both domestic and foreign investors. Therefore, this may create a hinge that makes foreign investors no longer attracted and hence FDI inflows become unattractive and been discouraged. Thus, this could result in a strongly negative association between government effectiveness index and FDI inflows and indeed FDI inflows is deterring by weak institutions. This result is consistent with the results of Anghel (2005), Daude and Stein (2007), Cuervo-cazurra and Genc (2008) and Asiedu and Lien (2011) where weaker institution does not deter the inflows of FDI. But, it is contrary to the study of Asiedu (2006) and Quazi (2014). Because they found that strong regulatory institutions tend to encourage more FDI inflows into the targeted countries.

The coefficient of domestic market size, which is measured by GDP per capita, is statistically significance at five per cent level with a correct expected sign that shows a positive relationship with inflows of FDI per capita. Therefore, one per

cent increase in market size would lead to an increase in the FDI inflows by $61.41 million while controlling all other variables included in the model. Thus, market-seeking FDI are highly attracted to these countries by the large market size with the market potential to sell their products in WACs. Therefore, this result is similar with the findings of Wei (2000), Al-Sadiq (2009), Bellos and Subasat (2011) and Subasat and Bellos (2013). Their findings indicate that size of the market in the domestic countries tend to attract more foreign investors. Therefore, relationship between market size with the level of FDI inflows is positive.

This result shows that the coefficient of infrastructural facilities is statistically significant at five per cent level with negative relationship to FDI inflows. The sign is contrary to what is expected. Therefore, one per cent increases in infrastructure causes a decrease in the level of FDI per capita inflows by $18.62 million while controlling other variables in the model. This result justified that infrastructural facilities in WACs are inadequate and poorly provided, facilities such as good roads, seaports, airports, railway lines and telecommunications. Furthermore, the efficiency-seeking MNCs are discouraged from investing since FDI inflows is not attracted by the provision of a good qualitative infrastructural facilities. Therefore, this findings in consistent with the result of Asiedu (2002), Aw and Tang (2010) in which the level of infrastructure in the domestic does not enhance the FDI inflows. But it is inconsistent with the findings of Anyanwu (2011), Asiedu and Lien (2011) and Quazi (2014) where their findings indicates that provision of infrastructure encourages the inflows of FDI into the targeted countries.

Notwithstanding, the estimated coefficient of trade openness is statistically significance at five per cent level with a correct sign. Therefore, one per cent increase in trade openness causes FDI per capita inflows to increase by $46.37

million at five per cent level while other variables included in the model are controlled. This result indicates that the economy of WACs is open to trade with the rest of the world in the international markets and this would make FDI to be more attractive and hence FDI per capita inflows increased. Moreover, these countries are mainly being export oriented and this result is consistent with theory of FDI; that openness in the domestic country is indicative ease of material inputs into the world market, so that MNCs could access to material inputs at lower cost. This finding is in line with the findings of Al-Sadiq (2009), Anyanwu (2011) and Quazi et al. (2014). Their findings reveals trade openness in the targeted countries encourages the attractiveness of FDI inflows.

Inflation rate is used as a measure of macroeconomic stability in WACs. The coefficient of this variable is statistically significance at five per cent level but with negative relationship to FDI per capita inflows, meaning that a one per cent increase in inflation rates would lead to a decrease in FDI per capita inflows $68.12 million while controlling other variables included in the model. Therefore, this result indicates that these countries characterized with macroeconomic instability. However, due to the instability in the macroeconomic environment, MNCs will be scared of high production costs which would affects their profits and MNCs would be discourage from investing in to WACs, consequently FDI per capita inflows becomes unattractive. Indeed, the result such as this is not surprising because some of the countries in WACs faced macroeconomic problems in their economy. For instance, from 2007 to around 2013 in almost all the countries were having the problem of high inflation rate that leads to unfavourable macroeconomic environment. This result is consistent with findings of Aw and Tang (2010) and Anyanwu (2011). Aw and Tang (2010) found a positive relationship between rate of

inflation and FDI in his study about the determinants of FDI in Malaysia. But it is not consistent with the findings of Baxamusa and Jalal (2014) in which his findings reveals negative association with FDI inflows indicating a favourable conducive business environment.

The coefficient of economic freedom is statistically significance at five per cent level but with a negative sign. This indicates WACs are characterised with low index of economic freedom. Therefore, by controlling all other variables included in the model, one per cent increases in the index of economic freedom causes the per capita FDI inflows to decrease by $131.01 million at five per cent level. This shows that less freedom of undertaking an investment and this makes FDI inflows to be unattractive. Therefore, this is inconsistent with the findings of Quazi (2014) in which the finding reveals positive relation with FDI inflows.

The coefficient of the quantity of labour in the WACs is statistically insignificance. Therefore, it does not have any significance influence over FDI per capita inflows. Despite these countries especially Nigeria has larger population of about 174 million people which means by implication it would have a large size of labour force. But unfortunately, most of the labour force are semi-skilled or unskilled labour, very few portion are skilled labour. Based on the World Bank reports of 2013, Nigeria has the total labour force as 56.2 million out of its total population. In the global world of technology, where most of the activities are undertake by skilled labour therefore having small number of skilled labours with the largest number of unskilled labours this result could be expected. However, this findings contradicts the results of Habib and Zurawicki (2002) and Hossain, Peters and Keep (2012) this Habib and Zurawicki (2002) used unemployment to measure the available quantity

of labour while Hossain, Peters and Keep (2012) also used labour costs to proxy the quantity of labour availability not exact quantity of labour used by this study.

Moreover, based on the estimated result it indicates that market size, corruption level, trade openness, inflation rate, regulatory institutions, infrastructure and economic freedom are considered as important and significance determinants of FDI inflows in WACs. In contrast, inflation rate, regulatory institutions, infrastructure and economic freedom they all have an opposite effects on the level FDI inflows in WACs. Therefore, countries in WACs are characterized as market-seeking and efficiency-seeking in terms of the FDI. Thus, the negative estimated coefficients are attributed due to adverse regional effects (Asiedu 2002).

Table 4.4 Estimation results of Model 1

	Pooled OLS	Random Effects	Fixed Effects	OLS with Hetero and Serial Correlation
Constant	191.18	191.18	-189.32	-191.18
	(0.433)	(0.430)	(0.433)	(0.347)
LCPI	20.58	20.58	-65.70	20.58
	(0.410)	(0.407)	(0.024)*	(0.754)
LMKTS	48.49	48.49	6I.41	48.49
	(0.015)*	(0.013)*	(0.019)*	(0.175)
LINFR	4.52	4.52	-18.62	4.52
	(0.307)	(0.304)	(0.016)*	(0.550)
LOPEN	50.90	50.90	46.37	50.90
	(0.000)*	(0.000)*	(0.008)*	(0.011)*
INFL	0.12	0.12	68.12	-0.12
	(0.987)	(0.987)	(0.012)*	(0.987)
LABR	4.03	4.03	0.11	4.03
	(0.444)	(0441)	(0.982)	(0.489)
LGOVE	-16.55	-16.55	-14.93	-16.55
	(0.650)	(0.649)	(0.0I2)*	(0.126)
LECOF	-106.64	-106.64	-131.01	-106.637
	(0.071)	(0.067)	(0.042)*	(0.126)
Breusch-Pagan LM test	28.83 (0.029)*			
Hausman test		57.66 (0.000)*		
Observations	80	80	80	80
Multicollinearity (vif)			2.82	
Heteroscedasticity (χ^2 – stat)			44.74 (0.000)*	
Serial Correlation (F – stat)			7.76 (0.041)*	
R^2	0.43	0.43		0.43
$F - stat$	6.79 (0.000)*		10.27 (0.000)*	
χ^2 – stat		54.31 (0.000)*		

Note: *Significance a five per cent level
P-values are in parenthesis

4.5.2 Model 2

The estimation of Model 2 employed the FFC that is used to measure the level of corruption together with the other variables included in the model. Table 4.5

presents the estimation results of Model 2 on the effects of corruption on the inflows of FDI while CPI was replaced by Freedom from Corruption (FFC) in this analysis. Moreover, based on the Hausman test result in Table 4.3, it is also suggested that FEM is more appropriate than REM (i.e. χ^2 is 37.46 and the probability is also 0.002).

From Table 4.5, the coefficient of FFC is statistically significant at five levels with negative relationship to FDI inflows. Therefore, by controlling the variables included in the model, one percent increases in the freedom from corruption causes a decrease in the per capita FDI by $9.39 million. This estimated result confirmed the findings of corruption as a "sandy the wheels" approach while CPI was included in the model. In addition, it is also confirmed that these countries are characterized with high corruption level. Moreover, this result also that corruption is increasing the cost of doing thereby increasing uncertainty which discourage FDI inflows. Therefore, FFC becomes a significant predictor of FDI inflows while controlling other variables in the analysis in WACs.

Furthermore, with regard to the other independent variables included in the model, where the coefficient of market size is statistically significant at five percent level, signified that a one percent increase in market size causes FDI inflows to increase by $77.72 million all things being equal. The coefficient of trade openness also is statistically significant at percent level which shows that a one percent increase leads to $37.11 million increase in per capita FDI into WACs while controlling all other variables in the model. The countries are characterized with macroeconomic instability due to the high level of inflation rate, where the coefficient of inflation is statistically significant at five per cent level. Therefore, one percent increase in the rate of inflation causes the inflows of FDI to decrease by

$60.26 million while other variables included in the model are controlled. However, in this analysis the coefficient of government effectiveness is also statistically significant at five per cent. But it has a negative relationship with the level of FDI inflow per capita thereby confirming the weak institution which these countries in WACs are characterized with. One per cent increase in the coefficient of government effectiveness causes a decrease in FDI inflows by $54.32. In comparison between the estimated results in Table 4.4 and Table 4.5, relatively all the results are almost similar with the same model of analysis as FEM.

Table 4.5 Estimation results of model 2

	Pooled OLS	Random Effects	Fixed Effects	OLS with Hetero and Serial Correlation
Constant	32.60	32.60	-219.39	32.60
	(0.433)	(0.433)	(0.385)	(0.813)
LFFC	-19.43	-19.43	-9.39	19.43
	(0.000)*	(0.000)*	(0.031)*	(0.068)
LMKTS	66.69	66.69	77.72	66.69
	(0.000)*	(0.000)*	(0.003)*	(0.025)*
LINFR	2.75	2.75	-16.03	2.75
	(0.575)	(0.575)	(0.510)	(0.628)
LOPEN	32.04	32.04	37.11	32.04
	(0.000)*	(0.000)*	(0.036)*	(0.005)*
INFL	3.16	3.16	60.26	3.16
	(0.575)	(0.575)	(0.035)*	(0.330)
LABR	4.71	4.71	-0.35	4.71
	(0.359)	(0.359)	(0.945)	(0.220)
LGOVE	-23.18	-23.18	-54.32	-23.18
	(0.324)	(0.324)	(0.024)*	(0.743)
LECOF	-76.6	-76.6	-125.08	-76.6
	(0.157)	(0.157)	(0.060)	(0.082)
Breusch-Pagan LM test		25.92 (0.036)*		
Hausman test			37.46 (0.002)*	
Observations	80	80	80	80
Multicollinearity (vif)			2.58	
Heteroscedasticity (χ^2 – stat)			86.56 (0.000)*	
Serial Correlation (F – stat)			8.536 (0.043)*	
R^2	0.45	0.45	0.43	0.45
$F - stat$	7.21 (0.000)*		9.03 (0.000)*	
χ^2 – stat		57.70 (0.000)*		

Note: *Significance a five per cent level
P-values are in parenthesis

4.5.3 Model 3

The results presented in Table 4.6 are the estimated results of Model 3 while COC is used in the model instead of CPI or FFC. Based on the Breusch-Pagan LM

Hausman tests in Table 4.3, FEM was also chosen for this estimation. However, some of the variables included in this model are statistically insignificant unlike in the previous models. Therefore, based on the Table 4.6 the variable used as a control measure of corruption (i.e. COC) is statistically insignificant, unlike the previous measures of corruption such CPI and FFC that are statistically significant.

Other significant variables included in the model include market size, trade openness, inflation rate and economic freedom. Similarly, the coefficient of market size is statistically significant at five per cent. Therefore, one percent increase in the size of the market causes the FDI inflows to increase by $76.35 million while other variables held constant in the model. Moreover, the coefficient of trade openness is statistically significant at five per cent level. One per cent increase in the openness lead to an increase in FDI inflows per capita by $39.58 million. In addition inflation coefficient is found to be statistically significant at five per cent level, where a per cent increase in the rate of inflation causes $60.87 million decrease in the inflows of FDI. This finding also found that these countries have characterized with unfavourable macroeconomic environment with a high inflation rate. On the other hands, coefficient of economic freedom is also statistically significant at five per cent level. Therefore, one percent increase in the index of economic freedom indicates a decline in the level of FDI inflows by $160.08 million while controlling other variables in the model.

Table 4.6 Estimation results of Model 3

	Pooled OLS	Random Effects	Fixed Effects	OLS with Hetero and Serial Correlation
Constant	170.92	170.92	-69.06	170.92
	(0.399)	(0.399)	(0.815)	(0.123)
LCOC	-27.93	-27.93	-12.82	-27.93
	(0.002)*	(0.002)*	(0.134)	(0.034)*
LMKTS	65.31	65.31	76.35	65.31
	(0.000)*	(0.000)*	(0.003)*	(0.009)*
LINFR	7.07	7.07	-14.65	7.07
	(0.098)	(0.098)	(0.078)	(0.193)
LOPEN	63.18	63.18	39.58	63.18
	(0.000)*	(0.000)*	(0.026)*	(0.001)*
INFL	3.05	3.05	60.87	3.05
	(0.061)	(0.061)	(0.029)*	(0.390)
LBOR	-5.11	-5.11	-3.81	-5.11
	(0.363)	(0.363)	(0.498)	(0.094)
LGOVE	-12.31	-12.31	-39.87	-12.31
	(0.732)	(0.732)	(0.301)	(0.866)
LECOF	-105.66	-105.66	-160.08	-105.66
	(0.042)*	(0.042)**	(0.028)*	(0.034)*
Breusch-Pagan LM test	10.83 (0.029)*			
Hausman test		81.30 (0.0191)*		
Observations	80	80	80	80
Multicollinearity (vif)			2.53	
Heteroscedasticity (χ^2 – stat)			80.12 (0.000)*	
Serial Correlation (F – stat)			9.177 (0.038)*	
R^2	0.50	0.50	0.43	0.50
$F - stat$	8.81 (0.000)*		9.03 (0.000)*	
χ^2 – stat		65.26 (0.000)*		

Note: *Significance a five per cent level
P-values are in parenthesis

4.6 DIAGNOSTIC TESTS

Diagnostic tests are conducted to check the consistency and reliability of the estimated coefficients included in the model. Tests such as multicollinearity,

heteroscedasticity and serial or autocorrelation tests conducted and finally a robust standard error was conducted to clear out the above mentioned problems.

4.6.1 Variance Inflation Factor

Multicollinearity problem is checked throughout the models via the evidence of variance inflation factor (vif). Based on the results in Table 4.4, Table 4.5 and Table 4.6, vif values are below the value of 10 and this confirmed that these observations are free multicollinearity problem.

4.6.2 Wald Test

Heteroscedasticity test is conducted using modified Wald test for heteroscedasticity in FEM regression to check whether heteroscedasticity problem exist. The H_0 indicates the observations are homoscedasticity. However, based on the result of χ^2 probabilities in all the models, H_0 was rejected and conclude that heteroscedasticity problem exist among these observations.

4.6.3 Wooldridge test

A Wooldridge test was conducted to check whether there is serial or autocorrelation problem among these observations, where H_0 indicates no problem of autocorrelation. Equally, having tested probabilities we are to reject the H_0 and concludes that these observations also has the problem of serial autocorrelation.

4.6.4 Robust standard error test

Having identified the above problem of heteroscedasticity and autocorrelation, robust standard error was conducted to solve the problems of heteroscedasticity and autocorrelation among the observations. However, results of diagnostic tests are all presented in Table 4.3.

4.7 ESTIMATES THE FDI INFLOWS FOR THE SPCIFIC COUNTRY

Several measures of corruption have been introduced together with other independent variables included in the model in order to examine the inflows of FDI into the specific countries namely; Gmabia, Ghana, Liberia, Nigeria and Sierra Leone over the sampled periods. Lastly, a joint tests for specific country effect as well as time effect acould be conducted for the consistency of the FEM. Moreover, for the specific country effect, null hypothesis is that countrires does not have any effect while the null hypothesis for time effect is that there are no time effect (i.e. time invariant). Therefore, based on this analysis, Gambia is considered as a reference country.

4.7.1 Model 4

In this model, Gambia is regarded as a country to which reference could be made in order to observe the inflow of FDI into specific country in relation to the measure of corruption as CPI. This result make the pooled OLS regression in Table 4.4 to be suspect. Therefore, the coefficieint of the FDI inflows into Ghana is statistically significant at five per cent level. This shows the FDI inflows into Ghana is higher by $54.74 million as compared with that for Gambia. Similarly, Liberian coefficient of

FDI inflows is strongly and statistically significant at five per cent level. This result indicates that FDI inflows into Liberia is higher than that of Gambia by $26.44 million. The coefficient of FDI inflows for Nigeria is statistically at five per cent level. In addition, Nigeria has attracted the largest amount of FDI inflows as compared to Gambia by receiving $79.36 million. However, the coefficient of FDI for Sierra Leone is statistcally significant at five. But Sierra Leone among these countries is receiving lower amount of $16.01 million FDI inflows than Gambia. Therefore, these results can be shown in Table 4.7

Table 4.7 Estimation results of Model 4

Variables	Coefficient	Std. Error	t-statistic	P-value
CONSTANT	179.3	239.4	-0.75	0.456
LCPI	-65.70	28.37	2.32	0.024*
LMKTS	61.41	25.47	2.41	0.019*
LINFR	-18.62	7.554	-2.46	0.016*
LOPEN	46.37	17.10	2.71	0.008*
LINFL	68.12	26.41	2.58	0.012*
POPG	0.107	4.818	0.02	0.982*
LGOVE	-41.93	16.25	2.58	0.012*
LECON	-131.0	63.06	-2.08	0.042*
GHANA	54.75	23.17	2.36	0.021*
LIBERIA	26.44	11.79	2.24	0.031*
NIGERIA	79.36	36.24	2.19	0.037*
SIERRA LEONE	-16.01	5.45	-2.94	0.015*
R-squared	0.624			
F-statistic	9.28			0.000

Note: Note: *Significance a five per cent level

4.9.2 Model 5

Model 5 shows the results of FDI inflows for the specific countires in relation to the measure of corruption as FFC. In this result also Gambia is considered as a country of reference, in terms of the inflow of FDI for a specific country. The results in Table 4.7 indicates that FDI inflows into these countries is strongly and statistically

significant, suggesting that these countries are hetrogeneous in attracting FDI inflows. This result make the pooled OLS regression to be suspect in Table 4.5. Similarly, the coefficient of the Ghanian FDI inflows is statistcally significant at five per cent level. This shows that the inflow of FDI into Ghana is higher from that for Gambia by about $39.40 million. The estimated Liberia's coefficient of the FDI inflows is also statistically significant at five per cent. This reveals that, the amount of Liberia's FDI inflows is much more higher by about $26.44 million as compared to that of Gambia. In addition. With regard to Nigeria the FDI inflows is statistically significant ant five per cent level. This result signified that Nigeria has a greater amount of FDI inflows than Gambia by receiving $30.12 million. The coefficient of FDI inflows for Sierra Leone is statistically significant at five per cent level. In contrast. Sierra Leone is attracted smaller amount of FDI inflows by receiving 28.13 million as compard to Gambia. Therefore, these results is presented in Table 4.8.

Table 4.8 Estimation results of Model 5

Variables	Coefficient	Std. Error	t-statistic	P-value
CONSTANT	-207.6	250.1	-0.83	0.409
LFFC	-9.391	4.29	-2.19	0.031*
LMKTS	77.72	25.27	3.08	0.003*
LINFR	-16.03	8.054	3.17	0.051
LOPEN	37.91	17.68	2.14	0.036*
LINFL	60.26	27.95	2.16	0.035*
POPG	-0.346	5.016	-0.07	0.945
LGOVE	-54.32	22.74	-1.44	0.155
LECON	-125.1	65.31	-1.92	0.062
GHANA	39.40	16.52	2.38	0.021*
LIBERIA	49.16	24.25	2.03	0.047*
NIGERIA	30.12	13.99	2.15	0.032*
SIERRA LEONE	-29.13	15.01	-1.93	0.061
R-squared	0.598			
F-statistic	8.29			0.000*

Note: Note: *Significance a five per cent level

4.9.3 Model 6

Like the way it has been shown in the previous models, Gambia is also consider as a reference country which comperison could be made, in terms of the inflow of FDI for a specific country while taking COC as a measure of corruption level. The estimated results is presented in Table 4.9 this indicates FDI inflows for these countries is statistically and strongly significant, suggesting that these countries received different amount of FDI inflows into their economy. This result make the pooled OLS regression to be suspect presented in Table 4.6. Indeed, coefficient of FDI inflows for is statistically significant at five per cent level. Therefore, FDI inflows into Ghana as compared with Gambia is higher by about $39.61 million. While the coefficient of FDI inflows for Liberia is statistically significant at five per cent level. In addition Liberia's FDI inflows is also higher with about $37.47 million in relation to Gambia. Similarly, Nigeria's coefficient is statistically significant at five level. Therefore, Nigeria's FDI inflows with regard to Gambia in terms of receiving FDI inflows is higher by about $25.13 million. The FDI inflows coefficient of Sierra Leone is statistically significant at five per cent level. This indicates that, still Sierra Leone is receiving lower amount of FDI inflows than Gambia as $11.01 million among these countries. Therefore, this result can be shown in Table 4.9.

Table 4.9 Estimation results of Model 6

Variables	Coefficient	Std. Error	t-statistic	P-value
CONSTANT	-51.63	295.7	-0.17	0.862
LCOC	-12.82	5.34	-1.13	0.262
LMKTS	38.59	25.18	3.03	0.003*
LINFR	-14.62	8.165	-1.79	0.078
LOPEN	39.58	17.37	2.28	0.026*
LINFL	60.87	27.35	2.23	0.029*
POPG	-3.812	5.596	-0.68	0.498
LGOVE	-39.87	38.26	-1.04	0.301
LECON	-160.9	71.49	-2.25	0.028*
GHANA	39.61	11.78	3.36	0.005*
LIBERIA	37.47	12.79	2.92	0.025*
NIGERIA	25.13	7.13	3.52	0.001*
SIERRA LEONE	-11.01	5.08	-2.17	0.034*
R-squared	0.602			
F-statistic	8.44			0.000*

Note: Note: *Significance a five per cent level

4.10 DIAGNOSTIC TEST FOR SPECIFIC COUNTRY AND TIME EFFECTS

However, based on the evidence of joint test conducted for country specific effect in terms of FDI inflows, the probability of F-statistic is highly and statiscally significant. Therefore, we reject the null hypothesis and conclude that these countries are not the same. While based on the evidence of joint test for F-statistic, the probability is statistically insgnificant justifying that there was no effects of time over years. The result test is presented in Table 4.10.

Table 4.10 Hypothesis Result of Countries Specific Effect

Effects	**F-statistic**	**P-value**
Country	8.52	0.0000
Time	1.34	0.2126

4.11 CONCLUSION

This analysis examines the determinants of FDI inflows in WACs and found that most of the variables are significant but the sign of some variables deviated from the economic theory. Despite the deviation from the sign of some variables, but still the result become valuable in describing the exact features of countries in WAC. In addition, a one per cent decreases in corruption causes an increase in FDI inflows into WACs. But, the result show that market size and trade openness are significant variables with correct signs that are influencing FDI inflows in WACs while quality of infrastructure, inflation rate government effectiveness index and economic freedom index are found to be with unexpected sign and labour also found to be statistically insignificant. According to the Hausman tests, result for these models as FEM is more appropriate and consistent. Diagnostic tests were also conducted for consistency and reliability estimates. Lastly, the specific country inflow of FDI was determined using different measures of corruption.

CHAPTER FIVE

CONCLUSION AND POLICY IMPLICATION

5.1 INTRODUCTION

This chapter consist of four sections such as the general overview of the study, summary of the findings, policy implications, limitation of the study and then conclusion of the chapter.

5.2 SUMMARY OF THE FINDINGS

Ultimately, there are theoretical and empirical studies conducted to examines the factors that determine the level of FDI inflows. Therefore, one of the famous and widely accepted theory of FDI was adopted for this study known as Eclectic theory. The Eclectic Paradigm modelling was adopted and applied to identify the factors that are influencing the FDI inflows in WACs. The result confirmed the validity of the model and it is consistent with the previous studies. However, Most of the growth and development scholars asserted that there is an adversely effects of corruption on growth and development because it causes loss of tax revenue to the government, inadequate productivity, economic transaction uncertainty, misallocation of resources and overall deterioration of infrastructure. Generally, it is simple to examined corruption ill effects on economic growth and development. Moreover, this study examines the effect on whether corruption could be beneficial or delicious on FDI inflows to the targeted countries of WACs. Moreover, according to many scholars the impact of corruption can either be “grabbing hand” or “helping hand” approach on FDI inflows. Therefore, by grabbing hand approach of corruption, corruption

deters FDI inflows due to the rigidity of regulatory institutions. Thus, corruption is considered as delicious to the inflows of FDI. While helping approach of corruption consider corruption as the lubricating element that encourage more FDI inflows by compensating the bad government due to the weaknesses of the regulatory institutions. Therefore, corruption is viewed as beneficial to FDI inflows.

However, the estimation of the model with the selection of the macroeconomic variables was careful in accordance with the reviewed literature. Obviously, the variables that are considered as the determinants of FDI inflows, such as corruption level, market size (MKTS) in which GDP per capita was used to measure it, infrastructure (INFR) measured by telephone lines and mobile subscribers per 100 people. Moreover, trade openness of the country (OPEN), inflation rate (INFL) this was used to measure the changes in the price level of goods and services and macroeconomic stability, quantity of labour (LBOR), government effectiveness (GOVE) which is used to measure regulatory institutions and economic freedom (ECOF) which is used as a measure of investment climate. The benchmark model that consistent with this analysis is FEM. All the explanatory variables are significant at five per cent level except labour. Only corruption, market size and trade openness are consistent with their expected signs. But variables such as infrastructure, inflation, government effectiveness and economic freedom are found deviated from their expected signs. Indeed, the coefficients of corruption are found to be negative and significant. This means FEM shows that a five per cent decrease in CPI holding all the other variables included in the model constant causes an approximately $65.70 million increase in the level of inflows in FDI in WACs. Thus, the more country control for corruption level, the more it can expect to attract more FDI inflows.

Similarly, the result of government effectiveness confirmed that WACs are characterized with very weak regulatory institutions which created an artificial distortion and institutional gap in attracting more FDI inflows. Infrastructure, on the other hand, found to be discouraging the attractiveness of more FDI inflows because it was poorly provided, then the WACs' economy found to be highly volatile due to macroeconomic instability which indicates that a one per cent increase in the level of inflation causes about $68.12 million decline in FDI inflows. Therefore, high inflation rate lead to a high cost of production which resulted to low in investment and hence the FDI inflows decrease. Moreover, as a result of macroeconomic instability the investment climate which is measured by economic freedom causes a much decline in FDI inflows, because as one per cent increase in economic freedom index leads to a fall in FDI inflows approximately by $131.01 million. However, the economy in WACs characterized with highly potential demand for goods and services that measure by market size, which despite the vulnerability of the macroeconomic environment but still the economy is attracting more FDI inflows to the regions. The economy is also found to be opened to trade with the rest of world. For all that, level of corruption, market size, trade openness, government effectiveness and economic freedom are strongly influenced FDI inflows in WACs and they are considered as the main determinant of FDI inflows in WACs.

The argument of corruption as a "helping hand" of business can disappear if the governments in WACs have very strong and efficient policies. Though it may be possible for well-established foreign company to offer a bribe when awarded with a high-priced contract, where this can only be good if they are not caught, but once caught the benefits would disappear and then the cost would kick in and then make it

a curse for those who involved. Accountability and transparency, good governance, can resolve in highly remarkable inflows of FDI.

5.3 LIMITATION OF THE STUDY

A significant limitation for this study was inaccessibility of genuinely quantitative data of the variables recommended in the theoretical models and based on the impacts of some relevant variables in WACs. Therefore, the study was able to focus on only five countries within the periods of 15 years-time frame. The research, still having the problem of dealing with missing data that lead to be imputed for keeping reasonable important observations for the robust analysis. But equally, this problem is not fundamentally that could influence the present result in this study. The research on the other hand, utilizes the perceived corruption index from TI, freedom from corruption from WGI and control of corruption from Heritage foundation, as measures of corruption level. The index is basically on the perception level not in term of the actual level of corruption, according to Mauro (1995) one of the major problem while dealing with corruption data is to find the actual quantifiable figure for corruption level. Though, these measures make the corruption to be quantifiable but it has been criticized by many scholars as unreliable and ambiguity index (Primorac, Primorka, & Smoljic, 2011).

5.4 POLICY IMPLICATION

The theoretical and empirical literature both ascertain that there are remarkable benefits that could be derived from FDI inflows, if per se these countries could adopt a policy which can reduce and maintain the level of corruption in their economy as well as enhancing favourable macroeconomic environment. Because in terms of

corruption, decrease in the corruption level would lower the cost of undertaking business and reduce uncertainty in investment and perhaps this could facilitate more inflows of FDI. Theoretically, paying bribes to the corrupt bureaucrats (i.e. government bureaucrats) and domestic business elites by the foreign investors, for a favour like issuance of investment licenses, police protection, permits, reduce and tax assessment, it can definitely add more costs of doing business which impedes more FDI inflows. Therefore, policy recommendation should be based on the empirical result of this study. The following are the policy recommendation of this study.

i. The result found that corruption level is the very important determinant factor in explaining the changes of FDI inflows. Therefore, governments in WACs should put in place a considerable reforms that can ginger the anti-corruption commissions and then initiate the new once in support for fighting against corruption and to organize public awareness and enlightenment about the effects and disastrous consequences on their life and the economy at large. The government should enact a strict laws that would deal whoever happens to convict with corruption case.

ii. The stakeholders need to understand the role of institutions and put more emphasis on the public service awareness by organizing workshops, seminars, based on the role played by regulatory institutions in the local and international business environment. Therefore, there is also the need for frequent institutional reforms with the prevailing condition in an attempt to facilitate the functions and activities of these institutions thereby strengthen the regulatory institutions that could lead to get strong institutions as well as more FDI inflows.

iii. The respective governments should put in place very sound liberalization trade policies that would facilitate the activities of foreign investors due to the crucial benefits that could be generated from larger amount of FDI inflows. Such policies that would ensure removing trade restrictions that should ease foreign investors to move capital in and out from country for the purpose of trading activities. The respective government also should adopt policies that would ensure banking standard and international accounting.

iv. The respective should initiate policies that could curb the high rate of inflation to sustain the macroeconomic environment stability which would keep investment profitable and then attract more foreign investors into such an economy. Because high inflation rate is a sign of macroenonmic instability that would increase the uncertainty and user cost of capital which could influence the profitability of foreign investor adversely.

v. It is recommended for the governments in WACs to ensure law and order enforcement that will bring peaceful coexistence among the populace and which could not advances into future civil war that could culminate the economic activities that would affects FDI inflows adversely.

5.5 SUGGESTION FOR FUTURE STUDY

This study has many potential for the extension of future research. Therefore, this research utilizes the traditional panel data analysis to evaluate the impacts of corruption on FDI inflows in WACs. Similarly, it is suggested for the purpose of future research to utilize the panel dynamic ordinary least square to examines whether short run or long run relationship exist between corruption and FDI inflows

into WACs. Likewise, to investigate where there is causation from corruption to FDI or FDI to corruption (i.e. unidirectional or bidirectional causation).

Furthermore, this study was able to examine the determinants of FDI inflows only on the five targeted WACs. Therefore, it is suggested for the future study to cooperate both the targeted as well as source countries effects of these factors, to examine whether there significance influence over FDI inflows from both targeted and source countries. Also the future study can focus to evaluate the effects of corruption on inflows of FDI on at least many countries from the WACs for robustness of the findings.

5.6 CONCLUSION

Previously, the effects of corruption and other variables included in this study on economic transactions have received greater attention. The effects of corruption in the targeted countries is considered as the most influential and deterministic factor of FDI inflows in terms of location. Several empirical studies have able to provide a negative evidence of the relationship between FDI inflows and corruption, but others were unable to find such relationship. However, most of the previous studies where based on the cross-country analysis while neglecting the individual specific effects of individual countries with which corruption level is correlated. Therefore, empirical analysis of this study is consistent with the previous studies and was able to utilized individual countries' specific effect and concludes that the corruption in the targeted countries (WACs) does not reduce the amount of FDI inflows and hence corruption is considered as greasing the wheels approach of FDI inflows in WACs. Moreover, greater market size for the potential market that measured by GDP per capita as well

as trade openness are found to be more important in attracting more FDI inflows. But variables like inflation, infrastructure, government effectiveness, and economic freedom are negatively related to FDI. This suggests WACs are characterized with the problem of poor infrastructural facilities, weak regulatory institutions and unstable macroeconomic business environment.

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