

**THE IMPACT OF FOREIGN DIRECT INVESTMENT (FDI) ON ECONOMIC
GROWTH: A COMPARATIVE STUDY OF EAST AND CENTRAL AFRICA**

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DECLARATION

I, KINGSLEY TAKYI AKONNOR, hereby declare that this thesis is the result of my own research and that not even part of it has been submitted elsewhere for any degree.

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ABSTRACT

This study analyzes the impact of foreign direct investment (FDI) on economic growth in East and Central Africa between 2000 and 2015. A sample of 24 countries made up of 16 from East Africa and 8 from Central Africa were considered. Data was obtained from World Bank Development Indicators and World Governing Indicators. I employed the pooled Ordinary Least Square (OLS) regression and panel data econometric techniques for the estimations and the findings revealed that FDI positively impacts economic growth in East Africa. Conversely, no impact of FDI on economic growth was found for Central Africa. Other significant factors that impact economic growth from the findings are the level of governance and inflation. The findings from the study suggest that policies aimed at attracting FDI should be embarked on by governments in Central Africa to help improve the inflows of FDI into the region.

DEDICATION

This thesis is dedicated to the Almighty God for his wisdom, guidance, and directions and also my uncle Mr. Ntow Kwafu.

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TABLE OF CONTENTS

DECLARATION.....	i
ABSTRACT.....	ii
DEDICATION.....	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS	v
LIST OF FIGURES	ix
LIST OF TABLES	x
LIST OF ABBREVIATIONS	xi
CHAPTER ONE	1
INTRODUCTION.....	1
1.1 Background to the study.....	1
1.2 Statement of the Problem	4
1.3 Research Questions.....	6
1.4 Objectives of the Study	6
1.4.1 Main Objective	6
1.4.2 Specific Objectives	6
1.5 Justification of the Study	7
1.6 Overview of Chapters	8

CHAPTER TWO	9
LITERATURE REVIEW.....	9
2.1 Introduction.....	9
2.2 Theoretical Review.....	9
2.2.1 The Solow growth model	10
2.2.2 Endogenous growth theory	11
2.2.3 Harrod-Domar model	13
2.2.4 How FDI affects economic growth.....	14
2.3 Empirical Review	16
2.3.1 Studies that show a positive relationship between FDI and economic growth.....	16
2.3.2 Studies that show negative or ambiguous relationship between FDI and economic growth	25
2.4 Summary of the literature review.....	27
CHAPTER THREE	29
OVERVIEW	29
3.1 Overview of FDI in East and Central Africa.....	29
3.2 FDI in East Africa.....	30
3.2.1 FDI to Kenya	30
3.2.2 FDI to Burundi.....	34
3.2.3 FDI to Tanzania	38

3.2.4 FDI to Uganda	41
3.2.5 FDI to Rwanda	45
3.2.6 FDI to Ethiopia.....	47
3.3 FDI in Central Africa	49
3.3.1 FDI to Angola	50
3.3.2 FDI to Cameroon	51
3.3.3 FDI to Equatorial Guinea.....	53
3.3.4 FDI to Republic of Congo.....	54
3.3.5 FDI to Central African Republic	55
3.3.6 FDI to Chad	57
3.3.7 FDI to Gabon.....	59
CHAPTER FOUR.....	61
METHODOLOGY	61
4.0 Introduction.....	61
4.1 Theoretical Framework.....	61
4.2 Empirical Model.....	61
4.4 Data and Description of variables	64
4.5 Endogeneity	68
4.6 Descriptive Statistics	69
5.2 Correlation Matrix.....	70

5.2 Diagnostic Tests.....	71
5.2.1 Test for Heteroscedasticity	71
CHAPTER FIVE	73
RESULTS AND DISCUSSION.....	73
5.1 Introduction.....	73
5.2 Presentation and interpretation of results	73
5.4 Discussion of results	75
5.6 Comparison of Results from East and Central Africa.....	78
CHAPTER SIX	80
SUMMARY AND CONCLUSIONS.....	80
6.1 Introduction.....	80
6.2 Summary of the Study	80
6.3 Conclusion	81
REFERENCES.....	83
APPENDIX.....	91

LIST OF FIGURES

Figure 1: A map of Africa showing the various sub-regions	29
Figure 2: Kenya’s FDI Trend (Inflows), 2000-2015.....	33
Figure 3: Burundi’s FDI Trend (Inflows), 2000-2015.	35
Figure 4: Tanzania’s FDI Trend (Inflows), 2000-2015.....	40
Figure 5: Uganda’s FDI Trend (Inflows), 2000-2015.	43
Figure 6: Rwanda’s FDI Trend (Inflows), 2000-2015.....	45
Figure 7: Ethiopia’s FDI Trend (Inflows), 2000-2015.	47
Figure 8: Angola’s FDI Trend (Inflows), 2000-2015.....	50
Figure 9: Cameroon’s FDI Trend (Inflows), 2000-2015.....	52
Figure 10: Equatorial Guinea’s FDI Trend (Inflows), 2000-2015.....	53
Figure 11: The Republic of Congo’s FDI Trend (Inflows), 2000-2015.	55
Figure 12: Central African Republic’s FDI Trend (Inflows), 2000-2015.	56
Figure 13: Chad’s FDI Trend (Inflows), 2000-2015.	58
Figure 14: Gabon’s FDI Trend (Inflows), 2000-2015.	60

LIST OF TABLES

Table 1: Descriptive Statistics.....	70
Table 2: Correlation matrix.....	70
Table 3: Test for Heteroscedasticity.....	71
Table 4: Regression results (East Africa)	74
Table 5: Regression results (Central Africa).....	77

LIST OF ABBREVIATIONS

AGOA	African Growth and Opportunity Act
API	Agency for the Promotion of Investment
APIEX	Agency for Investment Promotion and Export
BIT	Bilateral Investment Treatment
CAIC	Central African Investment Centre
CEMAC	Economic and Monetary Community of Central Africa
CPI	Consumer Price Index
EAC	East African Community
ECM	Error Correction Model
EIA	Ethiopia Investment Agency
EIC	Ethiopia Investment Commission
FCCIB	Federal Chamber of Commerce and Industry of Burundi
FDI	Foreign Direct Investment
FE	Fixed Effect
FMOLS	Fully Modified Ordinary Least Square
GDS	Gross Domestic Savings
GDP	Gross Domestic Product
GMM	Generalized Method of Moments
ICSID	International Centre for Settlement of Investment Disputes
MAI	Multilateral Agreement on Investment
MNCs	Multi-National Corporations
NCI	National Commission for Investments
NIC	National Investment Charter
OECD	Organization for Economic Co-operation and Development

OLS	Ordinary Least Square
RDB	Rwanda Development Board
RE	Random Effect
SEATINI	Southern and Eastern Africa Trade Information and Negotiations Institute
SEZ	Special Economic Zones
TFP	Total Factor Productivity
UIA	Uganda Investment Authority
UNCTAD	United Nations Conference on Trade and Development
VAR	Vector Auto Regression
WDI	World Development Indicators

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Foreign Direct Investment (FDI) has been identified as a channel that helps in sustaining and increasing the rate at which the host country's economy grows (Sawalha, et al. 2016). This improves the standard of living of the people, increases the rate of economic integration with other nations and reduces the rate of unemployment. This is evidenced by the fact that FDI improves and strengthens the ability of the host country to make use of the opportunities that come along with such investments (Choe, 2003). FDI makes it possible for firms to assess new technology, cheaper production facilities, create a new market and market channels and intensive skills. According to UNCTAD, (2013) the gap between investment requirements and availability of the domestic resource is bridged by FDI. There is also an increased innovation and financing new methods of production. Sharma, (2012) asserts that FDI affords host countries a lot of benefits through regulated investment in enterprises, technological transfer, and a well-functioning national regulatory framework.

FDI is defined as cross-border equity flows between economies where a resident in one economy controls (at least 10% voting stock) the operations of a business entity domiciled in another economic jurisdiction (The World Bank, 2010). Investment from foreigners can take various forms: it can be from a non-citizen; a partnership with majority control owned by a non-citizen; or a company incorporated under other legal jurisdictions other than the host country. Multi-National Corporations (MNCs) usually undertake the contribution of foreign capital with the introduction of production techniques, tastes, and styles of living and managerial practices. Choudhury and Nayak, (2014), provide more insight into the role of MNCs in foreign

investments. Because of their profit motive, MNCs take advantage of cross-border supply chains, differential levels of development, and exploit comparative advantages of the destination economies.

With regard to the degree of influence each accords the respective owners, FDI is contrasted from portfolio investment. While FDI requires the contribution of owners in the area of decision making and operations of the firm, portfolio investment represents passive ownership of securities (The World Bank, 2010). According to Mwega, (2009), equity capital and reinvested earnings are examples of FDI.

There are diverse views on the actual contribution of FDI towards economic growth. Some proponents believe that FDI fills the savings gap, foreign exchange gap, revenue gap and management gap (Todaro, 1977). This is seen through efficiency and benefit of the free market mechanism of FDI and the promotion of credit and risk sharing across borders (O'Connell, et al. 2010). It is also associated with superior technology and skills base, promote skill upgrading, provide employment and enhanced innovation and thus can be said to enhance productivity and growth (Blomstrom, 1986). With reference to Abala, (2014) FDI is seen as boosting domestic capital, facilitating movement of technology and trade across borders, developing skills of domestic labor and upgrading technical and managerial capabilities. This according to him is seen through the provision of sufficient capital, increased competition in the recipient countries and aiding domestic firms to increase productivity by employing more effectual technology. Finally, FDI is also seen as having a positive impact on profits and productivity prospects of private domestic investment through the provision of investible financial, new technologies and efficiency (Mwega, 2009).

In spite of FDI's positive contribution towards the growth of an economy, opponents on the hand argue that FDI undermine macro-economic stability by making domestic markets vulnerable to external volatility and sharpening the trade-offs between competing objectives of monetary policy, widens the said gaps, increase dependency and crowds out domestic savings (O'Connell, et al. 2010). This is seen through competition among domestic firms and firms established by foreigners in the domestic country. Such competitions usually end up affecting local producers because of their inability to match the technology adopted by the foreigners. This according to Schnitzer, (2002) accounted for why many African economies until the late 1980s attached less importance to FDI as many leaders feared for "loss or dilution of political sovereignty", adverse effects on domestic firms such as bankruptcy and general deterioration of the environmental resources especially if investments were directed to the natural resource sector.

Notwithstanding the mixed evidence and different conclusions drawn from the various empirical findings, the positive externalities arising from FDI cannot be overlooked. In terms of productivity for both the host countries and the source countries, many economists and policymakers attest to the positive impact FDI has on economic growth. These positive externalities are seen in the form of technological diffusion, the introduction of new production techniques, employee training, imitations, and creation of bonds between the foreign and the domestic firms which provide enough reason to support the importance of FDI in enhancing economic growth (Alfaro, et al. 2006).

With regard to developing economies, the role played by FDI as a facilitator of economic growth is vital. A report by the UNCTAD, (2017) shows a continuous increase in global FDI inflows over and above the US\$1 trillion recorded in 2006 to US\$1.52 trillion in 2017. Its contribution towards economic growth especially in developing economies is seen in the sphere of

development financing as it increases the overall investment in the host economy and leads to an increase in productivity gains through managerial skills and technological advancement.

In many developing economies, FDI has been a major contributor in terms of economic growth. FDI has become an important instrument for many policymakers because of its ability to solve the problem of transfer of financial resources and also the problem of inadequate skills and technology which confronted many developing economies (Abdulai 2005). According to Alfaro et al (2005), FDI plays important role in an economy in terms of increasing domestic capital, balance of payments, output, domestic productivity, employment and a host of others.

1.2 Statement of the Problem

Evidence from various intervention programs put in place by the Governments of most developing economies to attract FDI inflows provide enough information about the level of importance these economies attach to the contribution of inward FDI towards economic growth. Nonetheless, the level of actual inward FDI received varies across countries, so do the actual effect of FDI on economic growth in these economies.

FDI flows to Africa is experiencing a continuous decline in recent times. In 2016, there was a decline by 3 percent from \$59 to \$57.23 billion per the United Nations Conference on Trade and Development (UNCTAD's) World Investment Report in 2017. However, there was an uneven distribution of inflows to the continent. East Africa led the way by receiving \$7.1 billion in FDI in 2016 representing a 13 percent increase over and above what was received in 2015. According to the report, flows to Ethiopia rose by 46 percent from \$1.73 to \$3.2 billion, propelled by investments in infrastructure and manufacturing. On the other hand, there was a decrease in FDI

flows to Central Africa by 15 percent in 2016 from \$6 to \$5.1 billion. The Democratic Republic of Congo recorded a decline of 28 percent from \$1.67 to \$1.2 billion, as the country attracted investment only in its mineral sector. However, there was an increase in flows to other countries. For instance, the Congo recorded an eight percent increase from \$1.84 to \$2 billion, springing from continued investment by Chinese companies.

The Economic Commission for Africa's report shows that East Africa has been recording fast economic growth rate in recent times. In 2015 and 2016, the region recorded the fastest economic growth on the continent (6.5 percent and 5.3 percent respectively) compared with the other regions. In 2016, Kenya's growth rate of 5.8 percent increased stemming from a high rate of household consumption and investments in infrastructure. Agriculture and services were major contributors of growth in Rwanda whilst in Tanzania, the manufacturing sector together with robust domestic demand for the growing services were the major players in the economy's growth rate recorded (The Economic Commission for Africa's Report 2017). A report by the Urbanization and Industrialization for Africa's Transformation, predicts an increase in the region's growth rate to 6.0 percent in 2017 and 6.3 percent in 2018. Central Africa on the other hand, has been experiencing a decline in economic growth in recent times with growth rates of 3.6 percent and 0.8 percent in 2015 and 2016 respectively.

Various studies have investigated the impact of FDI on economic growth. For instance, a study by Zekarias, (2016) confirmed the positive impact of FDI on economic growth after analyzing 7 selected countries in East Africa. Conversely, Brenner, (2014), found a negative impact of FDI on economic growth in less developed economies after analyzing 112 developed and less developed economies.

Looking at the varying and inconclusive views on the impact of FDI on economic growth from the above studies together with other studies which will be reviewed in the next chapter; it is an indication that further studies need to be conducted to ascertain its impact prompting the need for this study. Again, the study seeks to investigate if the rate of economic growth recorded in East and Central Africa can be attributed to the level of FDI inflows into these sub-regions. In other words, is the level of FDI inflows directly responsible for the rate of economic growth recorded in these sub-regions?

1.3 Research Questions

This study will be driven by the following research question:

- i. Is FDI the actual cause of economic growth in East and Central Africa?
- ii. What deliberate and effective policies are put in place to attract FDI into East and Central Africa?

1.4 Objectives of the Study

1.4.1 Main Objective

The main objective of the study is to find out the impact of FDI on economic growth in East and Central Africa.

1.4.2 Specific Objectives

The study seeks to:

- i. Empirically analyze the impact of net aggregate FDI inflows on economic growth in East and Central Africa.
- ii. Theoretically determine deliberate effective policies put in place to attract FDI into East and Central Africa.

1.5 Justification of the Study

Given that various studies have been conducted on the impact of FDI on economic growth; it is worth noting that such studies are either focused on specific countries or Sub-Saharan Africa in general. Also, these studies provide varying and inconclusive views on the impact of FDI on economic growth making further studies on this discourse worthwhile. This study, therefore, seeks to focus on East and Central Africa for two reasons. First, East Africa is currently attracting more FDI inflows into the African continent while Central Africa is experiencing a decline in FDI inflows in Africa. Secondly, East Africa is recording high economic growth rates over the years while Central Africa is experiencing low economic growth rates over the same period. It is therefore important to inquire if the higher levels of FDI inflows are actually the cause of the high economic growth in East Africa and also if the low inflows to Central Africa have an influence in terms of economic growth recorded in the region over the years.

The study will also help in knowing policies that have been put in place with regards to FDI inflows to these regions.

1.6 Overview of Chapters

The thesis consists of five chapters. Chapter One is the introduction and covers the background of the study, statement of problem, research questions, objectives of the study, justification of the study and the organization of the study. Chapter Two comprises of the theoretical literature, how FDI affects economic growth and empirical literature. Chapter Three gives an overview of FDI in East and Central Africa. Chapter Four presents the methodology and deals with the development of theoretical models and methodologies that are used for the data analysis. The models that are used for the study are also discussed in this chapter. The focal point of Chapter Five is a discussion of results while the final chapter looks at the summary of major findings, conclusions, and recommendation of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, I intend to review the theoretical and empirical literature on FDI with particular emphasis on FDI-growth nexus. This section will be devoted to theoretical literature, empirical literature and a summary of the reviewed literature on the impact of FDI on economic growth. I do not intend to discuss the literature on why FDI occurs, as this has been extensively discussed elsewhere. For excellent reviews see for instance (Kinoshita and Campos, 2003) on “Why does FDI go where it goes?”

2.2 Theoretical Review

Considering the level of responsiveness and the corresponding initiatives many nations of the world are putting in place to attract FDI, the contribution of FDI towards economic growth cannot be underestimated. However, what remains unresolved is how and to what extent FDI impacts on economic growth in many countries. Whiles economic theories explaining FDI and economic growth predict a positive relationship between the two, empirical findings on the topic somewhat produce ambiguous results. There are findings which confirm the positive relationship whiles other findings come out with a negative relationship. To properly understand the economic mechanism, how economic agents behave (motivations to overseas venture) and the end effect of FDI, a contextual review of theories that explain the FDI phenomenon are essential. Choudhury and Nayak, (2014) observes that proper explanation of FDI can be dated back to the 1960s where scholars attempted to integrate activities of Multi-National Corporations (MNCs) into their theories with their increasing role in overseas investment. There are other relevant

growth theories such as the theory of neoclassical growth, endogenous growth theory, and the Harrod-Domar growth model. These theories are considered below:

2.2.1 The Solow growth model

This is the building block of most growth analyses in economics. It follows the works of Solow (1956) and Swan (1956). The model assumes a neoclassical production function which postulates that the level of output and growth in an economy depends on the quantity of labor (L), capital (K) and knowledge and the effectiveness of labor (A). These inputs are combined to produce output through a function of the form $Y(t) = F [K(t), A(t), L(t)]$, where 'Y' is output and 't' represents time which enters the function indirectly through capital, labour and technology (Romer 2012).

The Solow Model forecasts that countries with low level of GDP per capita resulting from low capital accumulation in relation to long-run per capita are likely to experience growth rates and returns (Salai-i-Martin, 2004; Salai-i-Martin and Barro, 1995).

FDI per the Solow growth model is assumed to enter the production function through the capital stock (K) and thus promote economic growth of the recipient country. This is because FDI involves the direct flow of capital including physical capital into the host country which tends to add up to the existing aggregate capital stock of the host country.

Considering the underlying assumptions of diminishing returns to capital and then prediction of the neoclassical model that, growth is due to exogenous factors such as technological progress, population growth, and constant savings rate, the standard neoclassical growth model is rendered theoretically inefficient in coming up with the long-run determinants of growth (Salai-i-Martin, 2004). This is because growth in the long-run is dependent on endogenous factors such as level

of investment and the stock of human and physical capital rather than exogenous factors. This inefficiency of not being able to come up with the long-run determinants of growth, however, led to the introduction of endogenous growth model which postulates that growth is attributed to endogenous factors.

A major shortcoming of this theory is that it totally ignores the problem of composition of capital stock and assumes capital as a homogenous factor which is unrealistic. Also, the theory ignores the study of technological progress. In the process of growth, technological progress is very essential but is ignored under the Solow growth model (Romer, 1990). Also neglected is the problem of inducing technical progress through the process of knowledge acquisition, investment and capital formation (Mankiw, et al. 1992). Lastly, the theory works on the unrealistic assumption that capital is homogenous. Capital goods are however not homogenous and may create the problem of accumulation. In a nutshell, it is difficult to conclude that there exists a steady growth path when there are varieties of capital goods in the market.

2.2.2 Endogenous growth theory

This theory was propounded by Romer, (1990) in response to the lapses and shortfalls in the Solow-Swan model. The theory explains the long-run rate of growth of an economy with major emphasis on endogenous factors of the neoclassical growth theory. The model emphasizes on technical progress arising from the level of investment, the stock of human capital and the size of the capital stock.

The endogenous growth theory has moderated the ambiguity in the literature by stressing on FDI as one of the long run determinants of growth. It explains that factors such as increasing returns or induced technological changes and economies of scale which are within the production

process are the main initiators of economic growth. There have been various contributions geared towards explaining the link between FDI and economic growth. For example, Romer, (1990) and Grossman and Helpman, (1991) made contributions by developing growth models which are in line with the endogenous growth theory in an attempt to explain this relationship. Their models are based on the assumption that technological advancement is significant in terms of the growth of an economy. According to them, the creation and transfer of technological knowledge is a focal point and also innovation is seen as a principal means of achieving economic growth. With this analysis, they found out that, the extent to which developing economies adopt and employ innovative technologies from highly developed economies is a major factor in determining the growth rates of developing economies. They assert that FDI is the means through which advanced technologies are made available to developing economies. Per their theory, since developing economies are generally unable to invent and create new technologies, they, therefore, resort to the use of technology that is invested from developed economies through the medium of FDI.

Also, Borensztein, et al. (1995) contributes in the sphere of endogenous growth theory by arguing that, the technological progress as propounded by the endogenous growth theorists occur through the capital deepening process mainly through the introduction of new capital goods. Through FDI, new varieties of capital are being provided.

The endogenous growth model implicitly predicts a positive relationship between FDI and economic growth especially in developing countries where there are lower levels of human as well as aggregate capital. This prediction is based on the significance of human capital and improvements in technology in the growth process and also the fact that FDI does not only depend on physical capital but also on technology and transfer of skills.

Even though the endogenous growth theory is meant to address the shortfalls of the new classical growth theory, the theory is criticized by Fisher, (1993) for its dependence on the production function and the steady state only. Olson, et al. (2000) also criticizes the theory due to the neglect of the role of institutions and overemphasis on the role of human capital. Finally, the difference between physical capital and human capital is not made clear in the various models of the theory. For example, in Romer's model, capital goods are key to economic growth. He assumes that human capital accumulates and when it is embodied in physical capital, then it becomes a driving force. However, he fails to clarify which is the driving force.

2.2.3 Harrod-Domar model

The Harrod-Domar model which was developed by Harrod, (1939) and Domar, (1946) is also widely used in explaining the growth of an economy. A unique characteristic of this model is that it combines both the Classical and Keynesian growth theories. According to Maji and Odoaba, (2011), the model explains the usefulness and role investment plays in the economic growth of countries. The model helps in determining the requisite investment level that is required to attain a specified level of output growth in an economy.

The model is specified as; $\frac{\Delta Y}{Y} = \frac{s}{k} = g = \frac{s}{k}$

Where s, k, and g represent saving ratio, capital-output ratio and growth rate of national output respectively. According to the model, if the level of saving(s) is high, firms have access to credit and therefore the ability to borrow more for their investment purposes. This increase in investment consequently results in an increase in output causing economic growth. From the capital-output ratio (k) perspective, a fall in (k) leads to the economy increasing production with fewer inputs due to the efficiency in production in the economy.

From the Harrod-Domar model, it can be observed that a developing economy that wants to achieve economic growth has to resort to the promotion of savings and also encourage technological advancement as a means of reducing the capital-output ratio. Also since the transfer of technology from developed economies to developing economies is a form of FDI, it can be concluded that FDI through technological advancement can be an engine for economic growth and therefore it is paramount on the government of developing economies to encourage technological advancement if it is focused on achieving economic growth. From this analysis, economic growth can be expressed as a function of FDI; *Economic growth = f(FDI)*.

A critique of the model is that factors such as labor productivity, technological innovation, and levels of corruption are ignored. The model is an oversimplification of complex factors which go into economic growth. Also, it assumes the existence of reliable finance and transport system. Often the problem for developing countries is lack of investment. Moreover, the model explains boom and bust through the importance of capital. However, in practice businesses are influenced by many things other than capital such as expectations.

2.2.4 How FDI affects economic growth

It is worth noting that aside the theories discussed under section 2.2 in explaining the FDI economic growth relationship; two theories explain the need for FDI to have a positive impact on economic growth: these are the capital formation theory and the technological spillovers theory. These theories are worth considering because they provide explanations that support the works of researchers who established a positive relationship between FDI and economic growth.

The main thrust of the capital formation theory is the emphasis on the role of FDI as capital. In his neoclassical growth model, Solow, (1956) revealed that an increase in production stems from

an increase in an economy's available capital stock and this implies a further increase in output growth. Considering FDI as a major contributor to the physical and financial capital of the host country, an increase in FDI is expected to lead to a high level of domestic capital stock needed for increased production. It can, therefore, be deduced from the neoclassical growth model that higher levels of capital stock coming from foreign economies through FDI results in higher growth of an economy. However, FDI per the neoclassical framework is seen as a contributor to growth only in the short run (Brems, 1970) since higher growth rate which is experienced after increasing the stock of FDI is only sustained in the short run.

The impact of FDI on economic growth can also be felt through knowledge or technological spillovers. With recourse to the endogenous growth theory framework where knowledge accumulation is a major determinant of long-run economic growth, FDI is said to have a direct impact on growth through its role as a diffuser of knowledge or technology (Borensztein, et al. 1998). Kinoshita, (1999) throws more light on the technological diffusion process grouping them into four different categories; the imitation effect, the training effect, the linkages effect, and the competition effect. According to him, the imitation effect comes into play where local producers copy the efficient or advanced technologies employed by subsidiaries or factories set up in the developing countries by the developed economies through contact in the market place. The implementation of these advanced technologies lead to increased production in the host country. With regard to the training effect, the need for foreign firms to teach domestic workers to be able to adopt and employ the advanced technologies introduced in the local markets leads to increased knowledge base in the recipient country. This consequently results in an increase in long-run output and growth. Where intermediate goods are purchased by domestic firms from foreign-owned firms, the linkages effect comes into play. Here, the technology available to local firms is

upgraded if the inputs bought are more than those which were previously available to the domestic firms. The upgrade, therefore, results in increased output. There is increased competition in markets where more efficient foreign firms are allowed to enter. The increased competition sends a signal to local firms to either invest more resources to upgrade their technology or possibly become efficient in their production processes. In the end, either advanced technologies are adopted or there is efficiency in production leading to an increase in output. This phenomenon explains the competition effect.

The various effects described above are evident in the regions considered in this study. The imitation and training effects are very pronounced in East Africa as countries in this region learn the advanced technologies and employ them in their various productive activities.

2.3 Empirical Review

This section deals with the review of relevant empirical studies on the effect of FDI on economic growth and is organized into two sections; the studies that show positive impact and those that show negative or ambiguous effect of FDI on economic growth.

2.3.1 Studies that show a positive relationship between FDI and economic growth

Yapatake, (2017) sought to examine the slow inflows and growth of FDI in the Central African Republic using time series data covering the period 1996 to 2014. Employing the error correction model, it was found that domestic credit to private sector, gross domestic product growth, quality of public administration and electricity production are not statistically significant (at 0.05 level of significance). A recommendation from the article was for the country to renovate the national

electricity supply company in order to provide a constant supply of electricity as a means of attracting FDI.

Mohammad, (2017) investigated the impact of FDI on economic growth of 4 East African Community Member Countries (Tanzania, Kenya, Uganda, and Rwanda) covering the period 1990 to 2015. Applying the Fully Modified Ordinary Least Square (FMOLS) technique, it was found that FDI accelerates positive impact on economic growth in East African countries with results significant at 0.10 level of significance.

Zekarias, (2016) analyzed the impact of FDI on economic growth in 14 East African countries covering the period 1980 to 2013 using dynamic GMM estimators. The findings confirm that FDI has a positive and marginally significant effect on economic growth. This led to the conclusion that FDI is a key driver of economic growth and a catalyst to economic conditional convergence in Eastern Africa.

In an empirical investigation of the impact of FDI on economic growth in East Africa, Worku, (2016) employed annual panel data for seven (7) selected countries in the region over the period 1970 to 2015. The methods of panel autoregressive distributed lag and random effect models combined with time scaling wavelet decomposition analysis were used to show a panel of short, medium and long-run effects for the entire region and individual countries. The long-run estimated coefficients showed a positive and statistically significant relationship between FDI and economic growth in the selected countries.

Elboiashi, (2015) examined the effect of FDI on growth sampling some selected developing countries from 1970 to 2005. Employing the GMM panel data technique, a positive impact of FDI on economic growth was found, but the magnitude was dependent on the prevailing

conditions in the recipient country. The results from the findings showed that trade openness, domestic investment, infrastructure development, human capital, financial market development, and institutional quality positively influence economic growth.

Sackey, et al. (2012) with the help of various econometrics techniques such as Vector Auto Regression, Johansen cointegration tests and Augmented Dickey-Fuller tests examined the impact of FDI on economic growth in Ghana. Using time series data covering the period 2001 to 2010 they established a positive and statistically significant relationship between FDI and economic growth as well as a unidirectional causality from FDI to economic growth. The conclusion from the work of Sackey, et al. was similar to that of Antwi, et al. (2013). The only difference is the period of study which was extended to cover the period 1980 to 2010 and also the failure to check for any causality between FDI and economic growth in the study by Antwi, et al. (2013).

Djurovic, (2012) employed ordinary least square (OLS) and deductive logic techniques for her analysis covering the period 2000 to 2010 to investigate the impact of FDI on economic growth in developing countries. She found a positive relationship between FDI and economic growth and also added that it is when FDI is combined with higher government spending that it positively impacts on economic growth.

Tintin, (2012) examined the effect of FDI on economic growth by conducting a study on 125 countries comprising 58 developing, 29 least developed and 38 developed economies. He employed panel ordinary least square and used data from 1980 to 2010. The findings from the study revealed a positive relationship between FDI and economic growth for all the selected economies.

In their study on Jordan, Louzi and Abadi, (2011) made use of annual time series data covering the period 1990 to 2009 and employed ordinary least square (OLS) and vector auto-regression (VAR) techniques to establish a dependent positive effect of FDI on economic growth. According to them, the impact is recognized when FDI is combined with other factors such as well developed infrastructure facilities, human capital level, and political stability.

Edoumiekumo, (2009) used time series data covering the period 1970 to 2007 and made use of the Johansen cointegration approach to study the effect of FDI and economic growth in Nigeria. The results from the research showed a positive and statistically significant relationship between FDI and economic growth. A bi-directional causality from FDI to economic growth was confirmed using the Granger causality test. The results are similar to that of Chukwuka, et al (2012) who used yearly time series data covering the years 1960 to 2010 to examine the effect of FDI on economic growth in Nigeria. Johansen test and Granger causality test were employed in establishing a positive and statistically significant relationship between FDI and economic growth. Also, there was bidirectional causality from both variables per the results.

An empirical study of the relationship between FDI and economic growth was performed by Abdul Samad, (2009). Using 19 developing countries from Latin America and South-East Asia the cointegration technique, the Error Correction Model and the Granger causality test were employed. The findings from seven out of the total countries sampled (two from Latin America and five from South-East Asia) revealed bi-directional causality between FDI and economic growth. Also in four countries (three from South-East Asia and one from Latin America) a unidirectional short run causal link from economic growth to FDI was revealed. Finally, a unidirectional causality from economic growth to FDI was reported for six countries (one from South-East Asia and five from Latin America).

Tang Sumei, et al. (2008) sought to find the causal linkage between domestic investment, FDI and economic growth in the Chinese economy over the years 1988 to 2003 making use of a multivariate VAR system with error correction model (ECM). A unidirectional causality from FDI to economic growth was confirmed from the results leading them to conclude that through domestic investment, FDI helps accelerate economic growth in addition to helping in capital formation.

Vo and Batten, (2006) employed panel data techniques; fixed and dynamic methods to 79 developing countries from the period 1980 to 2003. They established a positive but dependent impact of FDI on economic growth and further revealed that the effect is realized when FDI is combined with education.

Moreover, Carkovic and Levine, (2005) contributed to this discourse by studying the linkage between FDI and growth for 68 developing countries employing the Generalized Method of Moment (GMM). A panel data averaged over a 5-year period covering the years 1960 to 1995 was used for the study. Their econometrics specification allowed for the interaction of FDI with other variables such as education, domestic financial development, trade openness, and national income and a robust and positive impact of FDI on economic growth was found. From the findings, the level of development of local financial markets is critical in recognizing the positive effect of FDI on economic growth. This was similar to the work of Alfaro, et al. (2004) who studied the relationship among FDI, financial markets and economic growth from 71 developing countries using cross-country data averaged over the period 1975 to 1995. The results from their study highlighted the role played by FDI in enhancing economic growth if domestic markets are highly financially developed. Thus the two studies commonly conclude that FDI enhances economic growth in developing countries.

Hansen and Rand, (2005) sampled 31 developing countries and examined the causal relationship between FDI and GDP. The evidence showed a unidirectional causality between FDI and GDP using variables for heterogeneous panel data signifying that FDI impacts economic growth. The finding complements the work of Johnson, (2006) who performed his analysis for 90 countries covering the years 1980 to 2002 using panel data. A positive link between FDI and economic growth was established and he concluded that FDI spurs economic growth.

Asafu-Adjaye, (2005) employed the ordinary least square technique to examine the relationship between FDI and economic growth in Ghana. The research was conducted using annual time series data covering the period 1973 to 2003 and the results established a positive effect of FDI on economic growth. Similarly, Andinuur, (2013) used annual time series data from 1980 to 2011 to study the impact of FDI on economic growth in Ghana employing ordinary least square and Vector Autoregressive regression techniques he established a positive relationship between FDI and economic growth as done by (Asafu-Adjaye, 2005).

Dritsaki, et al. (2004) found the relationship among economic growth, FDI and trade for Greece covering the period 1960 to 2002. A long-run equilibrium relationship was established using cointegration analysis. The Granger causality test was also employed and the results showed a bidirectional causal relationship between the FDI and economic growth. A similar study for Cyprus over the years 1976 to 2002 was conducted by Feridun, (2004) to examine the relationship between FDI and economic growth. The results from a Granger causality test showed that economic growth is Granger caused by FDI but not vice versa. The difference in results could possibly be attributed to the inclusion of trade in the analysis by Dritsaki, et al. (2004).

Chowdhury and Mavrotas, (2003) examined three developing countries over the period 1969 to 2000. They used annual time series data to empirically investigate the linkage between FDI and economic growth. Using Johansen and Granger causality tests, they found a positive link connecting FDI and GDP growth as well as a bi-directional causality. This result supports the work of Basu, et al. (2003) where cointegration and causality tests were employed in studying possible causality between FDI and growth in 23 developing countries over the period 1978 to 1996. A positive relationship between FDI and GDP and also bidirectional causality between FDI and GDP for open economies were established. Also, the results support the work of Choe, (2003) who used panel data for eighty developing countries over the period 1971 to 1995 to find out the relationship between FDI and economic growth. Choe's evidence confirmed a Granger causality relationship between FDI and economic growth in either direction.

Athukorala, (2003) worked on the Sri-Lankan economy by studying the impact of FDI on economic growth from 1959 to 2002 using time series data. To investigate a bi-directional causality between FDI and economic growth, cointegration and error correction model were used. The econometrics results revealed a positive and statistically significant relationship between FDI and economic growth. Furthermore, there was evidence of unidirectional causality from growth to FDI as shown by the study.

Bengoa and Sanchez-Robles, (2003) employed panel fixed and random effect methodology for a group of 18 Latin American countries to study the relationship between FDI and economic growth. Using data from 1970 to 1999, a positive relationship between FDI and economic growth was established in the host country. They also found that in order to attract long-run capital flows, adequate human capital, economic stability and liberalized markets are prerequisites in the recipient countries.

A study conducted by Hermes and Lensink, (2003) examined the influence of financial development on the FDI and economic growth nexus using data from 67 least developed countries (LDCs) mostly located in Asia, Sub-Saharan Africa, and Latin America. Their results showed a positive impact of FDI on economic growth in countries where the financial markets are more developed. Further observation showed that out of the 67 countries sampled, 37 have a more developed financial market and the positive statistically significant impact of FDI on economic growth is seen to be experienced equally.

Akinlo, (2003) in his paper “Foreign direct investment and economic growth in Sub-Saharan Africa” studies the effect of FDI on economic growth in Africa making use of pooled annual data from a sample of twelve countries. His results showed that twice-lagged FDI has a positive impact on economic growth, indicating that the effects of FDI accumulation is realized over a period of time and not necessarily immediate. It was also observed that the impact of FDI on economic growth is felt through capital accumulation but not increasing productivity.

Zhang, (2001) empirically examined causality between FDI and growth using 11 developing countries from Latin America and East Asia over the period 1970 to 1995. From the findings, a positive relationship between FDI and economic growth and a Granger-causality from FDI to GDP for five of the countries sampled was revealed. Similarly, Bende, et al. (2001) investigated the linkage between FDI and economic growth using annual time series data for the period 1970 to 1998 in four developing countries. A positive and statistically significant relationship between FDI and economic growth was established from the results. Both studies, therefore, reveal a positive relationship between FDI and economic growth in developing countries.

Berthelemy and Demurger, (2000) employed the Generalized Methods of Moments (GMM) simultaneous equation estimation technique to study the impact of FDI on economic growth in China. The findings showed that foreign technology transfer is an important determinant of growth of economies in establishing a positive link between FDI and economic growth. The study used 24 provinces in China for the years 1985 to 1996.

In his paper, De Mello, (1999) estimates the impact of FDI on total factor productivity (TFP), capital accumulation and output using panel and time series data from 1970 to 1990 for a sample of Organization for Economic Co-operation and Development (OECD) and non-OECD countries. From his results, although FDI is projected to positively impact economic growth in the recipient country over time through knowledge spillovers and technological advancement, this can only materialize based on substitution and the rate at which FDI compliments domestic investment.

Examining the impact of FDI on economic growth in sixty-nine developing countries, Borensztein, (1998) found that while FDI positively impacts real per capita GDP growth, taking into consideration the levels of human capital helps to modify the relationship. Specifically, the coefficient is larger for countries that have low human capital stock. Hence, the contribution of FDI to economic growth is only felt when the host country has the ability to absorb the advanced technologies. This led to the conclusion by the author that advanced technologies that are usually associated with FDI are taken advantage of by countries with a more educated workforce.

Balasubramanyam, et al. (1996) conducted a study on export promotion and import substitution countries. The study emphasized the importance of trade openness in assessing the impact of FDI on economic growth. Specifically, the results from a cross-sectional data over the period 1970 to

1985 sampling 46 developing countries showed that FDI has a higher effect on economic growth in countries pursuing export promotion as against import substitution. Again FDI was seen to have a stronger effect on economic growth as compared to domestic investment.

2.3.2 Studies that show the negative or ambiguous relationship between FDI and economic growth

In spite of the positive impact of FDI on economic growth as postulated by economic theory, some empirical findings tend to present either negative or ambiguous relationship between these variables. Below are some empirical findings that present these conclusions;

Brenner, (2014) conducted a study in 112 developed and less developed economies excluding oil exporting countries for the period 1974 to 2010 and reported a mixed result of the effect of FDI on economic growth. Employing the generalized method of moment technique for his analysis, there was evidence of negative effect of FDI on economic growth in less developed economies and positive effect of FDI on economic growth in more developed economies.

Using panel data from selected economies in Latin America and East Asia for the years 1980 to 2003, Lund, (2010) investigated the effect of FDI on economic growth and found an ambiguous link between the two variables in both developed and developing economies. With regard to the causal relationship between the two variables, he found much evidence of causality in the long run in most countries while evidence of short-run causality exists especially in higher income countries.

Noormamode, (2008) employed Vector Autoregressive technique for her study of 58 developed and developing countries making use of time series data covering the period 1980 to 2004 and found an ambiguous relationship between FDI and economic growth. From her findings, there

was no clear cut evidence of the impact of FDI on economic growth. Also, the results showed the impacts are felt depending on the level of income of the country leading her to draw a conclusion that the inflow of FDI does not necessarily enhance economic growth.

Khaliq and Noy, (2007) considered sectoral annual FDI flows data for the period 1997 to 2006, employing the panel fixed effects methodology to examine the effect of FDI on economic growth. Even though he observed a positive and statistically significant effect of FDI on economic growth, he found that the impact in terms of sectoral analysis differs from one sector to another and specifically observed the negative effect of FDI in the manufacturing sector in Indonesia.

Limiting their work to transition economies, Lyroudi, et al. (2004) investigated the impact of FDI on economic growth in Ukraine, Russia, Albania and Latvia among others. No significant relationship between FDI and economic growth was observed after employing the Bayesian estimation technique on data from 17 transition economies spanning over the period 1995 to 1998. After grouping the data into high and low-income countries and trying to establish a relationship between these two variables, they observed no significant connection between FDI and economic growth.

Ciftcioglu, et al. (2004) in their study employed panel and pooled classical regression technique to analyze data from nine Central and East European countries covering the period 1995 to 2003. The study reported a mixed result by establishing that FDI impacts negatively on economic growth, unemployment and the share of manufacturing and agriculture in GDP while it impacts positively on the share of export in GDP.

Alfaro, (2003) observed an ambiguous effect of FDI on economic growth on a cross-sectional data from 47 countries covering the period 1981 to 1999. Employing system Generalized Method of Moments equations in his sectoral analysis, the study found a positive and ambiguous impact of FDI on manufacturing and service sectors growth while that of primary sector growth was seen to be negative.

Konings, (2001) sought to investigate the impact of FDI on the productivity of some local companies from three selected countries namely Bulgaria, Poland and Romania using firms' level panel data. After using data for the period 1993 to 1997 and employing the Generalized Method of Moments (GMM), there was no evidence of positive spillovers of FDI on domestic firms. Further observation shows no spillover effects of FDI on domestic firms in Poland while FDI had negative spillover effects on domestic firms in Romania and Bulgaria.

An immense contribution was made by Carkovic and Levine, (2002; 2005) to analyze how FDI affects economic growth by considering cross country data from 1960 to 1995. They sampled 72 countries and employed the Generalized Method of Moments panel technique in their study. The results showed a dependent effect of FDI on economic growth.

2.4 Summary of the literature review

From the above review, it can be observed that there exists some form of relationship between FDI and economic growth. This relationship, however, is not in one direction as economic theory postulates and also the relationship is observed to vary from country to country. The main reason for the varying results observed is due to the differences in the nature and type of economy being analyzed and also the economic conditions in these countries regarding the inflow of FDI. It is

therefore paramount on the various countries to review their strategies put in place to attract inward FDI considering the role played by FDI in enhancing economic growth. Since most of the reviewed works examined the direct impact of FDI on economic growth, this study seeks to address this shortcoming by considering the effects of other factors such as governance, macro-economic conditions, policy regimes, and financial market development to enhance economic growth.

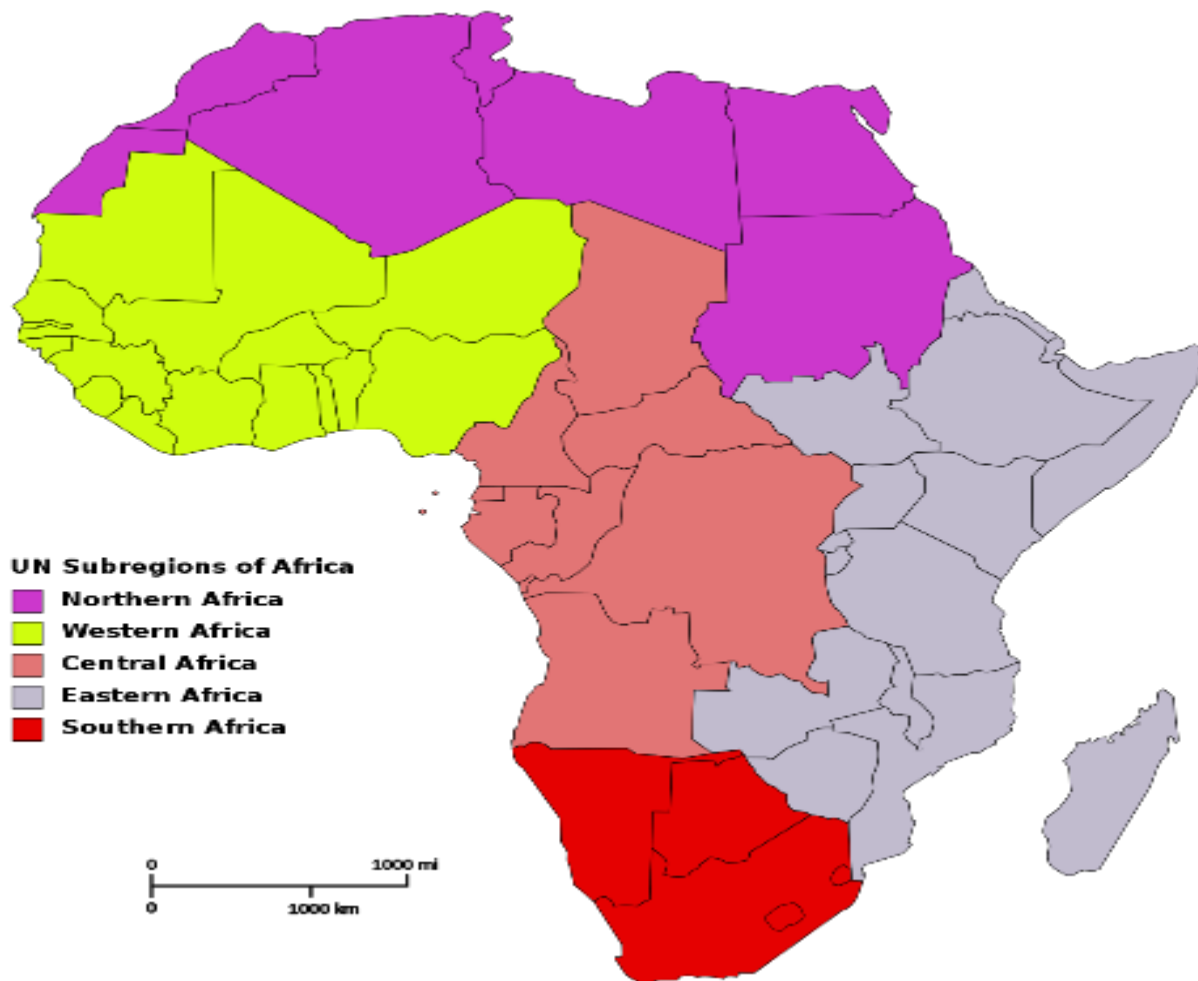
CHAPTER THREE

OVERVIEW

3.1 Overview of FDI in East and Central Africa

This section considers a review of FDI inflows to East and Central Africa in recent years, considering selected countries based on their peculiar characteristics. The section also discusses the policy environment that helped to improve net FDI inflow as well as those that retarded net FDI inflow.

Figure 1: A map of Africa showing the various sub-regions



3.2 FDI in East Africa

East Africa is a region with high potential for foreign investment. There are investment opportunities abounding in the energy, minerals, agriculture and tourism sectors. This explains why there was an agreement among five economies of the East African Community (EAC) namely; Rwanda, Uganda, Burundi, Kenya and Tanzania to cooperate in the areas of Investment and Industrial development as a means of taking advantage of the investment opportunities to influence their economic growth. Even though there a number of countries in the East African sub-region, the discussion here is more related to the EAC since all EAC partner states have adopted liberal investment policies aimed at attracting investment especially FDI (SEATINI Research Study Report, 2016). Further analysis is on Ethiopia which though does not form part of the EAC is worthy of mention in this study due to the performance of the country in terms of FDI.

Among other things, the cooperation seeks to promote the Community as a single investment area through harmonizing investment incentives as well as rationalizing investments. The flow of FDI to the EAC and Ethiopia together with policies put in place by these economies to attract FDI is considered below:

3.2.1 FDI to Kenya

Kenya has sought to maintain a relatively open economy to allow the inflow of FDI. The country also extends a number of investment incentives, both fiscal and non-fiscal, to boost investment flows into the economy. Various policy reforms have been undertaken to enhance the country's benefit from investments, both domestic and foreign; and to ensure that they contribute to the realization of the country's development objectives. Among these policies are the Export Processing Zones, Investment Promotion Act and Specific Economic Zones Act.

The Export Processing Zones Act of 2012 (revised in 2015), is the Act of parliament to promote and facilitate investment in local production for the export markets and the development of supporting investment environment for such manufacturing, service or commercial activities. The Export Processing Zone enterprises among other forms of incentives are exempted from the payment of withholding tax on dividends and other remittances to foreigners, income tax; and exchange controls on payments. While EPZs are open to both local and foreign investors, these exemptions appear to be direct incentives to foreign investors (Kenya Export Processing Zones Act, 1990).

The Investment Promotion Act, 2004 aims at simplifying the investment process through the establishment of KenInvest (a Government Semi-Autonomous Agency) whose primary objective is to promote investment in Kenya through the facilitation of establishment of new projects, provision of “After Care” services to new and existing investments and promoting Kenya as an investment destination locally and internationally (Kenya Investment Promotion Act, 2012).

The aim of the Special Economic Zones Act, 2015 is the designation of Special Economic Zones (SEZs) where geographical areas with land use, infrastructure, and utilities are integrated sector-wise. The Special Economic Zones Authority facilitates the enactment of business enabling policies and promotes foreign and domestic investments in designed zones. This is undertaken by private investors, public-private partnership or public agencies.

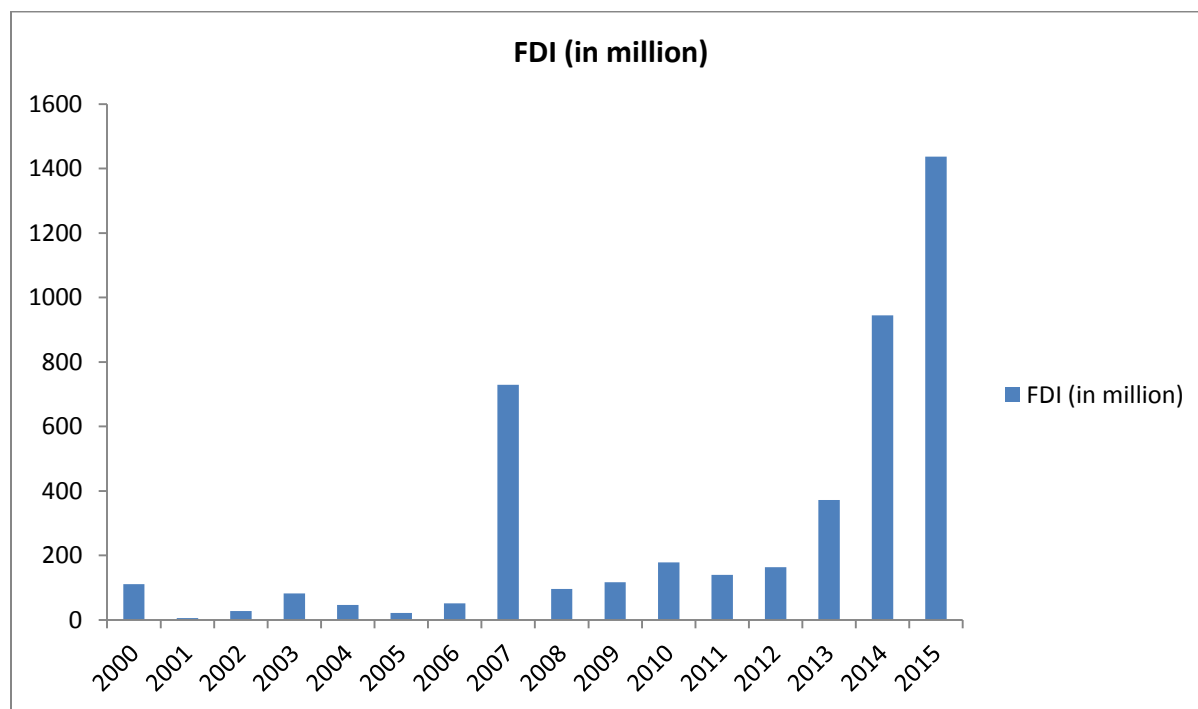
Aside the above deliberate policies and legislative initiatives aimed at promoting FDI, there has also been negotiations between the country and other countries such as Italy, the Netherlands, Germany and the United Kingdom on bilateral investment treaties (BITs) in a bid to secure FDI flows to the country (SEATINI Research Study Report, 2016). The provisions in these BITs

provide for national treatment, guarantee transfer rights, no provision on performance requirements and seek to protect the interests and rights of foreign investors rather than balancing their rights and obligations with the rights and development interests of the host states.

One of the current largest recipients of FDI in Africa is Kenya. The country has been experiencing increasing FDI inflows since 2010 and is one of the most attractive East African countries to foreign companies in recent times. The rise can be attributed to investments, mainly Chinese investment in the mining and hydrocarbon sectors. Kenya has seen a significant increase in FDI inflows since 2013 (more than USD 500 million in 2013 to nearly USD 900 million in 2014). In 2015, procedures for business creation and the transfer of ownership were simplified in the country in addition to improved access to credit and electricity. As at 2014, a business can be registered online on citizen in Kenya within 24 hours. In addition to this initiative, the conditions for obtaining business licenses have been simplified, together with the development of public-private partnerships as part of the 'Vision 2030' strategy (SEATINI Research Study Report, 2016). In 2016, the Business Report issued by the World Bank ranked Kenya 108th out of 189 countries in terms of FDI inflows.

Moreover, there is the exposure of most sectors in the country to foreign investment. The telecommunications sector, for instance, has attracted the most FDI in recent years, mainly due to the introduction of fiber optics in 2009-2010. The banking and tourism sectors are the other sectors attracting FDI in the country. Belgium, the United Kingdom, South Africa, the Netherlands, and China are the main investors in Kenya. The trend in FDI inflows for Kenya is presented below:

Figure 2: Kenya’s FDI Trend (Inflows), 2000-2015.



Source: WDI database, 2017

In recent times, movements in FDI in the various sectors of the economy are in garments, horticulture, tourism, and floriculture. While interest in floriculture and horticulture has been due to the favourable climate, investment in garment stems from a response to the U.S. granting preferential access to its market under African Growth and Opportunity Act (AGOA). On the other hand, the main concentration of manufacturing FDI has been on the food and beverage industry which are classified under the consumer goods sector (SEATINI Research Study Report, 2016).

One reason for the surge in FDI beyond the year 2015 is the increase in investment in the extractive industries such as in oil and gas where exploration is done by foreign firms. This is likely to be driven by higher prices of commodity exports, higher consumption and improved

terms of trade. This will most likely encourage market-seeking FDI. Although the FDI will most likely be concentrated in a few industries and sectors, it is highly probable that it will spill over to other sectors of the economy.

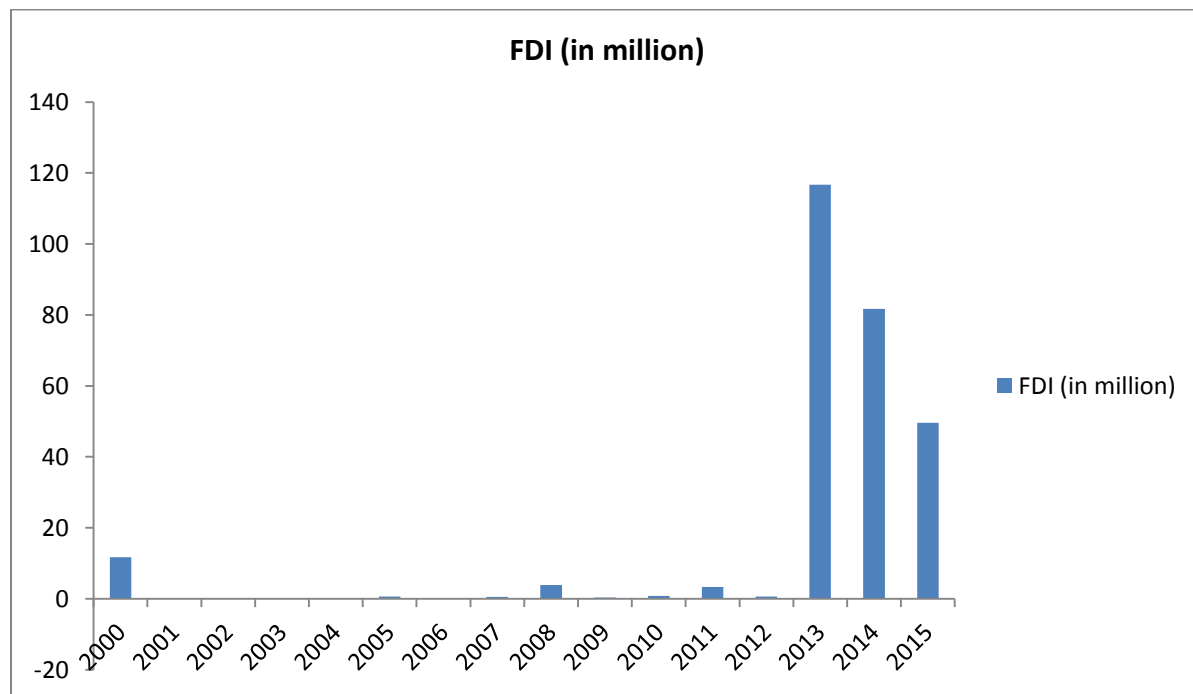
FDI has had a significant impact on job creation by foreign companies in Kenya. These positive impacts are achieved despite the recent economic and political challenges in the country signaling the large and yet unexplored potential for FDI attraction in Kenya. The creation of job by FDI was accompanied by the improvement in the quality of goods and services produced in the economy. FDI has also boosted export thereby facilitating the inflow of foreign currency which plays a significant role in influencing the balance of payment positively.

3.2.2 FDI to Burundi

Burundi has embarked on various economic reforms since the mid-2000s. A programme to withdraw the state from various economic activities and to liberalize the economy as a means of promoting private investment, including FDI was launched by the government. FDI attraction is now part of the country's development strategy and it intends to use it to stimulate economic growth.

In order to attract significant FDI inflows, Burundi has pursued reforms in its investment legal framework. To this end, various actions had to be considered including the reformation of the corporate tax system. The indirect tax system has already undergone an important improvement with the introduction of the value-added tax in July 2009. It is expected that this measure will smoothen the progression of private economic activities, in particular, exports and encourage better integration of the country into the EAC.

Figure 3: Burundi's FDI Trend (Inflows), 2000-2015.



Source: WDI database, 2017

Burundi is experiencing a low inflow of FDI to the region compared to the other members of EAC and this can be attributed to the following reasons among others:

Electricity supply has been the significant hindrance to FDI inflows to the region. A survey conducted by SEATINI Research Study Report, (2016) shows that it is a major and harsh problem by 65.2 percent of businesses, 87.3 percent of manufacturing enterprises and 69.6 percent of other sectors. Production, transport, and distribution of water and electricity in Burundi are provided by a public company, REGIDESO, which acts like a monopoly. Although the Burundian authorities have a priority to rehabilitate this sector, it continues nonetheless to burden the enterprises' operation, which must use alternative power sources such as generators.

Macroeconomic instability is also a major problem that accounts for low inflow of FDI. 49 percent of manufacturers and 38 percent of firms in other sectors per the survey conducted by SEATINI Research Study Report, (2016) complained that they are affected by this constraint. 49.3 percent and 45.3 percent of firms in the trade sector and the informal private sector respectively are also faced with the same constraint. This constraint from an analytical point of view is highly correlated with political instability experienced by the country and which has been characterized by a decade of interrupted structural reforms that have not allowed the country to produce the expected benefits. Public expenditure on economic and social infrastructure has been neglected in favor of military spending. The private sector, in particular, has suffered from the multitude of restrictions on currency and trade which have been exacerbated by an unstable exchange rate and high volatile inflation.

Tax rates are considered as a major constraint by both informal and formal enterprises. This is the case for 28.4 percent of manufacturing firms, 37.1 percent of trade companies, 38 percent of firms in other sectors and 34.2 percent of microenterprises and informal enterprises (Research Study Report, 2016). This tax rate applies to a narrow withdrawal base comprising of a structured small sector, which is unfavorable for its growth. The tax burden has however favored tax evasion and encouraged traders to turn to informal sectors.

An important reason which cannot be overlooked is corruption. This imposes significant economic losses to the country beyond social consequences relating to the internalization of corruption practices and the development of a culture of impunity (SEATINI Research Study Report, 2016).

In spite of the above problems which results in a low inflow of FDI to the country, there have been policies in place to attract FDI among which include the following:

The Burundi Investment Promotion Agency is the statutory body responsible for development, export and investment promotion in the country. Its missions include the promotion of investment and export; providing investment promotion and export information to investors; assisting and supporting investors in general and exporters in particular in the acquisition of legal documents for operation; among others.

The Federal Chamber of Commerce and Industry of Burundi (FCCIB) have legal status as a non-profit making organization. The goals of FCCIB are to engage, to propose and support all actions aimed at improving the business environment. It formulates proposal aimed at fostering national or international investments, promotes and conducts economic studies and facilitates the training of future executives, notably organizing training in entrepreneurship including company internship. The FCCIB is actually an umbrella organization comprising of ten sectoral chambers and two cross-cutting chambers, one of which brings together women entrepreneurs and other professions of the provinces of Burundi (SEATINI Research Study Report, 2016).

Structural reforms have been implemented under the World Trade Organization Review of the Burundi Trade Policy (Revised in 2012). For instance, there is the withdrawal of the State from productive sectors in favor of private enterprises, and liberalization of the economy. This process is one of the pillars of Burundi's strategy for attracting FDI and creating a favorable economic environment for investment. There are also other investment policies that determine the tax benefits granted to investors. These benefits include customs duty exemptions for certain capital goods, exemption of VAT payment as a deposit for investment projects above Euros 285,000,

countervailing duty reduced from 5 percent to 1.5 percent when the investment exceeds Euros 571,000 or the reduction in the tax law at 2 percent when the company creates between 50 and 200 jobs (SEATINI Research Study Report, 2016).

Given that Burundi is at the bottom of the rankings, in terms of all key economic development indicators, compared to its neighboring EAC block countries, the country has to review its policies and orient them to the new paradigm of globalization and climate change. The country could focus their planning on social infrastructures, good governance and a legal framework enabling investment both local and foreign. Also, relatively higher effort needs to be put in place to attract investment, stimulate local economic growth and ensure that the attracted investment supports its socio-economic objectives (SEATINI Research Study Report, 2016).

3.2.3 FDI to Tanzania

The investment legal regime in Tanzania opened up to foreign investors during the mid-1990s as a result of a radical policy shift from state-controlled investment towards private sector-led development. This was made possible through the crafting of National Investment Promotion Policy (1996), legislation of Tanzania Investment Act (1997) and the establishment of Tanzania investment Centre (1997). The government of Tanzania has been able to attract a considerable number of investors in various sectors such as agriculture, manufacturing, energy, mining, telecommunications, oil, and gas through the above-mentioned initiatives as well as other plans, strategies and legislation (SEATINI Research Study Report, 2016).

The country has also entered into bilateral investment treaties with 19 countries and 7 other investment agreements with regional economic blocs. In an attempt to increase investment in the country, the government is a signatory to global investment instruments such as the International

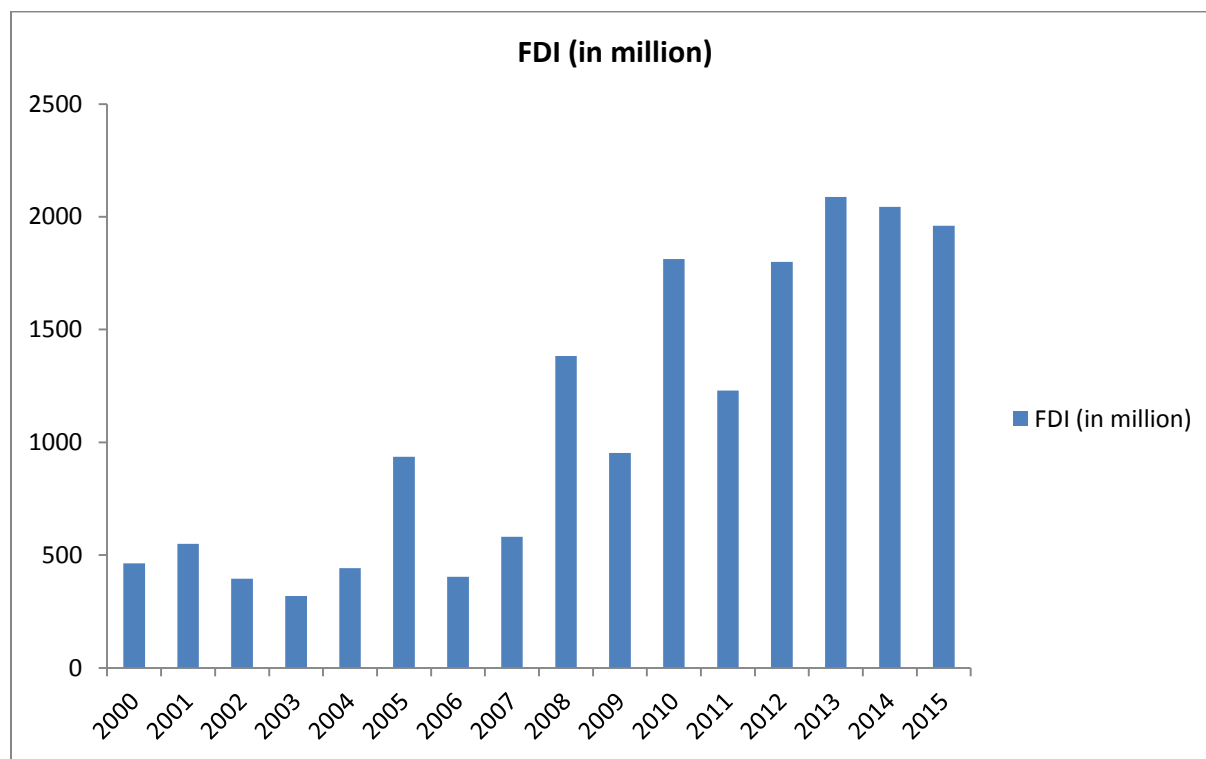
Centre for Settlement of Investment Disputes (ICSID) convention, the New York Convention, and the UN Guiding Principles on Business and Human Rights.

There are provisions in Tanzania's BIT's to ensure maximum protection for foreign investors (Cosmas, 2015). Although the country has no model BIT in place, however, it is worth mentioning that the country's BITs provide foreign investors, among other things, protection and security, the right to move capital and currency from one country to another, right to compensation in the event of expropriation of investment and the right to fair and equitable treatment of foreign investors. (Cosmas, 2015).

Tanzania has witnessed a general increase in the flow of FDI into the country in the past decade. The World Investment Report, (2015) showed Tanzania to be among the top five recipients of FDI inflows in the least developed countries (LDCs), with a total inflow of USD 2.142 billion in 2014, 1% higher than USD 2.131 billion realized in 2013. Despite the recent rise in investment in the country, total FDI inflows in absolute terms are modest with FDI inflow to GDP being lower than 4.6% as at 2014.

A notable explanation for the increase in FDI inflows to Tanzania is primarily due to the gas discoveries in the country. The Tanzania Investment Report, (2013) showed that increased investments in extractive projects including oil and gas are the causes of the high FDI inflows in the country. However, the Tanzania Investment Report, (2014) showed that Finance and Insurance sectors attracted the largest FDI for the first time since 1999, replacing the main traditional recipients such as quarrying, manufacturing, and mining. This, however, is due to the new minimum capital requirements which require banks to inject more capital and also large earnings which are reinvested.

Figure 4: Tanzania’s FDI Trend (Inflows), 2000-2015.



Source: WDI database, 2017

In spite of the efforts made by the country to improve and attract more FDI through major policy and structural economic reforms; there are still several bottlenecks and barriers that inhibit increase in investments in the country. These barriers include limited transparency in land reforms, slow review of labour laws and infrastructure bottlenecks. As a way forward, the government can take appropriate steps to correct these shortcomings through: enhancement of the administrative system, particularly the legal and regulatory framework; promoting and overseeing the intellectual property rights; improving spending on critical infrastructure for national economic development and setting up a body that will be accountable to the public in all matters related to granting of exemptions and incentives among others (SEATINI Research Study Report, 2016).

3.2.4 FDI to Uganda

It is often said that investment if strategically regulated can guarantee employment creation, technology, and skills transfer, increased incomes and industrial development (SEATINI Research Study Report, 2016). It is in the light of this assertion that the government of Uganda operates an open economy to attract investment, especially FDI. As a result, there has been a surge in investment in recent years in the country. This surge has been attributed to legal reforms that have sought to liberalize investment in the country, in addition to other significant pull factors such as the country's growth performance, a rising consumer market, and abundant natural resources.

Currently, the existing investment policy landscape in Uganda is skewed towards protecting the interests of foreign investors with the aim of attracting and securing greater FDI inflows. The Investment Code and other related investment policies and laws provide favorable conditions for promotion, liberalization, and facilitation of investments. This notwithstanding, the country has also taken to negotiation and signing of BITs. Such investment policies and treaties aimed at attracting FDI to the country are considered below:

The Investment code which is the overarching policy framework for investment in the country came into force in 1991. The investment code provides for both domestic and foreign investments and establishes the Uganda Investment Authority (UIA). The code which was amended in 2000 allows foreign investors the right to establish 100% foreign-owned limited or unlimited liability companies and the majority or minority joint ventures with Ugandan partners without restrictions. It however prevents foreign investors from carrying on the business of animal production, crop production or acquiring or being granted or leased land for the purpose of animal or crop production even though this may still be possible if it is approved by Cabinet

through a statutory instrument on the grounds that the activity to be undertaken is deemed necessary for the purpose of ensuring a regular supply of raw materials.

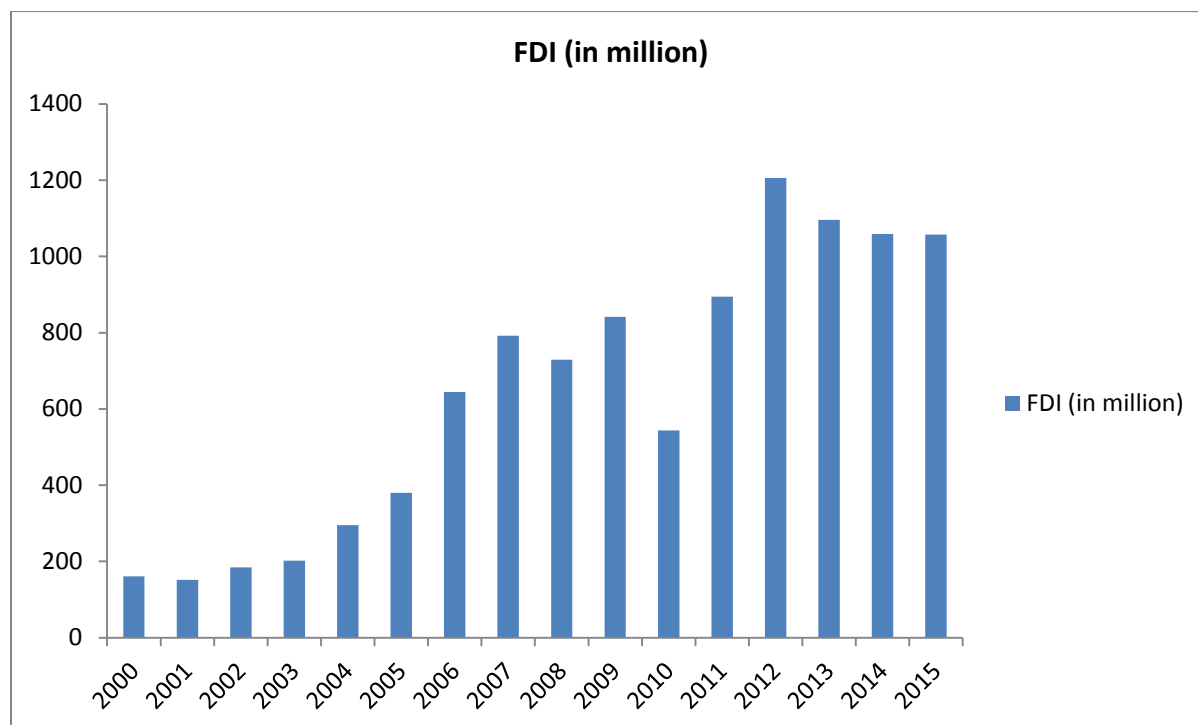
The Free Zones in Uganda was principally adopted to create a conducive environment aimed at promoting economic growth and development of export-oriented manufacturing in all sectors of the economy with the view to enhancing technology transfer, acquire or upgrade skill, diversify the country's economic base, attract FDI among others. The Uganda Free Zones Act was therefore passed to provide for the establishment, development, marketing, management, maintenance, supervision and control of free zones, the Uganda Free Zones Authority and other related matters (Ugandan Investment Authority, Ugandan Investment Code, 2000).

Bilateral Investment Treaties (BITs) are examples of International Investment Agreements and have been part of the country's international investment protection regime since the late 1950s. With the failure of the Multilateral Agreement on Investment (MAI) due to public protest, there has been a major increase in the number of BITs signed by the country. As at 2015, Uganda had negotiated and signed a total of 15 BITs with Nigeria, Zimbabwe, Germany, Cuba, Eritrea, United Kingdom, Belgium, South Africa, Italy, China, Denmark, Switzerland, Egypt, Netherlands, and France. The country is also set to negotiate a Trade and Investment Partnership with the United States under the auspices of the EAC. The justification for BITs was initially to offer additional protection to investors in countries where the investment environment is considered risky. Considering a risky investment environment together with capital deficiencies in many developing countries like Uganda, BITs would help attract investment into the country.

Uganda has consistently registered higher volumes of FDI flows compared to domestic investment. Notably, between 2009 and 2014, the country experienced an average growth rate of

FDI flows of about 25 percent per annum. According to the UIA Annual Investment abstract 2014/2015, the largest amount of FDI planned investment (US\$528.9 million) in Uganda was contributed by China and this accounted for 56 percent of all FDI planned investment in financial year 2014/2015. In addition, a huge project worth US\$ 620 million was licensed in mineral beneficiation during the same period (SEATINI Research Study Report, 2016).

Figure 5: Uganda’s FDI Trend (Inflows), 2000-2015.



Source: WDI database, 2017

Uganda, a country that faces a high national rate of unemployment has benefitted from the contribution made by foreign investments towards the creation of jobs. For instance, in 2014/2015, domestic companies generated 5,827 while foreign companies generated 6,472 jobs (SEATINI Research Study Report, 2016).

With a country's investment regime playing an important role in determining the kind of investment that it attracts as well as determining the extent to which a country and its population will reap the development promises of investment especially FDI, the government of Uganda can put in place the following appropriate investment regime:

Review of the country's investment regime aimed at ensuring that they are consistent with the country's development aspirations and supports their realization including ensuring inclusive and sustainable development.

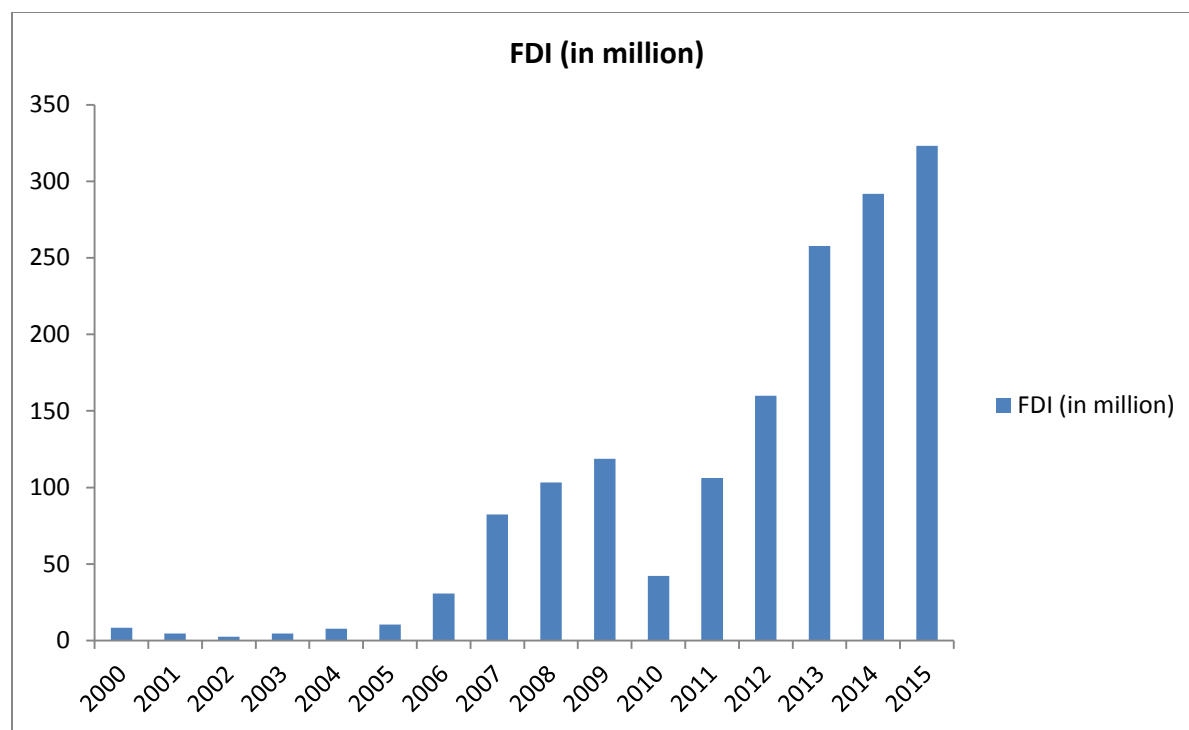
Secure government's policy space through the utilization of national investment and related frameworks. This gives the government leverage to regulate investors as well as hold them accountable in light of their obligations including ensuring that performance requirements such as joint venture formation, local content through providing employment opportunities and local purchases are met including the maintenance of environmental, human rights and labor rights standards.

Utilize international and regional instruments on human rights, gender, and social and environmental standards. Generally, existing regional and international instruments to which Uganda is committed to providing a clear approach to the development of national Social and Human Rights Impacts Assessments guidelines and for incorporating pro-development provisions during negotiations for BITs. This is critical as it can help reinforce the obligations of investors and provide the grounds for commitment, cohesion and collective responsibility by governments, other stakeholders and investors to improve the governance of investments (SEATINI Research Study Report, 2016).

3.2.5 FDI to Rwanda

Rwanda is consistently attracting FDI through the creation and sustenance of a high enabling investment environment by employing reforms which makes the formation of business easier, easy access to loans and easy means of paying taxes. This is seen as a means of complementing internal resources in the country. For the past two decades, the country has seen a steady increase in FDI. For instance, the country has witnessed an increase in FDI inflows from \$81 million in 2007 to \$161 million in 2009 and \$231 million in 2012.

Figure 6: Rwanda’s FDI Trend (Inflows), 2000-2015.



Source: WDI database, 2017

There have been efforts by the government in the area of pro-investment policy reforms aimed at improving the country’s investment climate and increasing FDI. For instance, the Rwanda Development Board (RDB) provides investors with one of the fastest business registration

processes in Africa. This is done through online registration by new investors at the RDB's website and a granting of approval to begin their operation within a day, and the agency's "one-stop-shop" help foreign investors in the acquisition of certificates, work permits and the needed approvals (SEATINI Research Study Report, 2016).

Rwanda has signed BITs with Belgium, Korea Republic, Switzerland, South Africa, Germany, Mauritius, and the United States. The rationale behind these BITs is to attract foreign investment into the country.

Even though the country has in place policies that are attracting investment, creating employment, enhancing skills and ensuring technological transfer, much more needs to be done, especially in ensuring benefits to both the investors and the government. These are considered below:

There is the need to put in place a clear and effective framework to ensure accountability between the investors and the government with a view of ensuring that investment projects are beneficial to all parties concerned.

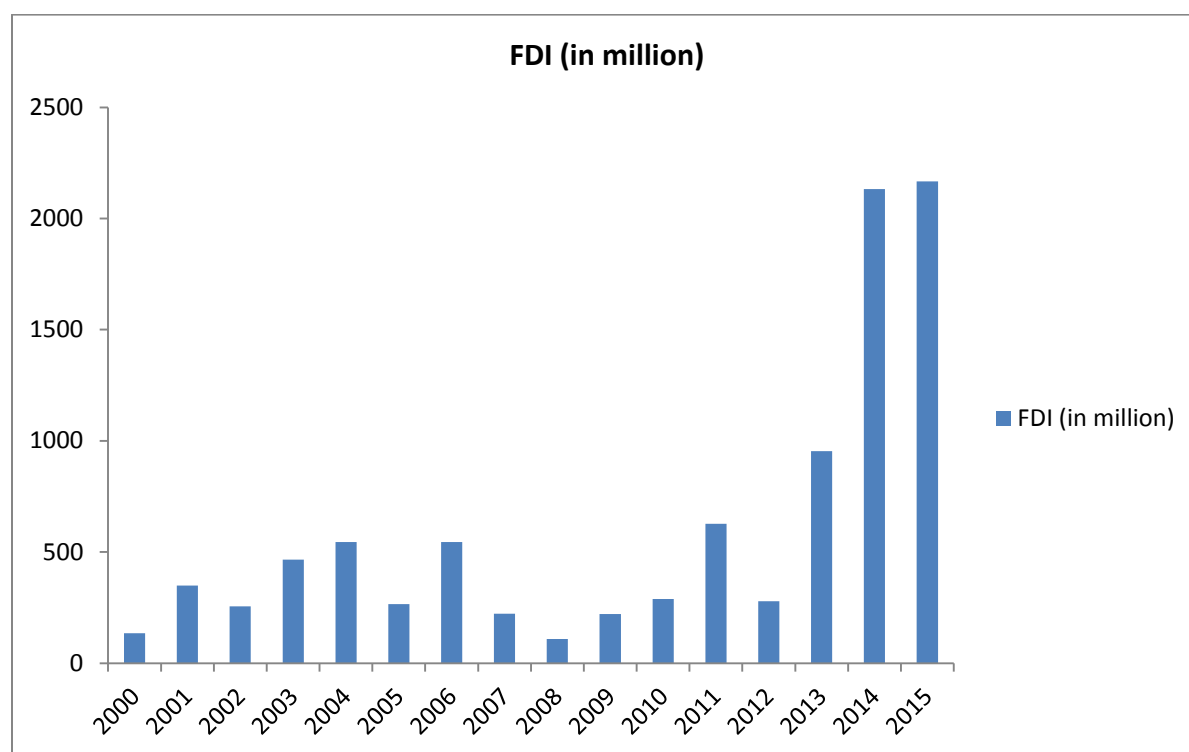
It is also very important to regularly review the Investment Code to ensure that necessary updates and amendments can be made.

The government is to ensure that the workers, in the various respective investment projects, are not exploited in terms of poor payments or being overworked without appropriate compensation for the overtime hours (SEATINI Research Study Report, 2016).

3.2.6 FDI to Ethiopia

The inflows of FDI to Ethiopia have accelerated in recent years. There has been significant progress in the area of transport infrastructure and the production of electricity as a means of improving the country’s attractiveness in terms of foreign investment. China has significantly increased its investment in the country over the past decade, notably in the textile, construction, telecommunications and power generation sectors. The country took advantage of the crisis of the Bangladeshi textile sector (following a disastrous collapse of a factory building in 2013) in order to attract foreign companies to the textile industry.

Figure 7: Ethiopia’s FDI Trend (Inflows), 2000-2015.



Source: WDI Database, 2017

The Ethiopian Investment Agency (EIA) is a government agency established to promote, encourage and facilitate private investments in general and foreign investment in particular. The

functions of EIA are the provision of pre and post investment services to investors; identification of specific projects and invitation of interested investors to participate; issuing all legal permits including investment, work, residence and expatriate posts, among others.

A separate institution, the Ethiopian Investment Commission (EIC), has been formed at the federal level of government to facilitate both foreign and domestic investment. In addition, individual investment bureaus at the regional administration level have been created. Ethiopia has signed investment promotion and protection treaties with Germany, Algeria, Libya, Tunisia, Russia, and France; ratified bilateral investment promotion and protection agreements with Switzerland, Turkey, Kuwait, Netherlands, Italy, Sudan, Denmark, China, Israel, Malaysia and Yemen.

Aside the favorable climate for foreign investment created by the overall economic conditions of the country, there is also the introduction of specific incentives and administrative procedures to encourage investment. These include among others;

- ❖ Exemption from profit tax for a minimum period of two years, up to five years depending on the type and location of investment, with provision for additional exemption of two to three years for investment in existing enterprises;
- ❖ The carrying forward of losses suffered during the tax exemption period for the tax exemption period granted.
- ❖ Duty-free imports of capital goods including spare parts up to 15 percent of the value of capital goods imported for investment purposes.

In terms of opportunities for investors, the country possesses comparative advantages in terms of both of its natural resources and its proximity to Middle Eastern and European markets. There

are considerable opportunities for mining resources such as marble, copper, gold, natural gas, tantalum, and potash; as well as a variety of tourist attractions: wildlife, scenic beauty and historic sites.

Even though there is much more to be accomplished in the country with regard to the attraction of foreign investment, progress in establishing a favorable climate for foreign investment is well underway. Fundamentals already in place include sound economic and investment policies, a growing economy, a reliable institutional framework, macroeconomic stability, and infrastructure improvements. The authorities are committed to continuously improving the country's investment environment to ensure that there is a continuous offer of sound business opportunities in a stable economic environment (SEATINI Research Study Report, 2016).

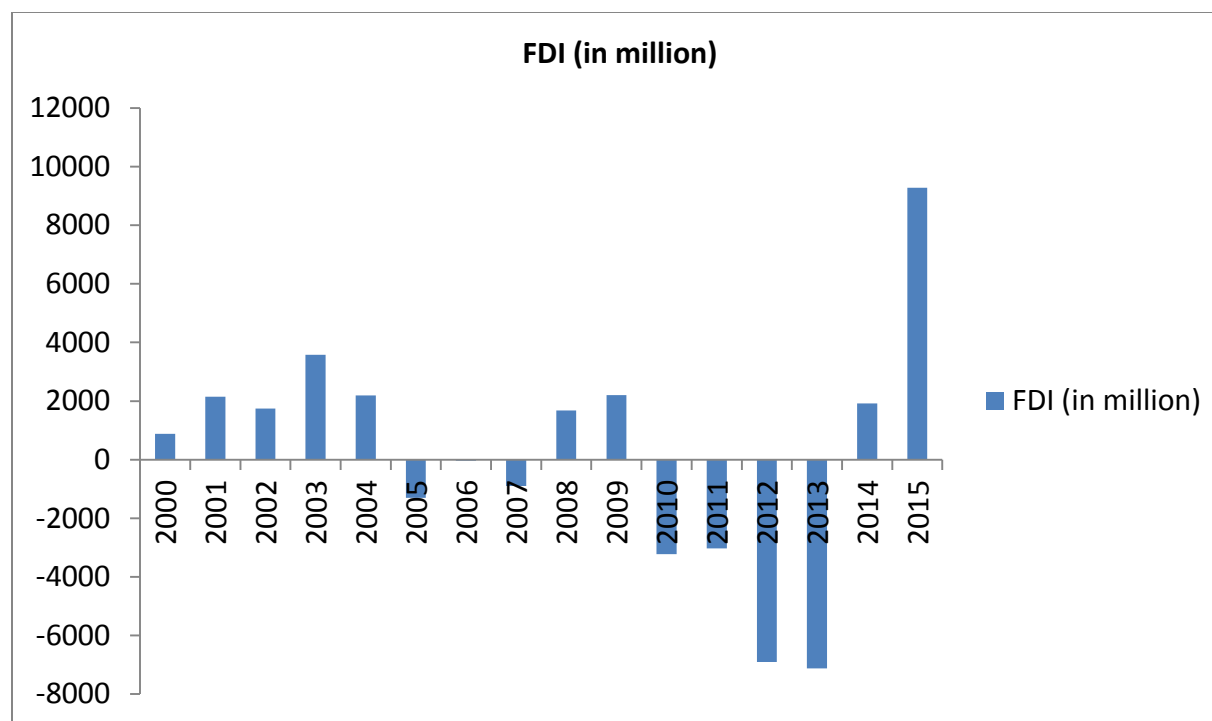
3.3 FDI in Central Africa

The Central African sub-region just like their East African counterparts is also not doing badly in terms of FDI inflows. For the purpose of this study, the countries forming the Economic and Monetary Community of Central Africa (CEMAC) as well as Angola will be considered. CEMAC is made up of Cameroon, Equatorial Guinea, Chad, Central African Republic, Gabon and Republic of Congo. The primary objective of the community is the promotion of the process of integration in the sub-region through the formation of a monetary union, where the Central African CFA franc is used as a common currency.

3.3.1 FDI to Angola

Angola is rich in fisheries, hydrocarbons, agriculture, minerals and also has significant hydroelectric potential. It has significant FDI inflow, USD 16.2 billion in 2015 and USD 14.4 billion in 2016 (WDI Database 2017). The main destination of most FDI inflows in the country is the oil sector. The government is putting in place measures to improve the climate since there are issues of pervasive corruption, abundant but unskilled labor, high levels of bureaucracy, poorly developed financial system, high on-the-ground costs for businesses and inefficient ports.

Figure 8: Angola’s FDI Trend (Inflows), 2000-2015.



Source: WDI database, 2017

There is a new private investment law that ensures that tax holidays are granted to investors who provide the locals with jobs, use local inputs in their business processes and generate higher export receipts. Per this law, foreign investors are also required to partner with local companies

and employ a fixed number of local populace in specific sectors. Also, the creation of the National Agency for Investment Promotion and Export (APIEX) was for diversification of the economy to stimulate economic growth and expand private sector participation in the economy.

The majority of FDI in Angola comes from France, China, Netherlands, and the United States. Some investment projects in the country include: Feasibility studies for cotton production in northern Malanie by Japan; A joint venture between Ferrangol, the Cuando Cubando Mining Company, and Brazilian Modulux to mine oil ore in Cutato; Biocom, a partnership between state-owned oil company Sonangol, the government investment fund Cochan and Brazil's Odebrecht; and 23 new diamond, gold, phosphate, copper, iron ore and natural stone explorations.

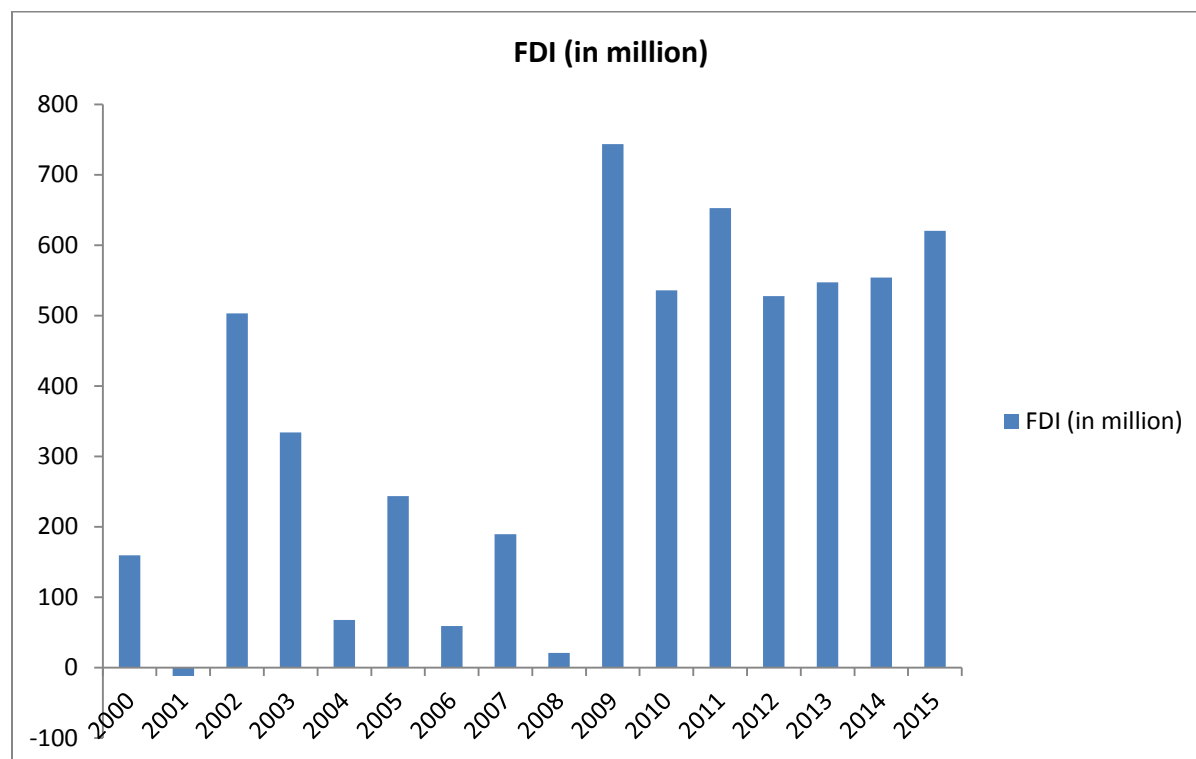
3.3.2 FDI to Cameroon

FDI inflows to Cameroon are traditionally low compared to the potential of the economy. The country experienced a decline in inward FDI in 2016, recording USD 128 million, compared to USD 627 million in 2015 and USD 726 million in 2014 (UNCTAD, 2017). Most of FDI into the country come from the European Union, particularly, Germany and France and target the mining industry, including oil extraction.

The country is lagging behind its contemporaries in terms of FDI even though it has the potential to become one of the most prosperous countries to receive FDI in Africa. While the country has many natural resources (fisheries, oil, forestry), it needs to improve and simplify its administration in order to boost entrepreneurship and fight against corruption. The country needs to attract foreign investors in order to finance its future projects of developing infrastructure and notably, the exploitation of gas. As part of its growing interest in Africa, China has been

investing steadily in Cameroon with total Chinese direct and indirect investments totaling USD 2.43 billion in 2016 according to the Cameroonian Ministry of Economy), allowing the construction of Kribi Port and Industrial Complex, Memve’ele Hydroelectric Dam and new football arenas geared towards the 2019 Africa Cup of Nations to be held by the country.

Figure 9: Cameroon’s FDI Trend (Inflows), 2000-2015.



Source: WDI database, 2017

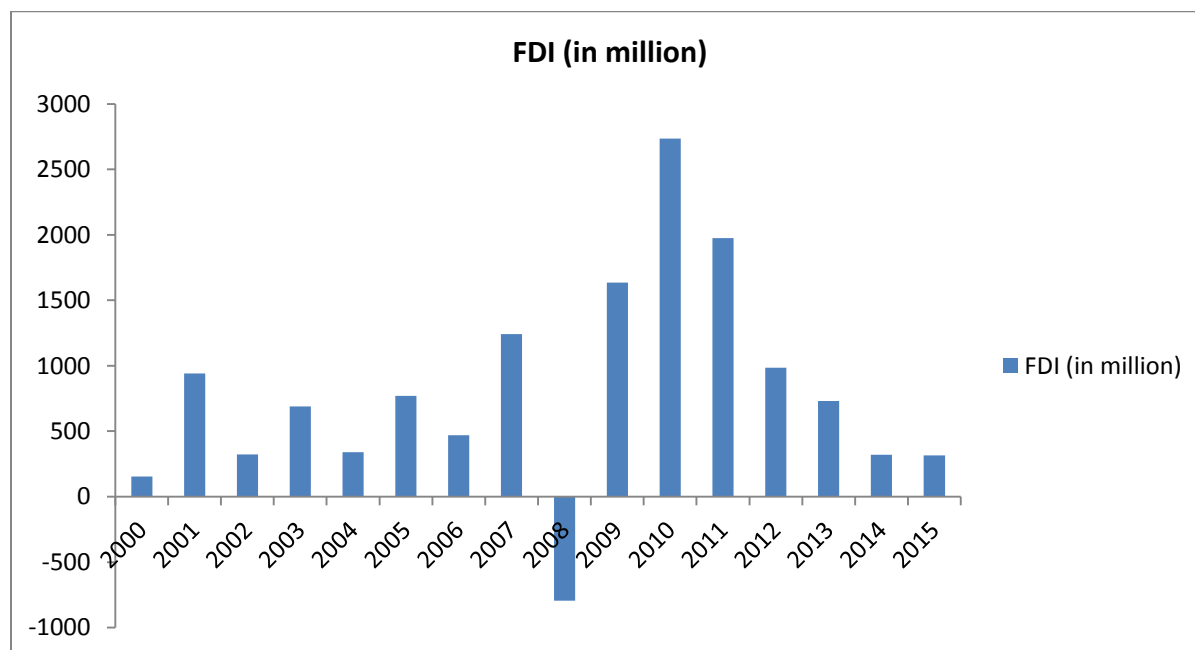
The Cameroonian government in an attempt to put in place measures to attract FDI has focused on specific sectors as significant sectors for investment: tourism, transport, rural development, and food industry. With the support of financial backers, the public authorities are embarking on important programs to attract more investors. These programs are geared toward increasing energy supplies, improving judicial decisions, simplifying procedures, reinforcing economic

information, supporting companies and ensuring the safeguard of the economic area against illegal threats.

3.3.3 FDI to Equatorial Guinea

Since the discovery of the offshore oil deposits, many investors have shown great interest in the country. The country has seen an encouraging increase in the inflows of FDI for the past years. However, these inflows have been decreasing in recent years. The majority of FDI in Equatorial Guinea targets the forestry, fishing and oil sectors. China, France, and the United States are the major countries investing in Equatorial Guinea.

Figure 10: Equatorial Guinea’s FDI Trend (Inflows), 2000-2015.



Source: WDI database, 2017

In an attempt to overturn the declining inflow of FDI into the country and create a favorable investment environment, there have been efforts by the government aimed at supporting the promotion of non-traditional exports through the offering of varying tax incentives. The

government also continues to sign new production partnership contracts (mines, gas) with international companies. Indian, Japanese and Anglo-Saxon companies are among the most active in the field of oil and gas.

Conducting business in the country is very complicated particularly due to the level of corruption. Moreover, the business climate remains unfavorable for investment due to burdensome procedures; high compliance cost and delay in obtaining a license which makes the commencement of business more difficult. With regards to reasons that contribute to low foreign investment in the country, limited access to financing, weak regulatory and judicial systems and high credit costs cannot be overlooked.

3.3.4 FDI to the Republic of Congo

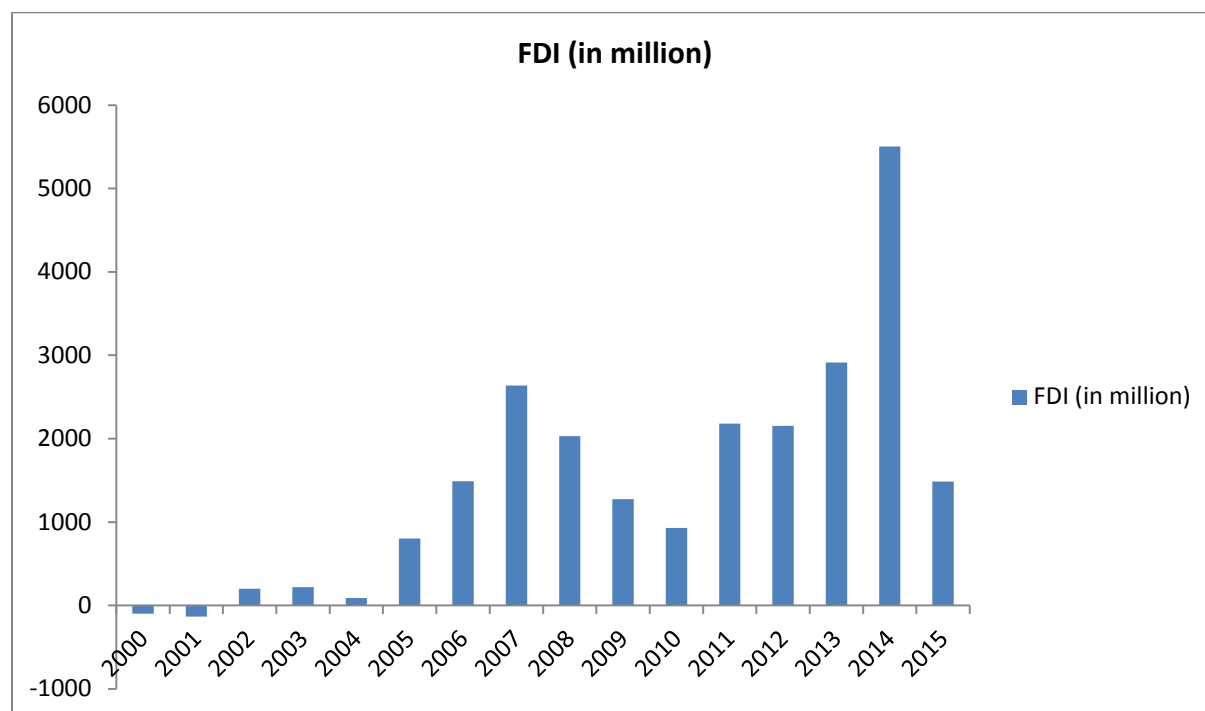
The Republic of Congo has seen an increase in the inflows of FDI in recent years recording \$5.5 billion in 2014, the highest receipt in Central Africa in that year. The bulk of these inflows are concentrated in the oil sector.

In an attempt to stimulate growth and development, the country has pledged to undertake a variety of legislative, regulatory and institutional reforms. For instance, the government aims at diversifying beyond oil activities as a key government priority to improve the investment climate in order to become an emerging market by 2025.

The government of the country has created an Agency for the Promotion of Investments (API). The agency is responsible for the promotion of economic diversification through the expansion of the pool of external investors. In the year 2013, there were regulatory reforms put in place by the government aimed at improving the business environment. Such reforms include the setting up of the National Agency for Investment Promotion in 2002 to facilitate and promote foreign

investment. There is also the Steering Committee for the improvement of business and investment climate originally set up in August 2009 and modified in August 2010.

Figure 11: The Republic of Congo’s FDI Trend (Inflows), 2000-2015.

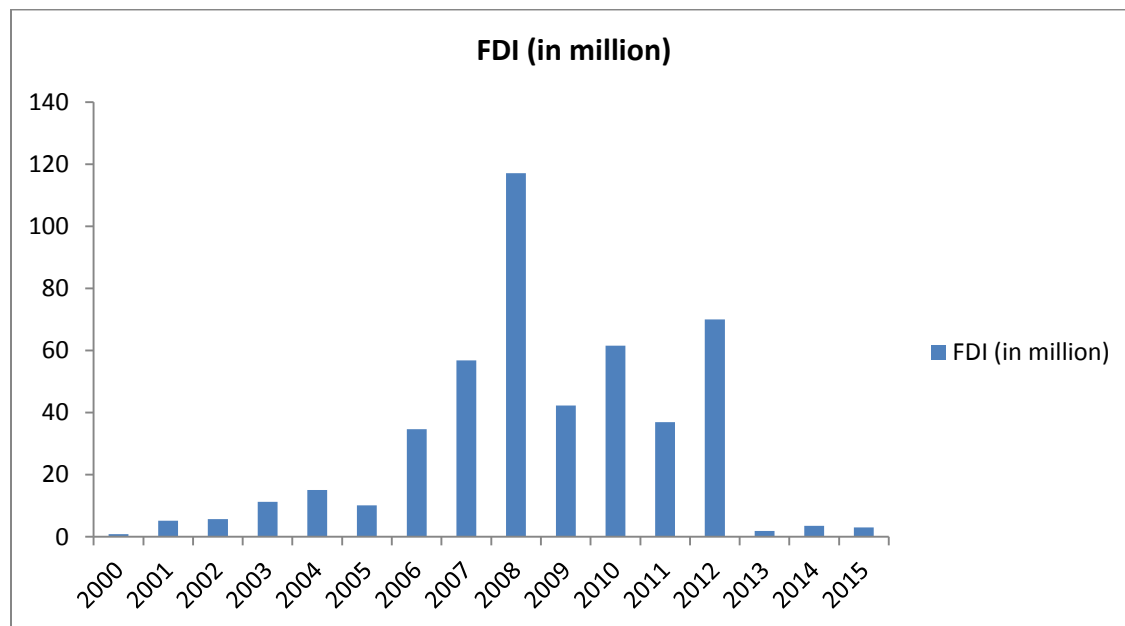


Source: WDI Database, 2017

3.3.5 FDI to the Central African Republic

The Central African Republic presents business opportunities for investors in various sectors. The framework of foreign direct investment provides a means of pursuing these opportunities. The country is endowed with natural resources such as; coltan, uranium, diamonds, gold, oil and gas, manganese, iron, and ancillary minerals.

Figure 12: Central African Republic’s FDI Trend (Inflows), 2000-2015.



Source: WDI Database, 2017

In 2001, the Central African Investment Charter (CAIC) was founded to enhance the development of the private sector through the attraction of local and foreign private investment. The main activities of the charter, which is common to the six member-states of the CEMAC is to focus on the generation of export and ensure that the country is open up to foreign investors, while at the same time being in compliance with the treaty of CEMAC. Through the charter, investors are provided with various incentives packages. These investments incentives include tax exemptions and access to benefits generated by the CIAC. The responsibility of facilitating the bureaucratic process of establishing new businesses in CAR is given to the National Commission for Investments (NCI) by the charter. The NCI does this by working with and on behalf of potential investors.

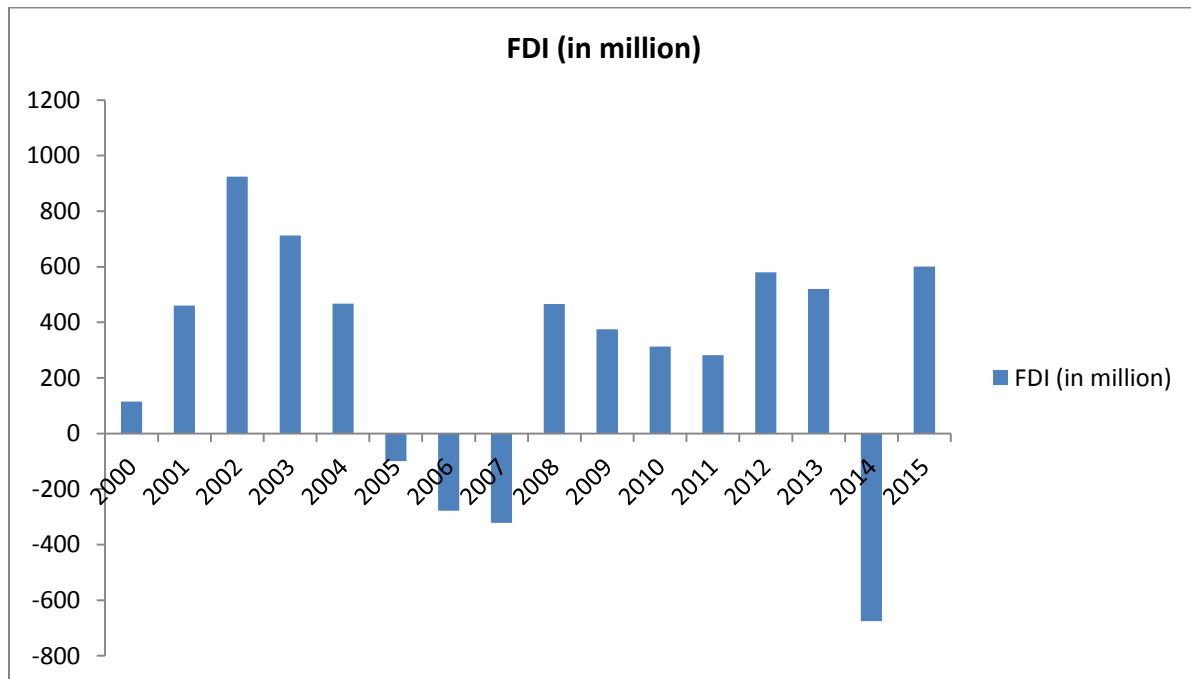
3.3.6 FDI to Chad

Although the country is open to investments, it is not easy making investments in Chad because of the relatively unfavorable business environment. Starting a business and paying taxes are not attractive. With regard to the establishment of business, conditions in the country such as low income, poor government support for economic freedom, corruption and lack of law enforcement in all areas do not make the country attractive for business purposes. Also, taxes in the country are very high with rates of 60 percent and 45 percent for personal tax and corporate tax respectively. This results in cases of tax avoidance and tax evasion. In addition, insecurity, poor infrastructure, political instability as well as a few domestic markets and inadequately skilled labor are hindrances to investment. Moreover, private properties are inadequately protected and the instances of fraud in property transactions are common.

The majority of FDI into the country goes into oil exploration and infrastructure development. The services sector has lately attracted foreign investment too, mostly through the telecommunications and banking sectors. The country's main investors are South Korea, Nigeria, France, and the United Kingdom.

The government of Chad's policies towards foreign direct investment is generally positive. This is seen in an increase in the country's foreign investment inflows since 2011 and can be largely attributed to investments in the oil sector.

Figure 13: Chad's FDI Trend (Inflows), 2000-2015.



Source: WDI Database, 2017

The country has in place laws and regulations to encourage FDI. For instance, there are incentives offered to foreign companies who have established operations in the country by the National Investment Charter (NIC) of 2008; a set of guidelines set up by the National Agency for Investment and Exports, an agency of the Ministry of Industrial and Development and Private Sector Promotion. These incentives include up to five years of tax-exemption status for foreign businesses established in the country. The (NIC) also permits foreigners to fully own companies in the country as well as guaranteeing both foreign companies and Chadian companies equal standing in the privatization process.

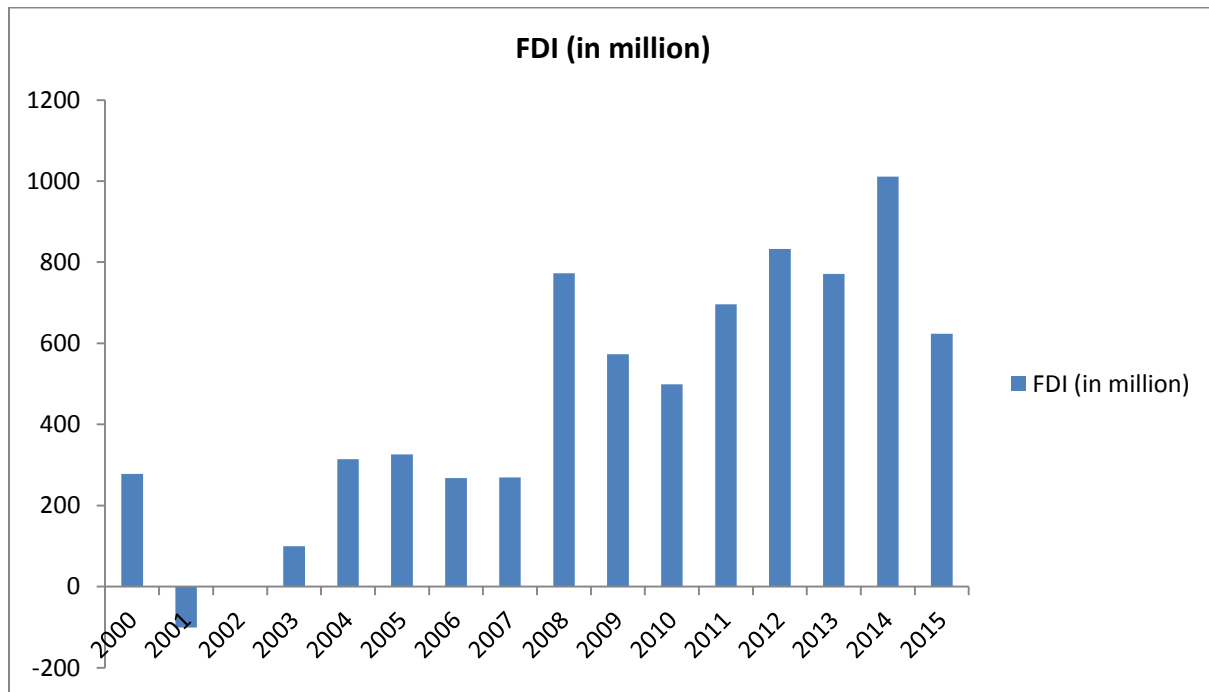
3.3.7 FDI to Gabon

Foreign investment into Gabon fell to USD 623 million in 2015 after reaching over USD 1 billion in 2014. The country can be attractive to investors because of political and high purchasing power and its abundant raw materials as compared to other Sub-Saharan African countries. The oil sector is the most attractive sector in terms of FDI in the country, with Total Gabon, Shell and Perenco being the largest hydrocarbon producers and also the main investors. Another sector which also attracts FDI is the mining sector.

France is a major investor in terms of FDI stock of Gabon as hundreds of French companies have established branches in various sectors: financial services, timber, water and electricity concessions, mining, oil exploitation, building, and civil engineering works and agribusiness.

Some of the barriers to FDI influx include bureaucracy, poor infrastructure, limited market potential, and an unskilled and expensive workforce. Particularly, the processes for registering property and enforcing contracts are burdensome due to bureaucracy.

Figure 14: Gabon's FDI Trend (Inflows), 2000-2015.



Source: WDI Database

CHAPTER FOUR

METHODOLOGY

4.0 Introduction

This chapter lays the foundation for empirical analysis of the study through the specification of the empirical model, the description of the data and variables and the estimation techniques used.

This provides a good basis for the discussion of findings in the next chapter.

4.1 Theoretical Framework

The review from chapter two revealed that the theoretical models that explain the FDI and economic growth relationship see FDI as a major contributor to economic growth. It is therefore imperative to adopt a model where FDI is included as an explanatory variable.

4.2 Empirical Model

I follow the works of Balasubramanyam et al, (1996), de Mello, (1997) and Akinlo, (2003), who augmented the basic production function to derive an equation that links FDI and economic growth. The modified production function which incorporates FDI as an input is shown below:

$$Y = f(K_d, K_f, L) \quad (1)$$

Where Y denotes output (GDP growth rate), K_d denotes domestic capital (which is measured by the ratio of Gross Domestic Savings as a percentage of GDP (GDS/GDP), K_f denotes the stock of FDI and L is labor (which is measured by the population growth rate). FDI's function as capital and its role as technology diffuser as postulated by the capital formation and technology spillovers theories explains its inclusion in the production function. From the production function, capital is decomposed into domestic and foreign to ensure that the impact of FDI can be determined independently of that of domestic capital.

Following empirical and theoretical literature, and also Carkovic and Levine, (2002), other control variables can be added to the function to generate a model as shown below;

$$Y = f(K, L, FDI, FD, LG, TRADE, INF) \quad (2)$$

where FD denotes financial market development, LG denotes the level of governance, TRADE denotes trade openness and INF denotes macroeconomic discipline (inflation).

In this study, the panel data analysis technique is adopted as it has an advantage of containing the information necessary to deal with both the intertemporal dynamics and the individuality of the entities being studied (Dielman, 1989). There are basically three types of panel models namely; pooled panel Ordinary Least Square (OLS) regression, random effect (RE) panel models and fixed effect (FE) panel models.

Considering equation (2), the evaluation of a pooled OLS regression is specified as follows:

$$GDPG_{it} = \beta_0 + \beta_1 K_{it} + \beta_2 L_{it} + \beta_3 FDI_{it} + \beta_4 FD_{it} + \beta_5 LG_{it} + \beta_6 TRADE_{it} + \beta_7 INF_{it} + \varepsilon_{it} \quad (3)$$

where i denotes country, t denotes time and ε_{it} is the error term which is assumed to vary over both country and time. Even though many studies have analyzed the impact of FDI on economic growth without considering the effect of time, this study incorporates time the effect in the model estimation. If time is of essence, the pooled panel OLS regression, the panel model of random effects and the panel model of fixed effects incorporate the effect of time in analyzing the relationship between economic growth and its determinants. If time is not of essence, the estimations are done without incorporating the effect of time.

It must be noted that, with the use of pooled panel OLS regression, the unobservable individual effects of countries are therefore not controlled. According to Bevan and Danbolt, (2004), this

heterogeneity of the countries used in the analysis is likely to have an influence on the measurements of the estimated parameters. However, the choice between pooled OLS regression and panel data model of random effect is made based on the Breusch Pagan test. If the probability value from the test is greater than 0.05 (level of significance), then the pooled OLS regression is selected implying that there is no reason to believe that differences across countries influence GDP growth rate. On the other hand, if the probability value from the test is less than 0.05 (level of significance), the panel model of random effect is selected implying that there is a reason to believe that differences across countries influence GDP growth rate.

The use of a panel data model which incorporates individual effects comes with numerous benefits, for instance, it allows for the accounting for individual heterogeneity. An observation by Serrasqueiro and Nunes, (2008) and Tiwari and Kalita, (2011), revealed that there are differences among developing countries regarding their climatic conditions, colonial history, religious affiliations, political regimes, ideologies, and geographical locations. Therefore, if the issue of heterogeneity is not considered, there will definitely be bias in the results, irrespective of the sample used.

Making use of unobservable individual effects among the countries in equation (3) yields the following:

$$GDPG_{it} = \beta_0 + \beta_1 K_{it} + \beta_2 L_{it} + \beta_3 FDI_{it} + \beta_4 FD_{it} + \beta_5 LG_{it} + \beta_6 TRADE_{it} + \beta_7 INF_{it} + \omega_{it} \quad (4)$$

where $\omega_{it} = \mu_i + \varepsilon_{it}$ with μ_i being countries' unobservable effects. A major difference between a pooled OLS regression and a model that takes into account unobservable individual effects lies in μ_i . Equation (4) above is a random effect model where μ_i is assumed to have a mean of zero,

is independent of the individual observation error term ε_{it} , has a constant variance σ_{ε}^2 , and is independent of the explanatory variables.

Nonetheless, there is the likelihood that a correlation between countries' unobservable individual effects and the determinants of growth may exist. If no correlation is found, the best model for estimation is the panel model of random effects. Conversely, if a correlation exists, the most appropriate model for estimation is the panel model of fixed effects.

Where a possible correlation is suspected, there is the need to test for the possible existence of such correlation. This is done using the Hausman test which tests the null hypothesis of the non-existence of a correlation between countries' unobservable individual effects and the determinants of growth, against the alternative hypothesis of an existence of a correlation. There is non-existence of correlation if the null hypothesis is not rejected and we can, therefore, conclude that the panel model of random effects is the best model for the estimation of the relationship between economic growth and its determinants. On the other hand, if the null hypothesis is rejected, we can conclude that there is the existence of a correlation and therefore a panel model of fixed effects is the most appropriate model for analyzing the relationship between economic growth and its determinants.

4.4 Data and Description of variables

Panel data will be used to assess the impact of FDI on economic growth in East and Central Africa. Data related to GDP growth rate, annual population growth rate, GDS to GDP, FDI inflows to GDP, annual rates of inflation and M2 to GDP and exports + imports of goods and services to GDP are all obtained from the World Bank Database. Data related to control of corruption are obtained from the World Governance Indicators Database.

GDP growth rate will represent economic growth; the ratio of Gross Domestic Savings expressed as a percentage of GDP (GDS/GDP) will represent the level of domestic capital formation (K); annual population growth rate is used as a proxy for labor stock (L); control of corruption will proxy level of governance (LG); the ratio of FDI inflow to GDP will proxy foreign direct investment (FDI); while the ratio of broader money to GDP ($M2/GDP$) will proxy financial market development (FD). Summation of exports and imports expressed as a ratio of GDP $[(Exports+Imports)/GDP]$ will represent the degree of trade openness (TRADE) and the rate of inflation will represent inflation (INF). ε is the error term, and the subscripts i and t represent countries and time periods respectively.

In this model, that forms the basis for the empirical analysis for this study, variables are as explained below:

GDPG- The total value of goods and services produced over a specified period of time refers to the GDP of an economy. Economic growth in this study is measured using the growth rate of GDP. The growth rate of GDP is used to represent the economic track record of a country and is an indicator of possible profitable investment opportunities in the country. A systematic relation between cross-border financial activity and the level of development is also allowed through the use of the GDP growth rate.

GDS/GDP- Gross domestic savings refers to the savings made domestically. For the purpose of this study, gross domestic savings is expressed as a percentage of GDP. Studies carried out by Djurovic, 2011, Alfaro, 2003 and Carkovic and Levine, 2002 expressed gross domestic savings as a percentage of GDP. From, the Harrod-Domar growth model, savings has a direct relationship with economic growth; hence a positive sign is expected.

FDI/GDP- FDI refers to the long term involvement of a source country's management, joint venture, transfer of technology and expertise in a particular host country. In other words, FDI is an investment involving a long term relationship, a lasting interest, and control of resident entity in one economy in an enterprise resident in an economy other than the foreign direct investor (UNCTAD 1999). Data on FDI inflows measure the amount of investment by non-resident investors with a minimum of 10% of companies' shares. For the purpose of this study, FDI is computed as the net FDI inflows as a percentage of GDP. Net FDI inflows are the sum of inter-enterprise capital invested, new capital invested and profits reinvested. Studies conducted by Carkovic and Levine, 2002, Alfaro, 2003 and Brenner, 2014 measured FDI as a percentage of GDP. Since FDI is envisaged as investment theoretically, a positive relationship between FDI and economic growth is expected.

L- Labour stock is represented by annual population growth rate. A positive relationship between the growth rate of population and economic growth is expected.

LG- This represents the level of governance represented by control of corruption. Corruption is seen as a threat to foreign investors since it leads to distortions in the financial and economic environment. It also results in a reduction in the efficiency of business and government as people are encouraged to take up positions which are not based on their abilities but rather on political grounds. Foreign investors and other businesses are prone to corrupt practices in the form of tax assessments, operation licenses, exchange control and demand for special payments and bribes in connection with import and export licenses. These practices make conducting business difficult and usually result in firms withholding or withdrawing investment in these countries. Controlling corruption reflects the perception of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by

elites and private interest (World Governance Indicators). The estimate ranges from approximately -2.5 (high corruption) to 2.5 (low corruption). A negative coefficient is expected to imply that low levels of corruption encourage FDI inflows and consequently contribute to economic growth.

FD- This represents the ratio of broad money to GDP (M2/GDP). Broad money includes cheque and saving accounts deposits, currency (notes and coins), mutual funds, investments in financial market securities and other call deposits. A positive coefficient is expected if the level of financial development positively impacts FDI-induced economic growth.

TRADE- The fraction of the sum of nominal imports and exports relative to nominal GDP $[(Imports + Exports) / GDP]$ is widely used in almost all empirical studies. Alcaca and Ciccone, (2001) argue that there are drawbacks of this approach to measuring trade openness leading to an alternative measure referred to as real openness. Their definition of real openness is the sum of imports and exports in exchange rate US\$ relative to GDP in purchasing power parity US\$. According to them, measuring trade using real openness results in the elimination of distortions which arise due to cross-country differences in the relative price of nontradable goods. This study, therefore, adopts the real openness in measuring trade. The role of trade openness in improving technological progress is experienced through competition, opening up the economy to the international market and bridging foreign exchange gap. If the level of trade openness positively impacts FDI-induced economic growth, a positive coefficient is expected.

INF- Inflation rate measured as a percentage. Inflation represents the macroeconomic environment of the economy. It is the persistent and continuous rise in the general price level of goods and services over a specified period of time. Consumer price index (CPI) is considered for

inflation in this study. Studies conducted by Carkovic and Levine, 2002, Alfaro, 2003 and Andinuur, 2013, measured inflation in terms of CPI. Theoretically, a rise in price levels causes the purchasing power of consumers to decline hence causing domestic production to reduce resulting in a negative effect on GDP. Therefore, a negative relationship is expected between inflation and FDI-induced growth.

4.5 Endogeneity

Theoretically, there is the possibility of simultaneity between FDI and economic growth as shown by studies such as Choe, (2003), Hansen and Rand, (2005). This according to them stems from the absence of unanimity on the direction of causality between FDI and economic growth. The causality running from growth to FDI is evident where countries experiencing higher growth rates provide higher returns to investment and more profit opportunities for firms. This results in investors moving resources into such economies in a bid to take advantage of the attractive returns, confirming the assertion that, economic growth induces FDI. Where possible endogeneity is not controlled for, the results obtained are not likely to be a true reflection of the situation on the ground. It is therefore imperative to consider any possible simultaneity between the two variables and be able to control for it. Some studies have accounted for endogeneity by including lagged values of the dependent variable as a regressor (the use of system GMM) or adopting the use of instrumental variables. System GMM is often used where there is difficulty in identifying suitable instruments. This study addresses the issue of endogeneity by employing instrumental variables as shown in the next chapter. The instrument used as a variable must be correlated with the endogenous explanatory variable but uncorrelated with the error term in the explanatory equation.

As most studies have proved, there is simultaneity between FDI and economic growth and this study is not an exception. To correct the problem of endogeneity, the instrumental variable (IV) approach was adopted. The instruments selected (gross domestic product per capita, government consumption expenditure as a percentage of GDP and domestic credit to the private sector as a percentage of GDP) were based on the study conducted by Anyanwu, (2011) on the determinants of FDI inflows into Africa. A Hansen J statistic test (overidentification test of all instruments) conducted on the validity of the instruments showed a chi-sq(2) value of 0.701, confirming the validity of the instruments.

4.6 Descriptive Statistics

Descriptive statistics of GDP growth (GDP-gr), FDI as a percentage of GDP (FDI-to-GDP), the level of financial development (M2-to-GDP), openness of the economy (XM-to-GDP), inflation (Inf), level of governance (Ctrl-of-Cor), level of human capacity (Pop-gr) and domestic investment (Sav-to-GDP) are presented in table 1.

The highest observations considered in this study were 252 with 8 variables (one dependent and seven independent variables). The range of all the variables is determined by the difference between the minimum value and the maximum value. For instance, the range of inflation is 24419.268 (24411.030 - -8.238), where 24411.030 and -8.238 are maximum and minimum values respectively. The standard deviation shows the spread of the values from the mean and is very important for comparison purposes. For instance, the above data shows that the level of financial development (M2toGDP) has a larger spread as compared to all the other variables.

Table 1: Descriptive Statistics

Variable	Observations	Mean	Standard Deviation	Minimum	Maximum
GDP-gr	252	4.613	4.474985	-17.669	13.573
FDI-to-GDP	250	4.591	6.5939	-0.610	54.062
M2-to-GDP	234	198.432	1666.552	10.480	18347.090
XM-to-GDP	252	0.182	0.182	0.000	1.003
Inf	248	122.216	1550.793	-8.238	24411.030
Ctrl-of-Cor	240	-0.532	0.514	-1.450	0.880
Pop-gr	252	2.392	0.973	-2.629	5.598
Sav-to-GDP	219	5.537	12.782	-34.579	38.371

Source: Author's computation based on data from WDI Database

5.2 Correlation Matrix

Table 2: Correlation matrix

	GDP-gr	FDI-to-GDP	M2-to-GDP	XM-to-GDP	Inf	Ctrl-of-Cor	Pop-gr	Sav-to-GDP
GDP-gr	1.000							
FDI-to-GDP	0.153	1.000						
M2-to-GDP	-0.346	0.055	1.000					
XM-to-GDP	0.004	0.442	0.290	1.000				
Inf	-0.574	-0.115	0.415	-0.126	1.000			
Ctrl-of-Cor	0.112	0.209	0.402	0.302	-0.131	1.000		
Pop-gr	0.2441	-0.102	-0.513	-0.396	-0.137	-0.472	1.00	
Sav-to-GDP	0.326	0.213	-0.191	0.332	-0.347	0.297	-0.210	1.000

Source: Author's computation based on data from WDI Database

Table 2 shows the relationship existing between the various variables used in this study. Where the correlation coefficient is equal to or greater than 0.8, it connotes the presence of multicollinearity and this may lead to spurious regression. Since none of the pairs in this study showed a correlation of 0.8 or more, there is no issue of multicollinearity. From the table, GDP growth rate (GDP-gr) has a positive relationship with ratio of FDI to GDP (FDI-to-GDP), trade openness of the economy (XM-to-GDP), level of governance (Ctrl-of-Cor), level of human capacity (Pop-gr) and domestic savings (Sav-to-GDP) and a negative relationship between level of financial development (M2-to-GDP) and inflation (Inf). On the other hand, the ratio FDI to GDP (FDI-to-GDP) has a positive relationship with level of financial development (M2to GDP), trade openness of the economy (XM-to-GDP), level of governance (Ctrl-of-Cor), and domestic savings (Sav-to-GDP) and a negative relationship with inflation (Inf) and domestic savings (Sav-to-GDP).

5.2 Diagnostic Tests

5.2.1 Test for Heteroscedasticity

Using the Breusch Pagan test, the results are shown below:

Table 3: Test for Heteroscedasticity

Breusch-Pagan test for heteroscedasticity
Ho: Constant variance
Variables: Fitted values of GDP growth rate
$\chi^2(1) = 0.00$
Prob> $\chi^2 = 1.0000$

Source: Author's computation based on data from WDI Database

With a probability value of 1.000 which is greater than 0.05, it implies that there is no existence of heteroscedasticity in the model. This implies that the variance of the residual is constant.

CHAPTER FIVE

RESULTS AND DISCUSSION

5.1 Introduction

This chapter presents the results obtained from data analysis and their respective interpretations. Specifically, it considers results from the estimation related to East and Central Africa individually and a comparative analysis.

5.2 Presentation and interpretation of results

The estimation of the results is done separately for the two regions. Table 4 concentrates on the results from East Africa while Table 5 takes care of the results from Central Africa.

The initial estimation was done using pooled OLS regression as shown by regression 1 from table 4. The effect of time on the estimation was tested and the result showed that time was of essence ($\text{Prob} > 0 = 0.0001$; which is less than 0.05 level of significance). This led to the incorporation of time in the estimation of the pooled OLS regression as shown by regression 2 from table 4. A further estimation was made using the panel model of random effect to take care of countries' unobservable individual effects. The choice between pooled OLS regression and panel model of random effect was made using the Breusch-Pagan test for individual heterogeneity. The results from the Breusch-Pagan test revealed $\text{Prob} > \chi^2 = 1.000$ which is greater than 0.05 level of significance. This led to the choice of pooled OLS regression over the panel model of random effect.

However, to address the issue of endogeneity there was the need for a further regression to be run using the instrumental variable approach as discussed in chapter four. This is shown as regression 5 from table 4.

Table 4: Regression results (East Africa)

VARIABLES	(1) GDP-gr (Pooled)	(2) GDP-gr (Pooled)	(3) GDP-gr (RE)	(4) GDP-gr (FE)	(5) GDP-gr (IV)
Foreign Direct Investment	0.0581** (0.0291)	0.0660** (0.0314)	0.0660* (0.0384)	0.0489** (0.0180)	0.704* (0.341)
Labour	0.972*** (0.372)	1.005*** (0.308)	1.005*** (0.261)	0.925** (0.380)	0.686** (0.289)
Level of Governance	1.041* (0.616)	1.003 (0.610)	1.003 (0.966)	-1.570* (0.886)	-2.933* (1.511)
Inflation	-0.0352*** (0.00582)	-0.0362*** (0.00490)	-0.0362*** (0.00325)	-0.0367*** (0.00654)	-0.0325*** (0.00772)
Trade Openness	-2.380 (2.143)	-3.905** (1.887)	-3.905** (1.695)	-3.513*** (1.178)	-2.319 (1.790)
Financial Market Development	-0.00404 (0.0127)	0.000797 (0.0130)	0.000797 (0.0161)	-0.0417** (0.0155)	-0.00838 (0.0748)
Domestic Capital	0.0610*** (0.0189)	0.0718*** (0.0198)	0.0718** (0.0300)	0.0622 (0.0389)	0.109 (0.0904)
Constant	3.150** (1.325)	0.987 (1.303)	0.987 (1.638)	1.787 (1.047)	
Time effect	No	Yes	Yes	Yes	-
Observations	186	186	186	186	186
R-squared	0.416	0.505	0.384	0.318	0.578
Prob > F	0.000	0.000	0.000	0.000	0.000
Number of id	16	16	16	16	16

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

From table 4, the sign *, ** and *** indicates that the tests were run at 1%, 5% and 10% level of significance respectively. The results from regression 5 show that the coefficient of determination (R-squared) is 0.578 and the probability value (Prob > F) is 0.000. This implies

that 57.8% of the variation in GDP growth rate is explained by the explanatory variables in the model and also the probability value of 0.000 implies that the variables in the model are jointly significant in explaining GDP growth rate. The further inference from the results shows that the ratio of FDI to GDP (FDI-to-GDP) and the level of governance (Ctrl-of-Cor) are individually statistically significant in influencing GDP growth rate at 10 percent level of significance. Also, level of human capacity (Pop-gr) is individually statistically significant in influencing GDP growth rate at 5 percent level of significance and inflation (Inf) is also individually statistically significant in determining GDP growth rate at 1 percent level of significance. The results further reveal that the openness of the economy (XM-to-GDP), domestic savings (Sav-to-GDP) and the level of financial development (M2-to-GDP) are not significant in influencing GDP growth rate in East Africa.

5.4 Discussion of results

This study investigated the impact of FDI and other variables on economic growth as proxied by GDP growth rate. The insignificant variables are not discussed as they do not contribute to any policy to be recommended by the study.

The results reveal that holding all other factors constant, a 1 percent increase in the ratio of FDI to GDP leads to an approximately 70 percent increase in GDP growth rate. This conforms to economic theory since FDI is a source of physical and financial capital to the recipient country hence an increase in FDI is expected to raise the total capital stock in the economy for increased production and consequently increase the growth rate of GDP (Solow, 1956). This finding is in line with an earlier study by Zekarias, (2016) who analyzed the impact of FDI on economic growth in 14 East African countries between the periods 1980 to 2013 using dynamic GMM estimators. The result revealed that FDI positively affects economic growth as it is a key driver

of economic growth and a catalyst to economic conditional convergence in the region. Similarly, an empirical investigation by Worku, (2016) on the impact of FDI on economic growth in 7 East African countries covering the period 1970 to 2015 showed a positive and statistically significant relationship between FDI and economic growth. Moreover, Mohammad, (2017) investigated the impact of FDI on economic growth of 4 East African Community Member Countries (Tanzania, Kenya, Uganda, and Rwanda) covering the period 1990 to 2015. Applying the Fully Modified Ordinary Least Square (FMOLS) technique, it was found that FDI accelerates positive impact on economic growth in East African countries with results significant at 0.10 level of significance. The results from this study, therefore, confirm the studies conducted in this region concerning the impact of FDI on economic growth.

The coefficient of inflation (Inf) is negative and significant implying that a 1 percent decrease in inflation results in an approximately 4 percent increase in GDP growth rate holding all other factors constant. This is consistent with economic theory since lower inflation makes factors of production and the production process cheap. This result follows the study of Liargovas and Angelopoulou, (2014) where they concluded that a decrease in inflation is more likely to attract FDI and consequently lead to economic growth.

The coefficient of labor (Pop-gr) is positive and statistically significant. This implies that holding all other factors constant, a 1 percent increase in population growth results in a 100 percent increase in economic growth. This conforms to economic theory since more labor is required to take advantage of new technologies, production methods and knowledge brought about by FDI.

Finally, the coefficient of the level of governance (Ctrl-of-Cor) is negative and statistically significant. This implies that holding all other factors constant, the level of corruption is low and

therefore it is an indication of higher FDI inflows and increased economic growth.

Table 5: Regression results (Central Africa)

VARIABLES	(1) GDP-gr (Pooled)	(2) GDP-gr (RE)	(3) GD-Pgr (FE)	(4) GDP-gr (IV)
Foreign Direct Investment	-0.0131 (0.0746)	-0.0131 (0.103)	0.0523 (0.189)	-0.758 (0.532)
Labour	5.244*** (1.858)	5.244*** (1.406)	9.412 (10.75)	23.12 (18.17)
Level of Governance	-2.050 (4.247)	-2.050 (1.682)	-7.052 (6.157)	-6.081 (5.520)
Inflation	-0.0277*** (0.00647)	-0.0277*** (0.00256)	-0.0325 (0.0175)	-0.00620 (0.0207)
Trade Openness	4.051 (3.432)	4.051 (5.811)	-0.725 (5.451)	4.906 (7.164)
Financial Market Development	-0.195*** (0.0733)	-0.195* (0.0997)	-0.394 (0.225)	-0.354 (0.325)
Domestic Capital	0.0503 (0.0331)	0.0503* (0.0281)	0.104 (0.120)	-0.229 (0.264)
Constant	-10.45*** (3.601)	-10.45*** (3.578)	-25.98 (30.15)	
Observations	112	112	112	112
R-squared	0.296	0.253	0.206	0.338
Prob > F	0.000	0.000	0.000	0.000
Number of id	8	8	8	8

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The initial estimation was done using pooled OLS regression as shown by regression 1 from table 5. The effect of time on the estimation was tested and the result showed that time was not of essence (Prob > 0 = 0.3889; which is greater than 0.05 level of significance). There was a

further estimation made using the panel model of random effect to take care of countries' unobservable individual effects. The choice between pooled OLS regression and panel model of random effect was made using the Breusch-Pagan test for individual heterogeneity. The results from the Breusch-Pagan test revealed $\text{Prob} > \chi^2 = 1.000$ which is greater than 0.05 level of significance. This led to the choice of pooled OLS regression over the panel model of random effect.

However, to address the issue of endogeneity there was the need for a further regression to be run using the instrumental variable approach as discussed in chapter four. This is shown as regression 4 from table 5.

The results from regression 4 show that the coefficient of determination (R-squared) is 0.338 and the probability value ($\text{Prob} > F$) is 0.000. This implies that 33.8 percent of the variation in GDP growth rate is explained by the explanatory variables in the model and also the probability value of 0.000 implies that the variables in the model are jointly significant in explaining GDP growth rate. The further inference from the results shows that all the variables are not statistically significant.

This implies that, in the Central Africa sub-region, FDI has no effect on economic growth.

5.6 Comparison of Results from East and Central Africa

To make the comparison of the results more meaningful, a baseline approach is used. The IV regression results from the two regions are considered here to know the actual impact of FDI on economic growth in these regions. This is shown in table 6 below:

Table 6: IV Regression for East and Central Africa

VARIABLES	(1) GDP-gr (Central Africa)	(2) GDP-gr (East Africa)
Foreign Direct Investment	-0.758 (0.532)	0.704* (0.341)
Labour	23.12 (18.17)	0.686** (0.289)
Level of Governance	-6.081 (5.520)	-2.933* (1.511)
Inflation	-0.00620 (0.0207)	-0.0325*** (0.00772)
Trade Openness	4.906 (7.164)	-2.319 (1.790)
Financial Market Development	-0.354 (0.325)	-0.00838 (0.0748)
Domestic Capital	-0.229 (0.264)	0.109 (0.0904)
Observations	112	186
R-squared	0.338	0.578
Number of id	8	15

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

From regression 2, the coefficient of the ratio of FDI as a percentage of GDP (FDI-to-GDP) is positive and statistically significant. This implies that holding all other variables constant, an increase in FDI results in a corresponding increase in GDP growth rate in the East African sub-region. On the other hand, the result from regression 1 shows a negative and statistically insignificant coefficient of the ratio of FDI as a percentage of GDP (FDI-to-GDP). This implies that FDI does not contribute to economic growth in the Central African sub-region.

CHAPTER SIX

SUMMARY AND CONCLUSIONS

6.1 Introduction

The general summary and conclusion of the study, as well as proposed policy recommendations based on the findings, are presented in this chapter.

6.2 Summary of the Study

The primary objective of the study was to analyze the impact of FDI on economic in East and Central Africa. The study used a panel data from the period 2000 to 2015.

The results from the findings show that FDI has a positive significant impact on economic growth in East Africa but has no impact on economic growth in Central Africa. The growth rate of population was revealed to have a positive and statistically significant impact on economic growth in both regions. Also revealed by the study was a negative and statistically significant impact of inflation on economic growth in both regions.

The study also sought to theoretically determine policies put in place to attract the inflow of FDI into East and Central Africa. A thorough observation showed that the inflow of FDI into these regions is as a result of deliberate policies put in place by the government of the various countries in these regions. The significant ones are considered below:

- ❖ The simplification of procedures for the registration and creation of businesses as well as obtaining licenses for business operation is a major factor that accounts for the inflow of FDI into these regions. It was observed that in most of these countries, these processes could be completed within 24 hours.

- ❖ Moreover, the tax policies in various countries are also adjusted as a means of encouraging the inflow of FDI. A typical example is the offering of tax exemptions and tax incentives to foreign firms established in various countries.
- ❖ The availability of natural resources cannot be overlooked in considering the conditions of the inflow of FDI. These natural resources include oil and gas and minerals such as iron, diamond, uranium, and manganese.
- ❖ Also observed are the deliberate agencies set up by the government of the various countries purposely for the promotion of investment in the countries. These agencies are mostly set up by an Act of Parliament to encourage foreign investments in the countries. These include; Investment Promotion Acts, Agencies for Investment Promotion and Investment Charters among others.
- ❖ Last but not least, the negotiations of Bilateral Investment Treaties (BITs) are also significant in encouraging FDI inflows.

6.3 Conclusion

In analyzing the impact of FDI on economic growth in East and Central Africa, the study addressed the question of FDI being the actual cause of economic growth in East and Central Africa and also the factors that determine the inflow of FDI into these regions.

Considering that FDI inflows to East and Central Africa became significant in recent years, 2000 to 2015 period was considered using a panel data from the World Bank's World Development Indicators and the World Governance Indicators Database.

A pooled OLS regression technique was employed to analyze the impact of FDI on economic growth in the selected regions. To control for endogeneity, the instrumental variable technique

was adopted. There was a positive and statistically significant effect of FDI on economic growth in East Africa while no impact of FDI on economic growth in Central Africa was revealed.

In a nutshell, the higher inflow of FDI into East Africa can be concluded to be a major cause of the high economic growth in the region. On the other hand, since FDI does not have any effect on economic growth in Central Africa, the low inflow of FDI can also be concluded to be a reason for the low economic growth rates recorded in the region in recent times.

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APPENDIX

List of Countries considered in the study

East Africa

Burundi

Comoros

Djibouti

Ethiopia

Eritrea

Kenya

Madagascar

Malawi

Mauritius

Mozambique

Rwanda

Seychelles

Tanzania

Uganda

Zambia

Zimbabwe

Central Africa

Angola

Cameroon

Central African Republic

Chad

Congo Republic

Democratic Republic of Congo

Equatorial Guinea

Gabon