REPUBLIC OF TURKEY
ÇUKUROVA UNIVERSITY
INSTITUTE OF SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS

THE IMPORTANCE AND DETERMINANTS OF FOREIGN DIRECT INVESTMENT FOR AFRICAN COUNTRIES

OIKAMENG CORDELIA LEGWALE

MASTER THESIS

ADANA / 2018

REPUBLIC OF TURKEY
ÇUKUROVA UNIVERSITY
INSTITUTE OF SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS

THE IMPORTANCE AND DETERMINANTS OF FOREIGN DIRECT INVESTMENT FOR AFRICAN COUNTRIES

OIKAMENG CORDELIA LEGWALE

Supervisor: Assist. Prof. Dr. Erhan İŞCAN
Member of the Examining Committee: Assist. Prof. Dr. Musa ŞANAL
Member of the Examining Committee: Assoc. Prof. Dr. Mehmet DEMİRAL

MASTER THESIS

ADANA / 2018

Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Müdürlüğüne;

Bu çalışma, jürimiz tarafından İktisat Ana Bilim Dalında YÜKSEK LİSANS olarak kabul edilmiştir.

Başkan: Dr. Öğretim Üyesi Erhan İŞCAN
(Danışman)

Üye: Dr. Öğretim Üyesi Musa ŞANAL

Üye: Doç. Dr. Mehmet DEMİRAL

ONAY
Yukarıdaki imzaların, adı geçen öğretim elemanlarına ait olduklarını onaylarım.
…/…/2018

Prof. Dr. Serap ÇABUK
Enstitü Müdürü

NOT: Bu tezde kullanılan ve başka kaynaktan yapılan bildirişlerin, çizelge, şekil ve fotoğrafların kaynak gösterilmeden kullanımı, 5846 sayılı Fikir ve Sanat Eserleri Kanunu'ndaki hükümlere tabidir.

ETİK BEYANI

Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Tez Yazım Kurallarına uygun olarak hazırladığım bu tez çalışmasında;

- Tez içinde sunduğum verileri, bilgileri ve dokümanları akademik ve etik kurallar çerçevesinde elde ettiğimi,
- Tüm bilgi, belge, değerlendirme ve sonuçları bilimsel etik ve ahlak kurallarına uygun olarak sunduğumu,
- Tez çalışmasında yararlandığım eserlerin tümüne uygun atıfta bulunarak kaynak gösterdiğimi,
- Kullanılan verilerde ve ortaya çıkan sonuçlarda herhangi bir değişiklik yapmadığımı,
- Bu tezde sunduğum çalışmanın özgün olduğunu,

bildirir, aksi bir durumda aleyhime doğabilecek tüm hak kayıplarını kabullendiğimi beyan ederim …../10/2018

Oikameng Cordelia Legwale

ÖZET

AFRİKA ÜLKELERİ İÇİN YABANCI SERMAYE YATIRIMININ ÖNEMİ VE BELİRLEYİCİLERİ

OIKAMENG CORDELIA LEGWALE
Yüksek Lisans Tezi, İktisat Ana Bilim Dalı

Danışman: Dr. Erhan İŞCAN
Eylül 2018, 77 sayfa

Bu tezin amacı, Afrika'ya yapılan doğrudan yabancı sermaye yatırımının belirleyicilerini, etkilerini ve önemini araştırmaktır. Gayrisafi Yurtiçi Hasıla, ticari açıklık, nominal döviz kurunu ve doğal kaynakları değişken olarak kullanılmaktadır. 2001-2016 yılları arası veriler panel eş bütünleşme tekniği kullanılarak analiz edilmiştir. FMOLS yöntemi kullanılarak elde edilen sonuçlara göre tüm değişkenlerin istatistik olarak anlamlıdır. Bu çerçevede Doğrudan yabancı sermaye yatırımını ekonominin büyüklüğü, ticaretin açıklığı, döviz kuru ve doğal kaynaklar etkilemektedir. Bununla birlikte, DOLS yöntemi kullanılarak elde edilen sonuçlara göre doğal kaynaklar haricinde diğer değişkenler istatistiki olarak anlamlıdır. Bu sonuç doğrudan yabancı sermayenin Afrika ülkelerine akışını belirlemediğini göstermektedir. Döviz kuru ve enflasyon gibi makroekonomik göstergeler daha az istikrarsızlık içeren, Afrika için iyi bir iş çevresi yaratma gereksinimi vardır. Ayna zamanda, Afrika için, maden çıkartma sektörlerinden endüstriyel sektörlere geçmeye gerek vardır, bu ekonominin çeşitlenmesine yardımcı olaraktır. Bu tezin ampirik bulgularının sonuçlarına göre yatırımcılar doğal kaynak arayan değil Pazar büyüklüğüne göre yatırım yapmaktadırlar. Bu, doğal kaynaklar için, hem FMOLS hem de DOLS yöntemleri ile elde edilen sonuçlarda ifade edilmektedir.

Anahtar kelimeler: Afrika**,** doğrudan yabancı yatırım, doğal kaynaklar, doğrudan yabancı yatırım teorileri.

ABSTRACT

THE IMPORTANCE AND DETERMINANTS OF FOREIGN DIRECT INVESTMENT FOR AFRICAN COUNTRIES

OIKAMENG CORDELIA LEGWALE

Master Thesis, Department of Economics
Supervisor: Dr. Erhan İŞCAN
September 2018, 77 pages

The purpose of this thesis is to investigate the importance and the determinants of FDI inflows to Africa. The determining variables used for this thesis includes GDP which is a proxy for market size, trade which is also a proxy for openness to trade, nominal exchange rate and natural resources. This thesis used a regression analysis on a panel data of 10 countries for the period of 2001 to 2016. The empirical results for FMOLS indicated that all variables are statistically significant at 5 percent level of significance. However, DOLS empirical results indicated that natural resources do not affect the inflow of FDI to African countries. There is need to further exploit data to find more information about the determinants of FDI flows to African countries as it is an essential component for the economic growth. In addition, there is need for Africa to create a good business environment with less instability of macroeconomic indicators such as exchange rate and inflation. There is also need for Africa to shift from the mineral extraction sectors to the industrial sector; this will help to diversify the economy. This thesis brings understanding that, some investors are not resource seeking rather have different investment objectives such as market seeking. This is shown by the results presented by both FMOLS and DOLS for natural resources.

Keywords: Africa, foreign direct investment, natural resources, theories of foreign direct investment.

FOREWORD

The reason why I choose to study about the flow of Foreign Direct Investment to Africa is because generally African countries are behind in terms of economic growth and development. I believe that with more FDI flowing to the continent there will be visible and significant levels of economic growth and development. Therefore, I study this topic in order to add to the available literature on factors determining FDI flows, as way to guide the African countries policy makers to understand how best they could improve the flow of FDI to the continent.

I will like to thank my family for supporting me throughout my studies and will also like to pass great gratitude to my supervisor for the great assistance and motivation he gave me throughout my studies.

OIKAMENG CORDELIA LEGWALE

Adana / 2018

TABLE OF CONTENTS

CHAPTER III
THEORETICAL BACKGROUND OF THE FOREIGN DIRECT INVESTMENT

CHAPTER IV
EMPIRICAL ANALYSIS

CHAPTER V

CONCLUSION AND POLICY IMPLICATION

ABBREVIATIONS

AGOA: African Growth and Opportunity Act

BIH: Botswana Innovation Hub

BITC: Botswana Investment and Technology Centre

CIPA: Companies and Intellectual Property

DOLS: Dynamic Ordinary Least Squares

EDD: Economic Development Zones

FDI: Foreign Direct Investment

FMOLS: Fully Modified Ordinary Least Squares

GDP: Gross Domestic Product

IMF: International Monetary Fund

MNC: Multinational Companies

MNE: Multinational Enterprise

NEPAD: New Partnership for Africa's Development

RD: Research and Development

ROCIP: Registrar of Companies and Intellectual Property

SEZ: Special Economic Zones

US: United States of America

WDI: World Development Indicator

LIST OF TABLES

Page

LIST OF GRAPHS

Page

LIST OF ANNEX

Page

CHAPTER I

INTRODUCTION

1.1. Problem of Statement

One of the main reasons of underdevelopment of African countries is attracting low levels of Foreign Direct Investment (Onyeiwu, 2004). Therefore, the main aim of this thesis is to find out the determinants and importance of foreign direct investment in African countries. African countries have been colonized by some of the European countries like England, Portugal and France in the 1800's. However, they gained independence in the mid and some in late 1900's (Cogneau, 2003). Upon colonisation and a few years after, African countries have been basically based on agriculture as the main source of revenue (Jama and Pizarro 2008).

This however, changed when precious metals such as Gold, Diamond, and Uranite were discovered in certain African countries. As Sachs and Warner (2001) stated that Africa has abundant natural resources therefore the economies became both agro and mineral resources extraction based while some countries based on natural gas and oil. These resources have a major and significant role on the growth and development of the African countries (Sachs and Warner, 1999). For example, countries like Botswana and South Africa prospered enormously from these resources (Acemoglu, Johnson and Robinson, 2002).

However, these resources were mismanaged and misused in certain African countries hence did not play an essential role towards development and growth of the countries. For instance, cases of 'Blood diamonds' in Sierra Leone, Senegal, Congo and other countries (Bieri, 2016).There also has been misuse and mismanagement of oil and natural gas revenue in Nigeria, Niger and other countries (Sala-i-Martin and Subramanian, 2013).

In the last decade African countries have been trying to divert the economy from mineral resources. Helmsing (2003) observed that most of the African countries are trying to diversify economies. They are trying to move towards industrialisation stage (McCormick, 1999). They have been working hard to create a good environment for business and trade and established good international and bilateral relationships. This has contributed positively towards the development of Africa. The countries have recognized the need to establish good policies that will enhance trade and attract foreign

direct investors (Cleeve, 2008).

However, the aim to attract more FDI in Africa has not been achieved (Onyeiwu, 2004). This is due to lower GDP, government policy, institutions and political stability, just to mention a few (Asiedu, 2006). In addition, some of the countries invest less in human capital; there is shortage of intellectual personnel in the service sector and entrepreneurship (Cleeve, Debrah and Yiheyis, 2015). Dupasquier and Osakwe (2006) stated that there is poor governance, poor security and poor infrastructure and other facilities which disable the foreign investors to invest more in Africa. Within all these factors, lower volumes of FDI have been directed to the African countries in the previous years. Attracting low FDI is a problem as it hinders economic growth and development of country. Therefore, there is need for African countries to focus on improving their economies as a way to attract more FDI.

1.2. Objectives of the study

Acknowledging the fact that most of the studies perceive FDI as one of the main factor that brings about technological change which leads to increased level of productivity hence economic growth in the recipient country. It is important to find out the level at which FDI affect Africa. Thus, main aim of this thesis is to find out the determinants and importance of FDI in Africa. In addition, it is aiming to find out the effects of FDI in Africa.

The specific aims are stated as follows:

- To find out the determinants of FDI in Africa
- To find out the importance of FDI in Africa
- To find out the effects of FDI in Africa

1.3. Hypothesis

This thesis hypothesises that Africa attracts lower FDI flows due to poor governance, corruption, instability of macroeconomic indicators Asiedu (2006) and Onyeiwu (2004). Aitken and Harrison (1999) perceive it as a form of crowding out local companies as they may not withstand foreign companies' competition. However, this thesis agrees with Paul and Maiyandima (2010) who stated that FDI contributes significantly to economic growth and development of the recipient economy.

1.4. Importance of the study

African countries are mostly less developed in terms of growth and development indicators such as Human Development Index (HDI) and Gross Domestic Products (GDP) (Savvides, 1995). Most of the countries are struggling in a process of changing from traditional economic production such as mining and agriculture to capital intensive oriented sectors such as manufacturing and industrialization.

This thesis will conduct robust investigations in order to provide valid and feasible recommendations as to how the African countries can attract FDI and also as to how the countries can implement lucrative economic policies and conditions that will attract foreign investors. In addition, the findings of the study will be added to the literature that can be used later on by other scholars. It is important to find out ways that can lead to economic diversification because a diversified economy attracts FDI in different sectors hence overall growth and development of the country.

As we mentioned earlier, attracting FDI is associated with several gains such as lowering of unemployment rate, more tax from multinational companies to the hosting country and many other advantages. Therefore, there is need to find better ways of driving multinational companies to Africa.

FDI is beneficial to both the receiving and investing countries (Adams, 2009). The investing country earns profit whereas the hosting country benefit in many different ways. FDI creates employment to the citizens of the host country, it brings knowledge thus, the knowhow in terms of production, it contributes significantly to GDP and increases productivity. FDI is one other way that leads to economic growth and development.

It is important for African countries to attract foreign investors in order to improve the economic stand point of their countries. This can be done by monitoring well the monetary and fiscal policies, implementing sound tax policies, maintaining a peaceful and secure environment, monitoring macroeconomic indicators well such as interest rate, currency, inflation and domestic debt to foreign debt ratio. Some factors that contributes significantly to attraction of FDI is market size which is determined by the population, geographical location, however, this factors cannot be controlled nor monitored by the state.

It is also important to analyse FDI flows to African countries as they are left behind in terms of economic growth and development as stated before. Therefore, in

most cases FDI boosts economies in general which means that attracting FDI will increase the prosperity.

CHAPTER II

OVERVIEW OF FOREIGN DIRECT INVESTMENT

2.1. Definition of Foreign Direct Investment

Foreign direct investment (FDI) is an investment that made in a foreign country by the company or individual from the original country either through the establishment of a company or by acquiring assets from that country. It entails the flow of capital from the original country to the host country and this boast the economy of the receiving country in different dimensions. According to Lee (1997) FDI is an important tool for the transfer of technology which contributes to economic growth than domestic investment. However, this positive effect is available only if the host country has the threshold stock of human capital.

IMF and OECD stated that FDI shows the objective of acquiring interest and profits by a host entity of a country (direct investor) in a company that is based in another country (the direct investment enterprise). The interest and profits implies the existence of a long-term relationship between the foreign investor and the direct investment enterprise and high level of influence on the management of the latter. Direct investment involves both the initial transaction which forms the relationship between the investor and the enterprise and all following capital transactions between them and among affiliated enterprises. From the view of Balance of Payments and the International Investment Position have similar conceptual framework provided by IMF. The Balance of Payments is a statistical statement that summarises for a given time, the economic transactions of an economy with the world and the International Investment Position compiles for a certain like end of a year, the value of the stock of each financial asset and liability as defined in the standard components of the Balance of Payments (Duce, 2003).

Multinational enterprises such as Coca-Cola, Car manufacturing companies like Ford which is based in the host country; restaurants such as Mc Donald's, KFC, foreign construction companies and foreign banks are some of the examples of FDI.

2.1.1. Types of Foreign Direct Investment

FDI has many different forms. The types of FDI depend on the criteria use.

There are FDI's which are based on direction of FDI, such as inward and outward, some are based on activity of FDI like, horizontal and vertical FDI, and some are based on investment objective such as resource, market and efficiency seeking FDI. There are some form of FDI which are based on entry mode such as green field investment and mergers and acquisitions. The other form is based on sector FDI such as industrial and non-industrial FDI the least but not last form of FDI is based on strategic modes such as exports replacements, exports platforms and domestic substitutions. In this chapter we will define the types of the FDI.

Direction Based Type of Foreign Direct Investment

Inward FDI is when foreign capital is invested in local resources and it is promoted by tax breaks, low interest on loans as well as subsidies. It is reduced by ownership limits and differential performance limits. Outward foreign investment is when local capital is invested abroad. It is promoted by government backed risk covers and reduced by subsidiaries for local business, tax incentives or disincentives (Gorg, 2009).

Activity based Type of Foreign Direct Investment

According to Gorg (2009) horizontal FDI is where by the company in the host country practices all the actives and tasks carried in the original company. This kind of FDI usually takes place in the same sector of the economy, for example, a house construction company in China invests in a house construction company in Botswana. However vertical FDI is the opposite of horizontal FDI. It is where by the investing company in the host country does not match the sector of the original company. For example, a car producing company from Germany investing in mineral extraction sector in South Africa. This kind of FDI has forms such as forward and backwards vertical FDI. Forward vertical investment is where by, the foreign company investment in a local company that can take products forward to customers. That is, a textile company investing in manufacturing company where end products can be sold. Backward vertical investment is where by the foreign company is investing in a local company that produces products for the particular industry. For example, the car manufacturing company in Australia invest in a tyre producing company in the host country (Du, 2012).

Investment Objective Based Type of Foreign Direct Investment

This type of FDI has three different approaches. The first is resource seeking FDI. In this type of FDI the foreign company invests another country with the aim to have access to the abundant resources of that particular country. It is determined by the availability of resources especially raw cheap materials, complementary factors of production and physical infrastructure. This type of FDI is common the mineral extraction sectors (Dunning, 1998).

The second approach of investment objective type of FDI is market seeking FDI. In this approach the foreign companies, mainly multinational companies aim to utilize and benefit from the market of the host country. Therefore, in this approach, FDI will flow to countries with large market size. It is also determined by market growth and regional integration (Dunning, 1998).

The third approach of investment objective type of FDI is efficiency seeking FDI. In this approach FDI provides the investing firms with a larger scale of economies, geographical diversification and international supply of production inputs. This type of FDI is determined by production matching labour cost, availability of skilled labour, availability services for business and trade policy (Dunning,1998).

Entry Mode based Type of Foreign Direct Investment

In this type of FDI there are two approaches which are green field investment and mergers and acquisitions. The green field approach is where by the foreign company investing in a host country establishes or creates its new facilities or expands and renovates the existing facility structures. That is, in this type of FDI the business is started from the scratch. It has positive impacts to the host country as it creates permanent jobs. Examples of green field investment include franchise companies like fast food restaurants.

The second approach of entry mode based type of FDI is merges and acquisitions. Merges is a legal way of combining two different companies to make them one entity and acquisition is completely claims another company and establish itself as the owner. An example of a merger and acquisition company is Kraft Heinz. It is an American food company created by a merger of Kraft foods and Heinz. This company produces high quality and tasty food.

Sector Based Type of Foreign Direct Investment

In this type of FDI, there are two types of sectors which encompass other sectors. There is the industrial which is taken as manufacturing and the non-industrial sectors such as service sectors. This type of FDI aims at producing in host country at a lower cost of production with the abundance of cheap labour and raw materials. It is also aiming at avoiding trade barriers and to be closer to the market.

2.1.2 Importance of Foreign Direct Investment

FDI is beneficial to both the receiving and investing countries. The investing country earns profit whereas the hosting country benefit in many different ways. FDI creates employment to the citizens of the host country, it brings knowledge thus, know-how in terms of production, it contributes significantly to Gross Domestic Product and increases productivity. FDI is one other way that leads to economic growth and development.

In the past decade Pei (2002) and Addison (2003) conducted studies to find out the importance and determinants of FDI. These studies indicate the significance of FDI (Asiedu, 2002). Therefore, more flow of foreign investment in various sectors in African countries is the hope and the main drive for economic diversification and growth of African economies. Therefore, it is very essential to assess the importance and determinants of FDI in African countries.

According to Narula (2002) FDI opens a way to globalisation which is one of the ways that promote the spread of technological innovations which leads to more productivity and output hence results into increased level of gross domestic product. FDI plays an essential role in the creation of employment through the multinational companies, this helps to reduce the poverty levels in the country hence improve the living standards of people in that given country (Mickiewics, 2000). Furthermore, it contributes to the development of infrastructure in the country which in return attracts more foreign investors. FDI strengthens the relationship of countries which makes trade liberalization possible as it leads to unconstrained movement of goods and services globally.

Over the past decade there has been an influx of research and development (RD) centres in the middle income countries established mostly by the multinational companies (Altbach and Balán, 2007). Asakawa and Som, (2008) points out that India

and China has been greater hub of these RD centres and this has raised attention to some of the researchers and policy makers in other middle income and emerging economies to attract RD based FDI.

There are several benefits linked to attracting RD related FDI such as technology transfer, learning from the multinational companies which includes learning the managerial skills, marketing, quality methods of production, development of the domestic firms and many other positive effects (Blomstrom and Kokko, 2003).

With internalization of RD, the multinational enterprises aim at opening new opportunities for the emerging markets to take part in the global innovation networks and make knowledge-intensive clusters by attracting FDI. From the view of the host country the RD related FDI helps the local firms to acquire and learn more from the MNC's and this will lead to reduced absorptive capacities and the minimum threshold will be achieving hence more production of good quality goods will presume. The benefit of RD-related FDI occurs mostly when the MNC collaborates with local firms and public research organisations hence intensify research leads to knowledge-intensive spill overs (Guimon and Salazar-Elena, 2015).

On the other hand, the dependency theory of FDI states that, the flow of FDI to developing countries has negative impact on economic growth and development. According to Bornschier and Chase-Dunn (1985) foreign investments may lead to formation of monopoly in the economy's industrial structure. The state of the argument is that, the economy will not grow naturally but rather will develop in a disarticulated manner (Amin, 1974). This is mainly because of the forward link and multiplier effect that demand in one sector of the economy which should create demand in another sector is weak due to monopoly power. This argument is important as most of the African countries are experiencing a skewed FDI on the extraction sector however the demand does not flow or benefit other sectors (Pigato, 2000).

FDI leads to crowding out of domestic companies that causes competition and takes away the market for local investors. This is mainly because foreign investors have more resources, sophisticated technology hence more powerful. The revenues from foreign companies are usually transferred to the original countries which mean the host country benefits less FDI. Foreign investors usually exploit the available resources in the host countries with no returns in the local economies.

2.2. Economic Size of the Foreign Direct Investment

In this chapter we will discuss the share of FDI in the world. According to the literature, the flow of FDI in the whole world is not balanced. For instance, Sadik and Bolbol (2001) and Musila and Sigué, (2006) stated the uneven distribution of FDI in Africa. That is other countries receive more FDI inflows than others. Investors are more interested in certain countries, region or continents than others (Ajayi, 2006).

2.2.1. The Global Share of Foreign Direct Investment

UNCTAD's World Investment Report (2018) stated that the world FDI fell by 23 percent. It fell from $1.87 trillion to $1.43 trillion in 2017.This major decline of global FDI was partly caused by a 22 percent decrease in the value of cross border merges and acquisitions. In addition, the green field investment also fell by 14 percent to $720 billion. UNCTAD (2018) points out that, FDI is the largest external source of finance in the developing countries The chart below shows the inflow of FDI in different regions and in the world from 1970 to 2016 and the figures are captured in trillion dollars. Data was obtained from World Bank data portal.

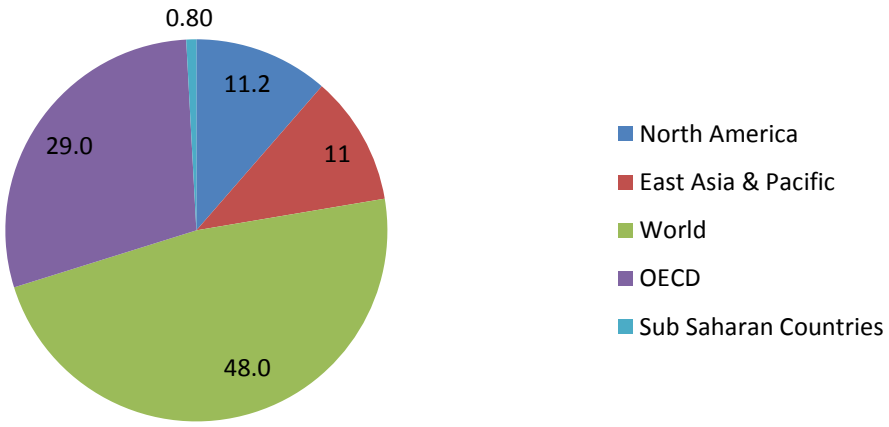

*Chart 1.*The Global Share of Foreign Direct Investment (as percentage)
Source: World Bank

The World Bank data report shows that African countries receive lower FDI as 0.8 percent. Despite the disparities in the distribution of FDI in the African countries, they really receive lower volumes of FDI annually compared to the rest of the world.

Therefore, this contributes significantly to the stagnant growth and lower developments of the continent at large.

The OECD which comprises of the middle and some developed, industrialised countries receive a larger share of FDI than any other region. As demonstrated in the table above, OECD's share of FDI flows is 29 percent which is by far the highest host. Even though the region is competent in terms of economic growth and development, shown by high amounts of GDP annually, it goes without saying that the countries also experiences disparity patterns of FDI distributions however, they are not as wide as for the African countries.

East Asian and Pacific received 11 percent. In East Asia, China is the main host of FDI because the economy of China is rapidly growing, with large amounts of GDP and large market size as well as highly sophisticated technology. China's FDI flow amounts to $ 170.557 billion as per World Bank report 2016. China is also mainly investing in assets and portfolios in most of the African countries which accounts to a significant FDI inflows to the African economies.

North America also receives a larger share of FDI of 11.2 percent. However, within the bracket United States have a larger share of the FDI flow which accumulated to $ 479.415 billion World Bank (2016). United States of America (USA) is a very economic stable country which attracts foreign investors. The country's macroeconomic indicators such as inflation, interest rate and currency are stable. In addition, USA has stable fiscal and monetary policies as well as higher degree of trade liberalization.

Other than the case for Africa, FDI flows are unevenly distributed in the whole world. According to (Onyeiwe and Shrestha, 2004), the disparity of FDI is due to many factors such as economic policies, taxes for corporate institutions, interest rates, market size, safety and security of the assets, returns expected and many other factors.

2.2.2 The share of United States Foreign Direct Investment to Africa.

USA is the largest source and recipient of FDI which accounted for one fourth of the world's FDI in 2015. The country host approximately 90 percent of assets from Switzerland, Japan, Canada, and the European Union. It also has its largest outflow of foreign assets invested at European Union countries and Canada. The Caribbean and Latin America region, countries such as Brazil and Chile are more exposed to USA's FDI and they benefit more from them.

USA shares 60 percent of FDI to African countries especially the resource rich countries such as Nigeria, South Africa and Angola. The allocation of America's FDI to African countries is not only determined by the abundance of resources, it is in addition influenced by factors such as market size, development of infrastructure, primary education completion rates, inflation rate are positive determinants of US FDI inflows and the political instability and chances of risks present in the country are not a problem for US investors (Okafor, 2015). Thus, the American investors are interested in the availability, affordable and quality natural resources as well as good infrastructure to facilitate the establishment and good progress of the business. They are also interested in host countries that have quality education to enhance efficiency in production. Large market size is also an attribute that attracts high inflow of foreign investment.

In 2009 US FDI in Africa increased by $16 billion. However, the yearly flow of direct investment to the continent has been decreasing every year from $10.4 billion in 2009 to $3.7 billion in 2012. Since 2009 the only severe decrease of USA's FDI positions and stock was recorded in 2013. In 2012 the main FDI recipients from USA in the sub-Saharan region is Nigeria ($8.2 billion), Mauritius ($7.0 billion), South Africa ($5.5 billion), and Ghana ($3.6 billion).

Table 1

US FDI Stocks and Flows to Africa 2009-2013 ($M)

Years	2014	2015	2016	2017	2018
USA Outward FDI Position in Africa	57,230	61,381	60,427	75,097	73,102
USA Outward Flow to Africa	5,380	3,706	4,756	5,079	5,010

Source: World Bank

From the table above we can see that outward FDI position of United States is greater than outward FDI flow of United States to Africa. FDI stock of United States between 2010 and 2015 in Africa was recorded to be $64 billion UNCTAD World Investment Report (2017). This shows that outward FDI of USA position in Africa is still high which makes US one of the largest investor in Africa.

The AGOA Acceleration Act established by the USA provides more access of US market for African countries. Africa is hoping to see more FDI in the countries that

are exporting textiles. This Scheme was extended to 2015 (UNCTAD 2015).

From 1994 to 2018 FDI in the United States increased by $457.01 million in 2018 (World Bank, 2018). FDI in the United States averaged $244.997 million from 1994 until 2018, reaching a high amount of $474.65 million in of 2014 and a record low of $-9.988 million in 2001.

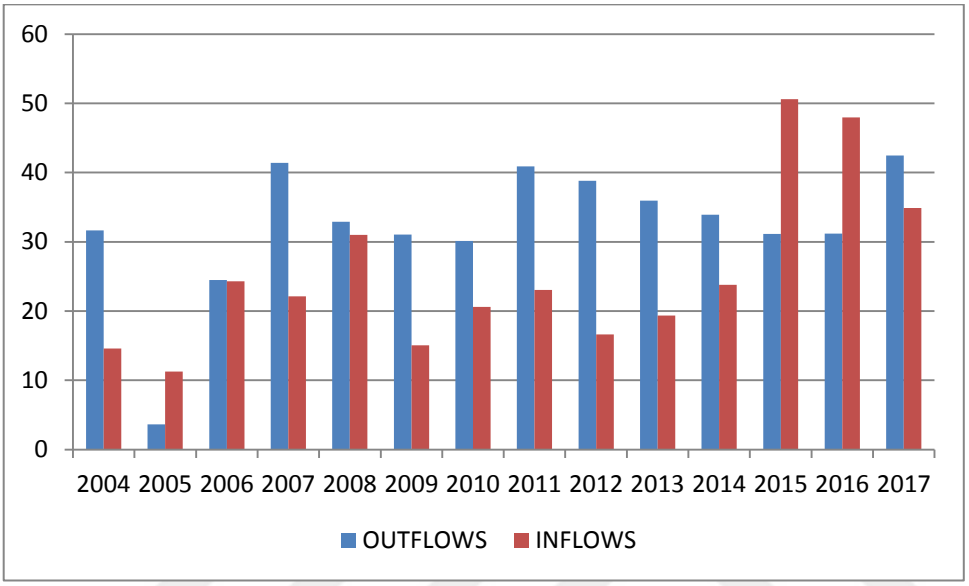

Chart 2. The Outward and Inward flow of US FDI 2004-2017 ($M)
Source: World Bank

From the above chart, we can see that US flow of FDI has been fluctuating over the years from 2004-2017. The highest total inflows were recorded in 2015 which amounted to $506.161million and the lowest inflow recorded was in 2005 which amounted to $112.64 million. The highest outflow recorded was in 2017 at $424.421million and the lowest was in 2005 at $36.36million. From the chart we can also see that the US FDI was generally low in 2005 and the outflows are larger compared to inflows except for 2015 and 2016.

2.2.3. The share of China's Foreign Direct Investment to Africa

Ministry of Commerce of Republic of China states that China's FDI in Africa amounted to $3.5 trillion by the end of 2015 which is seven times larger than the amount recorded in 2007. The Chinese FDI in Africa increases every year. In 2017 Chinese FDI in Africa was 22 percent more than the amount recorded in 2015. According to Ministry of Commerce of Republic of China, FDI in Africa have positive

impacts like creating jobs, bringing know-how and capital. For instance in 2016 FDI from Republic of China created 38,400 jobs. Also FDI brought capital investment, management and know-how which helps in the process of Africa's development and growth.

The table below shows the green field type of FDI from Republic of China to Africa from 2003-2014. Republic of China's FDI to Africa is significant and increasing over years. Between 2003 and 2012 direct flows from China to Africa increased by 47.8 percent and investment stock increased by 52.5 percent.

Table 2

Chinese FDI Green field Projects, 2003-2014

	Average Jobs Created	**Total Capital Investment ($M)**	**Number of Projects**
Manufacturing	510	13,284	77
Extraction	1,064	8,726	14
Construction	1,415	4,650	4
ICT & Infrastructure	322	1,850	4
Electricity	66	1,351	4
Business Activities	156	150	8
Sales, Marketing & Support	15	149	23
Logistics & Distribution	133	147	3
Business Services	17	84	8
Education & Training	75	73	8
Retail	38	32	4

Source: MOFCOM state council of China

From the table it is clear that between the year 2013 and 2014 there has been an increase in the flow of FDI to Africa. There has been diversification in the sectors of production. However, the mineral resource sector is still one of main sectors that attract more flow of Chinese FDI to Africa as it has recorded the second largest total capital

investment of $8.726 million with 14 projects in different countries. The largest recipient sector is manufacturing which recorded $13.284 million flows of investment to the continent and has 77 numbers of projects. The Chinese FDI is mostly in the manufacturing industry in Africa and the sector grew by 10 percent in from year to year which amounted for $2.4 billion and in 2015 it accounted for 15 percent of Chinese FDI. Sale, marketing and support has recorded 23 projects however it has low flow of capital investment.

The main recipient of FDI in Africa is South Africa because that region has copious natural resource country like metals and minerals then Nigeria which has enormous oil reserves. Therefore, the resource abundance of the country determines the amount of FDI attracted to the country and the entire continent as many countries in Africa have more mineral resources. For instance, the USA and Republic of China has both invested more on the mining and extractive industries that is, USA invested 58 percent and Republic of China 30.6 percent on the country's FDI stock in 2012.

However, there is a notable report that other sectors in the continent received FDI stock in the 2011-2014. In the report, China has shown a more diversified FDI composition in the continent more than USA. It is stated that, China invested 19.5 percent in financial services, 16.4 percent in construction, 15.3 percent in manufacturing and the remaining 18.2 percent in both business and technology services, geological prospecting, wholesale retail, agriculture and real estate.

According to Wiig (2011) most of the Chinese FDI to Africa is mainly on the resource rich countries. Cheung et al (2012) explains that the Chinese rent seeking motive as well as to find a lucrative market, high levels of trade and the availability of Chinese contract based projects to attract Chinese FDI to Africa. The Chinese government and markets focus on targeting African markets to maximize on rent seeking and benefit on the resource rich countries for production inputs however, these same motives attract Chinese's investment to Africa even more.

Some scholars such as Biggeri and Sanfilippo (2009) stated that the Chinese economic activities in Africa is not only based or attracted by the natural resource rich factor but also by trade, FDI and aid. That is, most of the Chinese projects in Africa are not only based on exploiting the natural resources but also to help Africans through aid and establish long lasting economic relationships with African Countries. For example, when the Chinese carry the infrastructure projects in African countries they come along with the intention to start business and invest their assets in those respective countries.

Whalley and Weisbrod (2012) analysed the impact of Chinese FDI on the economic growth of African countries. They found out that on the period before and after the global economic crisis, some of the African countries experienced an accelerated growth which they associate with the massive influx of Chinese FDI flows to Africa. Zhang et al (2014) also employed the growth accounting approach to find out the impact of Chinese FDI on African GDP growth. On the contrary, Zhang et al (2014) declares no economic growth effect associated with Chinese FDI inflows to African economies. However, other scholars such as Seyoum et al (2015) carried a case study on Chinese FDI spillovers and find out that there are more positive productivity spill overs from the Chinese firms. Many scholars have stated the positive impact brought by Chinese FDI on African economies such as creation of employment, diversifying the economy and contributing to the GDP growth.

2.2.4 The share of European Union's Foreign Direct Investment in Africa

The European Union inward and outward FDI fell sharply in 2014 and they have been low between the year 2009 and 2015. The main cause of lower FDI flows from EU was mainly due to lack of investment in the traditional partner countries like U.S. and Switzerland and the disinvestment by US from EU.

The EU member states outward flows of FDI increased from 2009-2013 but declined in 2014 and they were at their lowest level in 2009-2015. The EU investment in Central America also declined to $40.6 billion. In 2015, the EU FDI flows increased more than they were in 2013, which is EU's investment in US and Switzerland were regained. In addition, the EU's investments increased significantly in South Africa, Turkey, Singapore and Japan.

However, EU's inward FDI regained momentum just like outward flows in 2015. That is, the investment from US increased by $29.2 billion in 2015, Canada, Switzerland and Arabian countries increased also. In 2015, EU outward stock of FDI grew by 14 percent and inward stock grew by 20.7 percent. In 2017 EU's FDI outflows was $139.2 Billion which dropped from the previous amount of $290 Billion which was recorded in 2016. That is between 2016 and 2017 there was 52.2 percent decline in outflows. At the same time the inflows were extremely low in 2017 as the recorded $42.92 billion compared to $394.4 billion which was recorded in 2016.

Table 3

European Union FDI Flows By Major Partners, 2016-2017 ($ M)

	Outward FDI Flows	Outward FDI Flows	Inward FDI Flows	Inward FDI Flows
Years	2017	2016	2017	2016
Switzerland	60.750	1.201	90.165	71.517
Russia	-383	-430	-413	2.234
United States	-66.620	76.948	-274.156	56.449
Brazil	3.615	31.117	-3.174	-12.630
China	2.615	1.641	2.269	1.760
Hong Kong	10.441	11.102	4.932	7.387
India	6.261	7.767	4.640	2.430
Japan	-1.286	5.966	12.736	23.618
Canada	-3.614	15.090	10.884	27.478

The table present the inward and outward flow of EU's FDI to its main partners. From the table we can see that the flow of EU's FDI flows fluctuate and differs from country to country. In 2016 EU's outward FDI flows were generally low compared to the inward flows in 2016 same applies to 2017. Switzerland invests in the EU more than all the countries in the above table and EU invest more at Switzerland in 2017.

In 2017 the total EU FDI flow to Africa amounted for $303.94 billion which was 49.1 percent of total FDI in Africa.

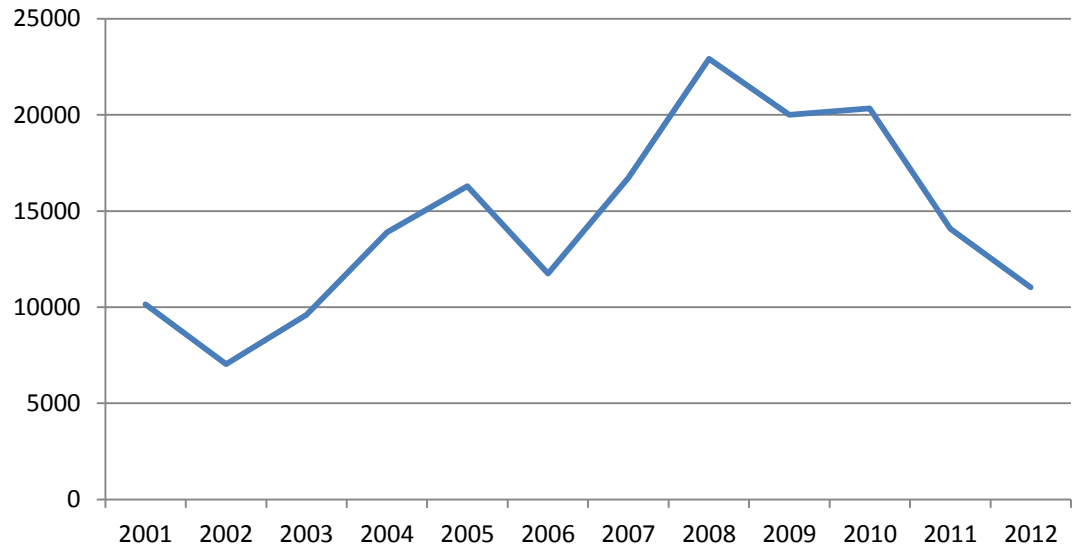

Chart 3. FDI Flow of European Union to Africa 2001-2013 (EUR M)

Source: Eurostat

From the chart above, the FDI flow from EU to Africa accelerated from 2001 to 2005 and amounted to $18.891 million and they started to decline sharply in 2006 and rose again in 2009 which the recorded the highest amount of EUR 26.582 million. The FDI from the EU started to decline sharply from 2010 until 2012.

United Kingdom's Foreign Direct Investment in Africa

By the year 2014, UK's stock of FDI value (outward FDI) in Africa was $55.25 billion. This was a large amount of investment which was greater than the stock of FDI invested by Africans in United Kingdom. In 2014 the stock of African investments in UK was recorded to be $39 billion.

The diagram below shows the amount invested by United Kingdom in Africa which has increased more than twice in 2005 and 2014 from $27.04 billion to $55.25 billion. The main United Kingdom's investing sectors in Africa are industry, mining and quarrying, and financial services which accounted for 54.4percent and 34.3percent of total UK FDI into Africa in 2014, respectively.

There was growth noticed in the value of FDI held by Africans in United Kingdom between 2005 and 2014. The increase from $0.65 billion to $3.9 billion was recorded. Africans mainly invest in transportation and storage and administrative and support service activities in United Kingdom and these sectors accounted for 10.3percent and 10.0percent of total FDI into the UK from Africa in 2014, respectively.

A larger increase in UK investment into Africa compared with Africa's investment into the UK resulted in the UK's net FDI position with the continent rising by $24.96 billion to $51.35 billion between 2012 and 2016.

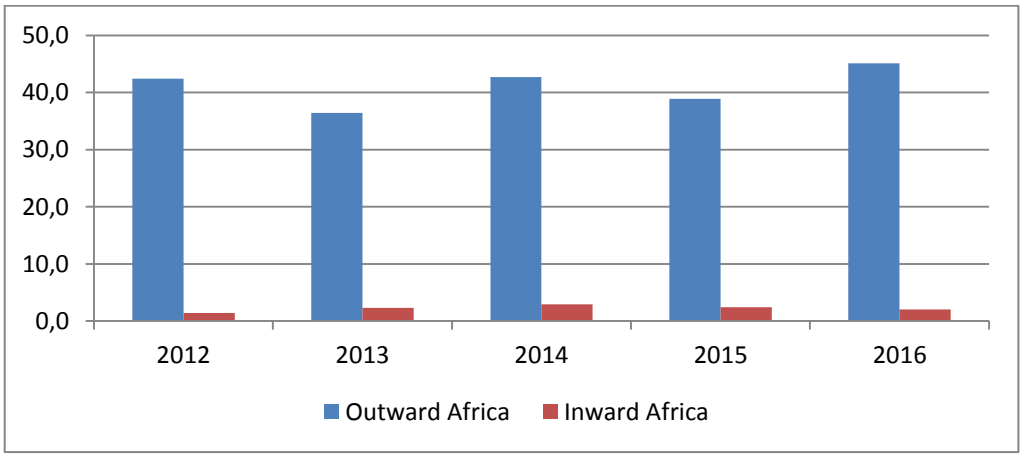

Chart 4. UK Direct Investment Positions with Africa 2012-2016 ($ M)

Source: Office for National Statistics.

There was a decline in amount of earning that United Kingdom investors generated from their investment in Africa. The decline in value was from $7.540 billion in 2005 to $9.0 billion in 2014. Despite more than half of UK investment in Africa being held in mining and quarrying, financial services generated the largest amount of earnings $3.5 billion. In contrast, earnings from FDI of UK from mining and quarrying were $3.4 billion.

It is worth to be noted that United kingdom's FDI earnings from all the sectors, thus, mining and quarrying, and financial services industries have fallen since 2011, although the decline in earnings from the mining and quarrying industries has been larger, having more than halved since 2011. Some of this decline is attributable to a fall in world crude oil prices since the second quarter (April to June) of 2014.

FDI earnings generated by African investors in the UK have traditionally been much smaller compared with those earned by the UK in Africa, and did not exceed $0.89 billion over the past decade. As such, the UK's FDI earning balance with Africa continues to remain in surplus.

2.2.5 The Share of Foreign Direct Investment in ASEAN

Asia consists of many emerging and fast developing economies. It is one of the main FDI recipients in the world. Especially the countries situated in the far east of Asia like China, Singapore, Japan, Indonesia and others. UNCTAD's World Investment Report 2014 revealed that Asia (excluding West Asia) received more than 30 percent of the world's FDI.

East Asia has been performing quiet well in terms of attracting inflows of FDI. The UNCTAD report shows that in 2013 the flow of FDI to the region rose by 3 percent with China leading the continent. China is ranked the 2nd best in attracting FDI in the whole world. It follows US with a much narrowed margin.

China has large and competitive offshores, markets and different kinds of investment in the world. The Chinese companies' acquired investment opportunities like the $15 billion CNOOC-Nexen in Canada and the $5 billion Shuanghui-Smithfield deal in the United States. This is one of the largest abroad deals which were acquired by the Chinese companies and firms in the mineral resources such as oil and gas as well as per food industries (UNCTAD, 2013). In 2017 Chinese FDI rose by 7.9percent to reach $135 billion while the outflows declined sharply.

The republic of Korea still in East Asia has attracted a huge inflow of FDI of about $12 billion, which is the highest level since the 2000s and the flows to Taiwan rose to $4 billion. UNCTAD's latest Investment Trends Monitor report, Hong Kong achieved $85 billion FDI value in 2017 and it stood the third main recipient of FDI flows in the world. This mainly took place through its increased mergers and acquisitions globally. Hong Kong which is the business hub for China, the special administrative region of China is recorded to be the second largest host of FDI in the region.

South East Asian level of FDI inflows to the region has decreased recently. In 2013, the region attracted more FDI hence a high rise of 7 percent to $125 billion. According to UNCTAD, between 2009 and 2012 there was a huge increase of $47 billion to $ 118 billion respectively. However, this accelerated attraction of FDI has now slowed down.

Singapore is one of the largest FDI recipients in South-Asia. It has acquired high FDI deals in 2013 which drove FDI inflows record to $64 billion. According to UNCTAD 28th Investment Trends Monitoring Report, Singapore was the eighth largest recipient of FDI inflows in the world in 2017. The Singapore FDI inflow rose from $50 billion in 2016 to $58 billion in 2017 which is still lower than the $68 billion recorded in 2014. The main investors in Singapore are the U.S., the Netherlands, United Kingdom and Japan.

Indonesia has been experiencing a stable attraction of FDI whereas Malaysia experienced an increase in the flow of FDI to 22 percent which made $12 billion and Thailand recorded an inflow of $13 billion however, due to political instability Thailand has be receiving less FDI. The FDI inflows to the ASEAN has reduced while inflows to Myanmar increased by 16 percent to $2.6 billion. The inflows to Cambodia, Lao People’s Democratic Republic and Viet Nam remained at almost the same level.

According to UNCTAD’s report in 2014, India has experienced a 17 percent increase inflow of FDI however; the macroeconomic uncertainties remain to be the major concern for investors. Bangladesh has been experiencing a rise of FDI inflows especially in the manufacturing sector of the economy and this has created a lot of job opportunities. The manufacturing industry is doing well in Bangladesh however; there are some challenges such as labour standard and skill development. UNCTAD stated the expectation of a rise in the level of FDI flowing to Pakistan in the telecommunication industry.

In Asian countries, Turkey is the second largest recipient of FDI inflows after Israel (UNCTAD World Investment Report, 2017). Turkey has adopted some legislative measures to facilitate the attraction of FDI flows such the creation of Investment Support and Promotion Agency of Turkey (ISPAT). In 2007 FDI flows to Turkey reached a high level of $ 22 billion but have decreased over the years. In 2016 the FDI inflows recorded were $13.3 billion and reduced to $10.8 billion in 2017 according to Turkish Ministry of Economy (2018). Main investors in Turkey are the EU members.

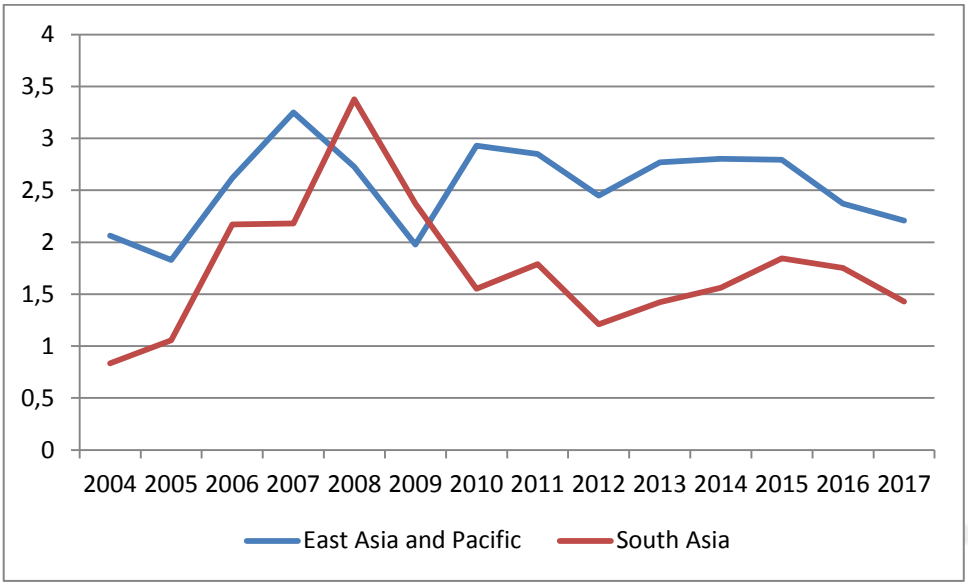

Chart 5. Foreign Direct Investment net Inflows (percentof GDP) 2014-2017 ($T)
Source: World Bank

From the chart above we can see that both the Pacific and East Asian countries receives more FDI inflows compared to South Asia. In 2017, East Asia and Pacific recorded $ 2.209 trillion FDI inflows while South Asia recorded $ 1.43 trillion. In the two regions we can see that the flow of FDI is fluctuate changes from one year to another.

2.2.6. Recent Trends of Foreign Direct Investment in the World

According to UNCTAD FDI recorded lower flows to the entire globe for the year 2015 and 2016. However, the flows still remained uneven and other regions were not affected by the decline.

FDI flows to Europe declined by 29 percent which made $385 billion on average having other countries receiving more than others in the same region. The decline was

due to the increase of inflows to Australia and Japan and other developed countries and 6percent to North America. The slowing economic growth and decreasing goods prices resulted in low flows of FDI to developing countries which reduced by 20percent estimated $ 600 billion. FDI flows to transition economies rose by 38percent estimated to be $ 52 billion.

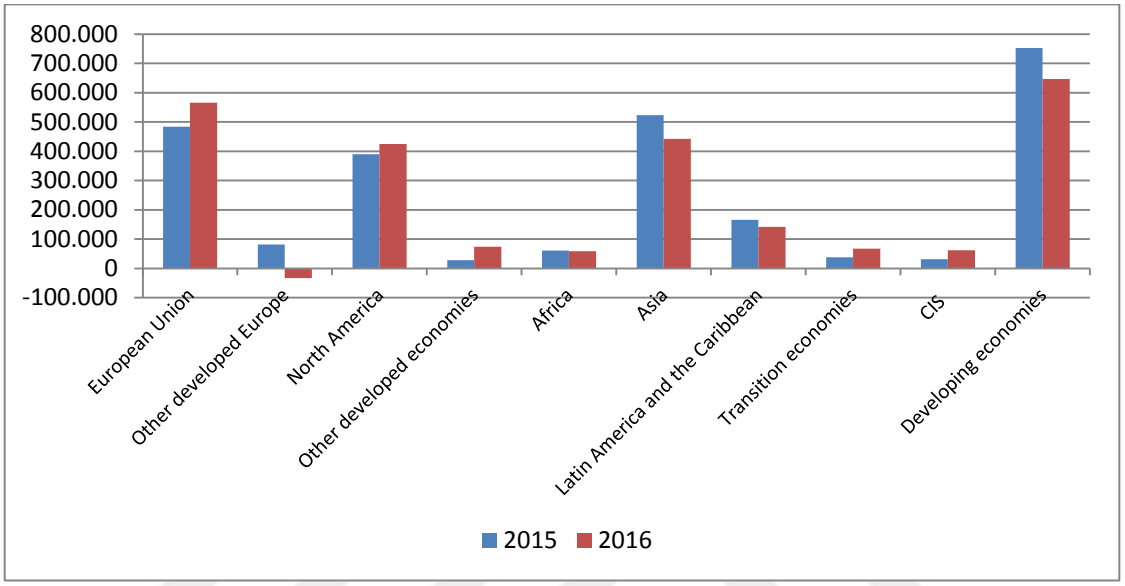

Chart 6. World Distribution of Foreign Direct Investment, 2015–2016 ($Billions)
Source: UNCTAD.

From the bar chart we can see the diminishing flow of FDI from different regions in the world. North America on its own seems to be contributing significantly to the world flow of FDI compared to other regions. For the year 2015 and 2016, it appears that European countries contributed an insignificant amount of FDI to the world. However, the developed countries in total have contributed 43percent of FDI to world. This is however still below average.

2.2.7. Recent Trends of Foreign Direct Investment in Africa

When examining the flow of FDI at regional level there has been an increase of the flow in all corners of the continent however South and Central Africa faced a huge decline. FDI inflows to North Africa increased by 11 percent to $14.5 billion. This is due to the increased positive inflows in Egypt (due to new gas discoveries) and Algeria (due to investment reforms and discoveries of oil).

Inflows to East Africa increased by 13 percent to $7.1 billion, driven by increases in Ethiopia, Mauritius and Madagascar – but Kenya and Tanzania fell by 36 percent to $394 million and 15 per cent to $1.4 billion, respectively. The latter was driven by hydrocarbons and cocoa processing projects. The flows to Côte d'Ivoire and Senegal dropped by 3 and 4 percent respectively.

FDI to Central Africa decreased by 15 percent to $5.1 billion because of commodity prices slump. This was mainly affected by substantial declines in Democratic Republic of the Congo (28 percent to $1.2 billion) and Equatorial Guinea (77 percent to $54 million). However, FDI to Gabon and Congo increased by 13 per cent to $703 million and 8 per cent to $2 billion, respectively.

FDI to Southern Africa fell by 18 per cent to $21.2 billion, due mainly to declines of FDI to in Zambia (70 percent), Mozambique (20 percent) and Angola (11 percent). FDI flows to South Africa grew by 31 percent to $2.3 billion, but still below its previous average. Despite the slump, the region has the highest share of continental FDI inflows, followed by North Africa, West Africa, East Africa and, lastly, Central Africa.

Outward FDI from Africa (to the rest of the world) increased by 1 percent to $18.2 billion, with outflows from mainly Angola, South Africa, Nigeria, Morocco and Botswana – in that order. In 2016, Angola emerged as the region's largest investor with major investment outflows by Sonangol enterprise, which recorded an increase of 35 percent to $10.5billion. Outflows from South Africa fell sharply from $5.7billion in 2015 to $3.4 billion in 2016. Outward FDI from Nigeria fell by 9 per cent to $1.3 billion, with FDI from Morocco contracting by 2 per cent to $639 million. UNCTAD reports that many African multinational companies investing abroad were affected by weak commodity prices and higher borrowing costs as the value of local currencies fell and interest rates rose.

CHAPTER III

THEORETICAL BACKGROUND OF THE FOREIGN DIRECT INVESTMENT

In this chapter we present the theories of FDI the factors that determine the flow and the effects of FDI.

3.1. Theories Assuming Perfect Market

According to Moosa (2002) there are three hypotheses that can be derived from the theory of perfect market. The first is the hypothesis of differential rates of return, second is the hypothesis of diversification and third is the hypothesis of market size. In this thesis we will discuss the hypothesis of market size and the differential rate of return hypothesis.

3.1.1. The Differential Rate of Return Hypothesis

It is a way to demonstrate the FDI flows and its motives. In the Heckscher-Ohlin model of neoclassical trade theory, FDI is considered as part of capital transfers from one country to another. This model was created on assumptions that commodities differ according to the available level of factors of production which end up leading to differences in the price of factors of production. A country with more capital will produce exports that requires more capital in their production or where there is no commodity trade, will transfer capital to a country abroad where there are more returns related to capital as compared to labour.

Additionally, the theory states that if there is an assumption that there are no trade barriers, that is, there is a free movement of goods and services then capital will flow from the low return countries to higher return countries (Denisia, 2010; Wilhems and Witter, 1998). In this hypothesis, if there are no monopolies or oligopolies then the risk is neutral. In this case the rate of return is the only factor that is considered to make the investment decision (Moosa, 2002). However, this hypothesis may be considered to be not true due to the existence of trade barriers and risks (Moosa, 2002).

According to Dunning (1988) it is wrong to associate the flow of FDI as part of neoclassical capital theory. He supported his claims by stating that FDI flows are not only capital based, there is technology transfer, organisational and management skills. He further stated that, within one firm resources can be transferred around in the process

of production whereas capital can only be transferred between two entities (Jonathan and Colin, 2006).

The neoclassical approach was also further criticized by Kindleberger (1969) due to the inability to explain thoroughly the flow of FDI. He argues that FDI requires market imperfections instead of perfect market (Faeth, 2009). Many scholars have tested this hypothesis however; it failed because it is inconsistent with the observations countries experience the flow of FDI simultaneously whereas it suggests that FDI flows in an ascending direction which is from the lower level of return to the higher rate of return countries.

3.1.2. The Market Size Hypothesis

This hypothesis states that FDI flows are mainly attracted to larger market countries than small markets, therefore, there is high flow of FDI to larger market countries. The host country's characteristics such as market size, market growth and presence of local competition plays a huge role as determinants of FDI flows in the world. The movement of FDI to larger markets and higher purchasing power enables firms to receive higher returns on their capital and increased profits from their investment. This is probably the reason there are high flows of FDI to markets of India, China and Indonesia since the 1990's. Despite the need for larger market size, it might be unnecessary for vertical FDI (Demirhan and Masca, 2008; Moosa, 2002; Sethi, et al, 2002).

For many studies which analysis the causality direction between market size and FDI flows, market size is measured as a proxy for GDP while some studies use the sales of the multinational company (Faeth, 2009). According to neoclassical models, the foreign investors are interested in sales therefore they increase their investments based on the level of sales in the host country. Moosa (2002) states that survey found that there is a relationship of FDI and sales of foreign Subsidiaries or GDP.

There are doubts however, based on the relationship between FDI flows and market size. The first states that the classical theory of domestic investment makes unrealistic assumptions. Secondly, there are high chances of statistical errors in the computerization of GDP and output in general. Thirdly, FDI based on the production of goods for consumption purposes in the host country maybe influenced by size of local markets instead of export-oriented FDI.

3.2. Theories Assuming Imperfect Market

The theory of market imperfection assumes that commodities are heterogeneous, there is information asymmetry and the price of commodities is determined by the market. This theory disregards perfect market. In this theory location hypothesis will be discussed and eclectic theory.

3.2.1. Location Hypothesis

Due to a given importance of FDI and the rise of its demand there has been an increase of literature examining the role played by location decisions of firms executed internationally. The choice of location of production is motivated by either external or internal factors to the firm. The location hypothesis exists as it assumes that other factors of production cannot move from one place to another such as labour and natural resources. For example, the location advantage of low wage is considered as one of the factors that influences the flow of FDI to other countries. This is probably a reason as to countries attracts more labour-intensive production FDI (Nagesh, 1994) and (Lei and Chen, 2011).

Empirical research done by the Overseas Development Institute (ODI) promotes the view that the price of labour is significant, especially for FDI in industries with abundant capital. However, high wages maybe viewed as a sign of good standard of labour, which disregards the relationship of low wages and FDI. It is important to state that only wage rate may not be the most important variable in the determinant of FDI as differences in different country labour productivity may also be a determining factor (Moosa, 2002). Advantages of location are in addition applied to other factors of production and not just low wages. A firm may establish factory in a country with high level of natural resources as a form of FDI. All these examples explain why despite of the risks involved in establishing company's operations abroad firms engage in FDI (Moosa, 2002; Hood and Young, 1990).

Additionally, the theory of location preference for FDI does not only rely on production, objectives of the company also influence the location preference for the investment and whether it is a new or sequential project (Dunning, 1998). The incentives to attract natural seeking, efficiency seeking, asset seeking and market seeking FDI differ (Chung and Alcacer, 2002; Nunnenkamp, 2002; Wadhwa and Sudhakara, 2011). For example, export based FDI cannot be influenced by the size of domestic market rather it will be influenced by the import-substituting FDI.

Dunning, (1998) presented findings of factors that influences the flow of FDI to international markets. The findings may be presented as efficiency seeking, market seeking, resource seeking and strategic asset seeking. Resource Seeking FDI is driven by factors such as presence of good natural resources, infrastructure to enable resources to be exploited and be sold out, the limitations put on FDI by government to promote knowledge oriented countries.

Market seeking FDI is influenced by factors such as domestic and regional markets. Big and developing markets, the cost of real wage, regulations, trade barriers which are tariffs and non-tariff related, presence and competitiveness of related firms. Efficiency seeking is mainly the cost of production related items such as labour and other inputs, no limitations on the exchange of goods and services between countries, exchange of goods in different stages of production such as final and intermediate stages, presence of agglomerative economies such as, zones where exports are processed and there is free trade, presence of trade incentives, grants and subsidised land and improved actions taken by the government in better education in order to improve economic activity.

Strategic asset seeking FDI is determined by the availability of knowledge based assets that promote investing firms to have ownership rights of location, learning the prices and the presence of assets for foreign investors.

3.2.1.1. Natural Resources Seeking Foreign Direct Investment

The country that has natural resources usually attracts investors to invest in them. Availability of natural resources is one of the main determinants of FDI. In this type or motive of FDI the resource seeking FDI firm is interested in obtaining natural resources such as raw materials and physical infrastructure. In most of the developing countries FDI has been driven mostly by the nature of its available natural resources (Kalyvas and Webster, 2011). However, recently FDI flows are not solely attracted by the availability of natural resources (Nunnenkamp, 2002). Seyoum (2011) argued that natural resources, skilled labour and infrastructure are not enough to determine the inflow of FDI rather formal and informal institutions play a huge role in determining the flow of FDI (Kinoshita and Campos, 2002).

3.2.1.2. Market Seeking Foreign Direct Investment

The objective of FDI is based on market seeking is to serve the local market directly. That is the main aim is to penetrate the market maximize profits and penetrate the foreign markets and at the cost of exporting (Brouthers et al, 2008; Wadhwa and Sudhakara, 2011; Franco et al, 2010). The foreign firm established in the host country will share the opportunities brought by market size and per capita income, market growth, structure of domestic market and consumer preferences in the host country (Kudina and Jakubiak, 2008; Sauvant, 2008).

The idea to invest in a host country is also motivated by local or regional markets. The motive behind it is to avoid regulations, tariffs or any other barrier. This form of investment is known as "tariff jumping investment" (Kalyvas and Webster, 2011). However, other than market limitations and market size, firms may engage in market seeking investment once their main suppliers, rivals and consumers have set up foreign producing facilities. That is, they go abroad with them to maintain and strengthen their market share.

3.2.1.3. Efficiency Seeking Type of Foreign Direct Investment

This type of investment is also known as 'off shoring'. This type of investment is encouraged by establishing new source of competitiveness for firms and enters into sectors and areas of production where costs of production are low. This means that the lower the costs of labour the more the FDI inflows attracted. It is a location advantage feature for attracting FDI. An example can be a mobile foreign company from the US established in South Africa to serve US or UK. Generally, the efficiency seeking FDI is usually conducted by manufacturing, distribution and service multinationals from countries with high labour costs (Sauvant, 2008) that starts to operate in countries with low real cost of labour to supply labour intensified production of goods and services. In order to attract such investments, host countries have established policies towards free trade or zones that processes exports (Kudina and Jakubiak, 2008).

3.2.1.4. Strategic Seeking Type of Foreign Direct Investment

This form of investment is influenced by world or regional strategies into foreign networks of created assets like technology, organisational ability and markets. Thus, firms become trans-nationalised in order to create, sustain or maintain

competitive positions (Wadhwa and Sudhakara, 2011). Usually this is achieved by obtaining partly or wholly the proprietary assets of another country and integrating them in their subsidiary network (Sauvant, 2008; Kalyvas and Webster, 2011).

3.2.2. Eclectic Theory

The Ownership Location Internalization (OLI) paradigm is one of the most important and strong framework to explain theories of FDI (Dunning, 2001). This was organised by integrating hypothesis of ownership, internalisation and location by Dunning (1979). The eclectic theory was brought by linking the competitive theories like the structural market failure hypothesis of Hymer and Caves the internalization approach of Buckley and Casson, as well as the location part to the theory (Denisia, 2010).

According to the Eclectic theory, the Ownership, internalization and location aspect of the theory should be achieved at first prior the firm embarking on FDI. Firstly, the firm must have an asset that it owns. This will give that particular firm an advantage over other firms. Secondly, the firm ought to internalise these assets within the firm not to contract them, selling leasing or licensing. Thirdly, there ought to be an advantage in setting up production in a different country not to rely on exports. If these three conditions are absent then it is good for the world economy to be served by exports only.

The ownership specific advantages are assets which are completely owned by firms which can be used to earn as much profit and economic rents as possible. These include good quality level of management, access to factor inputs, access to product inputs and technological capabilities. The ownership specific asset is important because through it, the firm owner can limitlessly improve the product in order to stand the market competition.

The location advantage goods owned by a country should favour production and exporting. They include lower transportation costs, production and communication costs, availability of natural resources, good infrastructure, good governance with good business environment (Faeth, 2009) and (Jonathan and Colin, 2006). Internalisation specific advantages results when firms produce internally and this could be seen as the way firms maximise the gains from their ownership advantages to overcome market imperfections.

This paradigm explains the motive of firms to invest internationally, what the

preconditions are, where they invest and also the reason why they select FDI out of the many possible forms of foreign market entry (Dunning, 2001). Regardless of the importance of the OLI paradigm in explaining FDI, the theory has been criticised for ignoring another aspect of FDI theory which suggests that FDI is a dynamic process (Jonathan and Colin, 2006). Dunning (1988) in his later study showed that the advantages and disadvantages of the Eclectic differed from country to country because other countries are developed while others are developing and the size of firms and the firm objectives such as assembling, innovatory etc. The theory also suggested that the benefits from the ownership, internalization and location will change over time (Moosa, 2002).

3.2.3. Modernization and Dependency Theory of FDI

Modernization and Dependency theories are used to explain the dichotomy of FDI. The modernization theory is basically based on the neoclassical and endogenous growth theories which advocates for the positive effects of FDI on developing countries. It states that, FDI flows to developing countries will promote economic growth. The theory is based on the fundamental principle that, for economies to grow there is need for capital investment. Therefore, through FDI flows developing countries will receive capital investment hence experience economic growth.

According to the neoclassical view, FDI flow contributes significantly to the transfer of technology to the developing economies. The theory states firmly that, there is need for technological transfer from the developed economies to the developing countries because most of the developing countries lack good infrastructures and have poor technology, social and economic stability that will promote growth (Calvo and Sanchez-Robles, 2002).

Kumar and Pradhan (2002) further stated that, FDI flows brings a lot of benefits in the receiving economies especially developing countries as it comes with managerial skills, organisational and the know-how ability, market access through the marketing channels of Multinational companies. All these aspects of FDI will contribute to high levels of human capital development, economic growth to the country hence high capital accumulation.

On the other hand, the dependency theory of FDI states that, the flow of FDI to developing countries has negative impact on economic growth and development.

According to Bornschier and Chase-Dunn (1985) stated that, prevailing of foreign investments leads to formation of monopoly in the economy's industrial structure leading to ''underutilization of productive forces.'' The state of the argument is that, the economy will not grow organically but rather will develop in a disarticulated manner (Amin, 1974). This mainly because the forward link and multiplier effect that, the demand in one sector of the economy which should create demand in another sector is weak due to monopoly power. This argument is important as most of the African countries are experiencing a skewed foreign investment on the extraction sector however the demand does not flow or benefit other sectors (Pigato, 2000).

3.3. Determinants of Foreign Direct Investment

There are several factors which plays a phenomenal role with regard to attraction of FDIs to a particular country. These factors are considered to be the stimulators of economic prosperity and flourish of investments. Onyeiwu and Shrestha (2004) stated in their 'Determinants of FDI in Africa' article that, there is need to have a conduce environment in order to attract foreign investors, hence the main issue in African countries to maintain which then results in low and uneven FDI in African economies. Inflow of FDI is determined by many factors which follow under different categories such as political, social, geographical, technological and economic factors. This are explained as follows:

3.3.1. Economical factors

GDP growth rate is a very important factor as it says a lot about the competitiveness of the country in the world. It also shows the market size, demand and supply level of goods and services in the economy. GDP covers phenomenal aspect of the economy such as the population, thus, the larger the population the larger the GDP expected as well as the higher the productivity level. Therefore, this factor is a major determinant of FDI (Nunnenkamp, 2002). Asiedu (2006) confirms that, market size determines the flow of FDI to African countries. This corresponds with perfect market assumption theory that states that market size and the differential rate of return affects

Openness of the economy is a question of as to how much the country is open to free trade, how liberal is the economy. This is very important as it determines the easiness of goods, services and labour to enter and leave the country. The more the

country is flexible to liberalizing trade the more it is to attract FDI (Asiedu, 2006). However, this was opposite to the BRICKS countries (Nunnenkam, 2002).

Inflation rate is very important to note that high inflation results in low levels of FDIs because, high inflation means that the currency of that country has been devaluated hence this leads to low profitability levels (Kok and Acikgoz, 2009). It is also a sign of poor monetary and fiscal policy implementations which then gives the foreign investors a negative perception of the country in question (Nunnenkamp, 2002).

The country's tax laws are very important in the context of attracting FDI. Hess (2000) identifies high corporate taxes as an inevitable barrier to FDI. Inconsistent and poorly implemented tax laws portrays unfriendly business environment. Therefore, there is need for the country to set favourable tax laws that will enhance the ability to attract foreign investors (Kok and Acikgoz 2000).

Infrastructure is one of the factors that attract foreign investors. Foreign investors prefer to risk their investment in countries which has well developed infrastructure such as roads, airports, water sources, electricity, internet access, telephone and other factors. This is mainly because these factors contribute significantly in the production process. Therefore, infrastructure needs to be well developed and well maintained in order to attract foreign investors (Morisset 2000).

Availability of natural resources play a huge role in the production process as it provides the producers with inputs. Previous studies show that natural resources positively affect the flow of FDI (Ramasamy et al, 2012; Sanfilipo, 2010). This attracts foreign investors as they aim towards maximizing utility of the natural resources hence gain more. Asiedu, (2006) proved that for natural resources affect the flow of FDI for African countries. Usually the foreign investors target the natural resource rich countries in order to benefit by buying inputs at lower prices and gain millions by selling at higher prices within the country as well as abroad (Asiedu, 2006). Some scholars however disagreed with the empirical findings those natural resources affect the flow of FDI to African countries more especially. For example, Cheung and Quian (2009) states that both market size and resource endowments are main drivers of FDI to Africa but they are not the main motivators and Zhang et al, (2013) states that China is attracted to the African markets than its natural resources.

High external debt at World Bank or IMF is a sign of poor fiscal and monetary policies in country. This often burdens the ability of African countries to provide efficiently basic infrastructure. In addition, the higher the debt/GDP ratio reduces the

flow of FDI to the country whereas the lower the ratio will have an opposite effect (Obwona, 2001).

High interest rates a generally perceived to have a positive effect in the economy as they attract FDIs as well as domestic investment. They stimulate gains in the returns of the projects implemented whereas low interest rates, reduces the level of investment but increases the level borrowing. Therefore, in order to attract foreign investors, it is empirical to maintain good real interest rates (Onyeiwu & Shrestha, 2004).

Large size of international reserves indicates a sound economic environment. This boasts the confidence of foreign investors on the host country at hand. There is need for the country to have international reserves as this shows the economical stance and health of a particular country (Onyeiwu & Shrestha, 2004).

3.3.2. Geographical factors

Geographical location shows the extent at which the country can access the sea portals, and its location to busy areas boast the market size, demand and supply hence productivity. Therefore, the location of the country plays an imperative role in attracting foreign investors (Asiedu, 2002). This is a natural effect that cannot be changed however; it impedes the level of FDI flows.

3.3.3. Political factors

Political Stability is one of the most important factors. The political stability attracts foreign investors therefore; host countries must make sure that the countries are politically friendly, safe and secure. This is the main reason why African countries attract less foreign investment. There is political instability which is not good for investment. Therefore, it is important for countries to maintain politically stable countries (Asiedu, 2006). Political stability may affect the flow of FDI in four different ways, which is through government stability, internal conflict external conflict and ethnic tensions. Political instability may cause limited flow of FDI to that particular country.

Rule of Law shows the quality of the legal system and contract enforcement (Bailey, 2017). It has a strong effect on welfare of the citizens, stability and growth. Strong rule of law provides protection of property rights and reduces transaction costs for foreign firms (Khoury and Peng, 2011). Additionally, Bailey (2017) strong rule of

law gives assurance and decreases uncertainty and improves firms' efficiency and profitability. If the country has weak rule of law this may encourage firm liquidation of current investment and this can chase away from investors (Hewko, 2002). According to the previous studies, rule of law has positive effect on the inflow of FDI (Gani, 2007; Khoury and Peng, 2011). The previous FDI studies to Africa such as studies by Asiedu (2006), Cleeve (2012) and Naude and Krugell (2007) confirms the postulation that rule of law positively affect the flow of FDI in Africa.

Corruption is known to cause social uncertainties and involves hidden cost (Kwok and Tadesse, 2006) which affects the flow of FDI. This was supported by some empirical studies like Egger and Winner (2006), Habib and Zurawicki (2002). Most of the African countries are corrupted. The corruption level is high on both the private and public sector. Therefore, there are few foreign investors investing in Africa. It is important for African countries to reduce the corruption level in order to attract more foreign investors (Asiedu,2006).

All of the above factors affect the flow of FDI to African countries. It is important to note that, these factors may coherently or independently affect the flow of FDI. Thus, these factors differ from each country in terms of degree.

3.4. Effects of Foreign Direct Investment

Most of the studies have shown the ways through which FDI contributes to the host countries. Some of them stated that, FDI contributes to the large accumulated capital in the economies of host countries, improve the competitiveness of the local firms (Zhang, 2014), it also reinforces the technology level in the recipient countries and it helps to improve human capital (Jenkins, 2006) as well as increase the level of productivity in a country hence increased levels of exports.

According to Buckley, Clegg, Wang and Cross (2002) the growth contribution of FDI to the receiving country is determined by the environment of the country. The environment of the country includes a lot of factors that have been discussed above such as savings rate in the host country, trade liberalization and the technological development. They stated that, countries with high savings, open trade regime and high level of technology attracts more FDI.

3.4.1. Foreign Direct Investment and Technological Spill Overs

According to Dunning (1993) FDI flows have positive benefits to the receiving country. The flow of FDI is linked to the transfer of technology to the developing countries. This leads to high level of productivity, high Gross Domestic Product and improved living standards of people. MNC's in host countries reduces the level of unemployment (Jenkins, 2006) and poverty rate. In addition, MNC's are linked to the patents, trade secrets, marketing strategies and management strategies. Therefore, all these will increase the openness of the country to trade.

According to Borensztein et al (1998) the MNC's are technologically powerful, they contribute to the largely to the RD projects expenditures in host countries. They furthermore contribute to the number of technical professional workers (Markusen, 1995). Through the flow of FDI the host countries gain immediate access to the exploration of better technology this ultimately improve the stock and capital level of the country.

The successful spill over of technologies adopted from multinational companies is also said to be determined by the financial sector of the country. The financial sector is the engine of the economy. Therefore, it ought to be well observed and taken care of. Hermes and Lensink (2003) stated that the development of both stock market and banks are essential for the attraction of FDI. According to the author the developed financial institutions contributes efficiently to the diffusion of technology that is associated to FDI flows.

The work of Alfaro et al (2004) found out that, for the fast diffusion of technology associated with FDI, it is essential to improve financial sector than the human capital. That is because the financial sector mitigates the losses made by the local firms from imitating production by the multinational companies. This finding has been verified again by Alfaro et al (2010).

3.4.2. Foreign Direct Investment and Productivity Spillovers

According to Kinoshita (2001) using the data from manufacturing firms in Czech using firm-level panel data in 1995 and 1998, finds out that there is an insignificant horizontal spillover effects, however he argues that the spillover effects usually occur in firms that are based more on RD. Thus, FDI productivity spillover effects are not as intense as the effect on RD.

According to Keller and Yeaple (2009), using US firm level data, postulates that multinational companies create statistically significant horizontal spillovers, and states that firms in sophisticated technology industries with high RD projects have an advantage of experiencing strong spillovers from FDI. They found insignificant effect of FDI on firms with low technology.

Lately, the focus of researchers is directed towards the hypothesis that knowledge and technology spillovers are bound to be found in vertical linkages unlike horizontal linkages. This is mainly because multinational companies are to domestic firms or rivals while they offering help to the domestic firms in order to get good quality inputs at lower prices and make sure that the inputs are supplied on time. Schoors and van der Tol (2002), using Hungarian firm level data for 1997- 1998, examined the effect of FDI on the labour productivity. They found the evidence of positive horizontal and forward spillovers however they also found negative backward spillovers.

Jha (2015) carried a study about found out that 1percent increase of FDI results in 0.07percentincrease in GDP of China and 0.02percent increase in GDP of India. Additionally, they found that China's growth is more affected by FDI, than India's growth. From the percentages we learn that indeed there FDI positively affect countries economic growth and development.

Kaushal (2016) found out that, FDI has a main role to play in economic development of the receiving nation. Many countries have been utilizing foreign investment and foreign technology to speedy economic growth. FDI invests large lump sums of capital ensuring large amount of domestic capital, high production level and more employment opportunities in the developing countries, which is a chief step towards the economic growth of the country.

Wei and Balasubramanyam (2004) compared to the level of FDI inflow to other regions. They found that FDI in Africa is one tenth of that of the world, too low. The paper also concluded that Africa may not attract more FDI because of the structure and composition of its manufacturing, service sectors and her endowments of human capital and the country is in a position to unbundle the FDI package effectively and rely on sources other than FDI for its capital requirements.

3.4.3. The Effect of Foreign Direct Investment on Human Capital

Besides contributing to the technological level of production, it also brings the

know-how to the country. Thus, due to adoption of new technology through the MNC's, there is also teaching element of how to do certain things based on the nature of the company. That is, MNC's equip the labour with the necessary skills which contributes to improved levels of human capital.

The training from MNC to the host countries affects most levels of employees, from lower levels to top levels of management. While most recipients of training are employed in the MNCs' own affiliates, the beneficiaries also include employees among the MNCs' suppliers, subcontractors and customers. The types of training include the on-the-job training to seminars and more formal schooling to overseas education, may be at parent company, it depends on the skill required. The skills gained through MNC spillovers maybe indirect.

There is a significant contribution of FDI on high level education. This is mainly because MNC's required highly skilled labour. The MNC contributes to high education through sponsorships and development of the universities in different dimensions and forms. UNCTAD (1994:218) states that the MNCs need for qualified graduates is in the form of financial support, especially to business schools and science facilities. In Thailand, various training programmes are run jointly by international chambers of commerce and the MNC's are affiliates and the government of Thailand. In Malaysia, there have been many skill development centres have been established by the government, local business and foreign MNCs.

3.4.4. Foreign Direct Investment and Absorptive Investment

Absorptive capacity defined as the technology gap between the foreign and domestic firms by Castellani and Zanfei (2003). They found out that there is a positive spillovers in Italy, negative spillovers in Spain and Insignificant horizontal effect of spillovers in France. They argued that low absorptive capacity implying high technology gaps are the sources of significant productivity FDI spillovers to local firms.

Barrios and Strobl (2002) find that the exporting Spanish firms are the only firms benefiting from FDI spillovers because they are at a better advantage to absorb foreign technology through the Spanish market's exposure to international competition. That is, with international competition the markets gain better technology and the skills needed for production.

3.4.5. Foreign Direct Investment and the Business Environment

The business environment is one of the factors affecting the rate of FDI brought into the host country hence the spillovers. Foreign investors invest in good business environments and they usually transfer better technology to the host country so that they are able to maximize profits and hence have more to spill.

The business environment can also affect the structure of ownership, which is related with the quality of FDI. Javorcik and Saggi (2004) for example, stated that, foreign investments that have higher level of technology are usually owned fully, rather than as joint-ventures, this is so to protect their assets. A joint-venture strategy may raise the risk for undesired leakages of the MNCs technology as the domestic rivals may use the inside information in the production of other goods for which it does not cooperate with the MNC.

An environment with lower levels of protection of property rights, MNCs usually create fully owned investments so that they protect their technological innovations from being copied. Hence, if these hypotheses are correct one will see larger positive spillovers from fully owned foreign firms than from partially-owned foreign firms and the largest spillovers from wholly-owned in better business environment.

3.4.6. Foreign Direct Investment Spillovers and Research and Development

The RD FDI spillovers are in different forms. There is the spillover linkage from the multinational companies to the local firms which is called the international spillovers and from the local firms to the multinational companies which is called the reverse. This kind are general terms of spillovers which when present has an impact on the entire economy. For example, the international spillovers may occur through reducing the absorptive capacity between the host and the original country. May also improve the know-how effect and help rise the human capital threshold. The reverse spillovers occur when the local firms provide the multinational company with the material for production, customers and many other factors which MNC's may need to establish and run their business in the foreign land.

The other means and terms of RD FDI spillovers are the horizontal and vertical spillovers. The horizontal spillovers occur between the firms belonging to the industry. That is, the multinational enterprise from the agricultural industry investing in the

agricultural industry of the host country hence realizing the positive spillovers in that form. The vertical spillovers are not only limited to the same industry but to the entire economy. It focuses on the MNC's, the suppliers and customers. The vertical relationship between firms such as outsourcing and or absorptive capacity influences spillovers.

The horizontal spillovers of RD FDI occur when the local firms receive technological information from the MNC's of the same industry. These spillovers are seen to be occurring in three different ways stated below;

a) The demonstration effect: This is all about the MNC's marketing, managerial and technological knowledge that copied by the local firms. That is, the inclusion of the local firms by the MNC may trigger the spillover of the aforementioned skills on the local investors which is a positive effect. (Gerschenberg, 1987)
b) Through the horizontal spillovers there is the mobility of skilled personnel from the MNC to the local firms. This has a positive effect as it will facilitate knowledge on local workers and managers. This is will help to meet the human capital threshold in the developing and emerging markets. (Gorg and Strob 2005)
c) With the horizontal spillovers there will be competition where by the local firms equips themselves with good technology so that they can stand the competition brought by the foreign companies. This is in order not losing the market share entirely to the foreign investors. It is a great way to improve the standard of the local firms and their production. It furthermore contributes to increased productivity of the local firms hence more growth and development in the economy (Gorg and greenerway 2004).

According to Keller and Yeaple (2009) there has been a positive effect of horizontal spillovers on the US manufacturing firms, and Sanchez- Sellero, Rosell-Martines and Gracia-Vazquez (2014) reported positive spillover effect in Spain. However, Reganati and Sica (2007) find limited information on the positive spillovers for the Italian manufacturing firms and the same was found on the Colombian firms by Kugler (2006).

The horizontal spillovers can also operate in an inverse manner whereby the RD FDI related spillovers are from the domestic firms to the Multinational companies. For example, the acquisition of raw and intermediate inputs during the production, the market and other general information about how the market performance and how they could strategies their companies (Van Pottelberghe Potterie and Lichtenberg 2001: Driffield and Love 2003; Blanchard and Matthiew 2016). According to Driffield and Love (2003), who carried out a study in the UK manufacturing sector over the 1984-1992 found that reserve spillovers are limited to RD-intensive industries and are restricted to locations with a high degree of spatial concentration in industries.

It has been reported by French Firms over the 1990-2003 by Blanchard and Mathieu (2016) that the reverse spillovers are visible not only in RD-intensive manufacturing industries but also in the knowledge intensive service industries.

The vertical spillovers occur when the knowledge from the MNC reach the customers and suppliers in the host country. The spillovers usually occur through transactions at first, such as outsourcing contracts, cooperative agreements or arm length transactions. They can also be backward when the MNC's are supplied by the local firms in the upstream sector or forward when the local firms purchase inputs from the MNC's (Gorg and Greenaway 2004; Clark et al. 2011). However, there is a greater consensus for vertical spillovers over horizontal (Harvranek and Irsova 2011) and backward spillovers are more visible that forward.

With respect to forward linkages between MNCs' outsourcers and local customers, knowledge transfer occurs in three different ways as indicated below;

a) Product embodied knowledge and exchange with sale and customer service employees. The quality improvement in the production of goods as an effect of MNC's in the host country. This is due to the fact that with the presence of MNC's the local firms are able to learn and gain the Know-How in the production process.
b) The RD FDI related spillover effect may also depend on the technological capacity level of the host countries. The smaller the technological gap between the local firm and MNC's the larger the expected externalities. This shown by Liu et al. (2008) for knowledge spillovers in UK and by Behera (2015) in India. In this case the absorptive capacity shows the ability to assimilate and use the available external information.

c) The ability to outsource relationships and connections with other countries. There is limited literature on this channel however Girma and Gorg (2004) show that in the period 1980-1992 the MNC's affiliates have a greater propensity to outsource relationships that local firms do.

CHAPTER IV

EMPIRICAL ANALYSIS

This chapter present the method of analysis adopted by the study, type and sources of data, specification of the model, the theoretical framework and choice of variables, the techniques employed for data analysis and present the empirical results.

4.1. Theoretical Framework and Choice of Variables

The literature review showed that the relationship between FDI and the variables in the model. The theoretical justifications of sign expectations and the inclusion of the explanatory variables in the model is discussed below.

The dependent variable is FDI which is measured by the amount of capital net inflows and foreign projects established in host countries. According to the literature, the flow of FDI is uneven and determined by many factors of which some will be analysed by this study.

In this paper there are independent variables that used in the model. These variables are real GDP, natural resources, nominal exchange rate and openness to trade. The variables are explained in details below.

Real Gross Domestic Product is a proxy for the market size of the host country, which shows the level of demand of output in the host country. This also indicates the potential of the country. Jyun-Yi, Wu and Hsu Chin-Chiang (2008) states that, if the country has satisfying initial level of GDP, technology and human capital it is capable to attract more FDI. Farkas (2012) tested the relationship between FDI and GDP and found significant output; they stated that the effect depends on the absorptive capacity. According to the literature, a positive sign is expected indicating that there is a positive relationship between FDI flows and RGDP. This is supported by the market size hypothesis under the perfect market assumption theory of FDI.

Abundance of Natural Resources (RES) according to theory of location under the resource seeking type of FDI as well as the eclectic theory (OLI), the availability of natural resources especially in Sub Saharan countries plays a huge role in the attraction of FDI flows. Many countries embark on FDI flows whereby the host country has natural resources and less skilled labour; in this case the market size of the host country is not a problem as the foreign company aims at vertical FDI. As the eclectic theory

stated, ceteris paribus, countries that are natural resources rich attract more FDI flows.

Natural resources play a huge role in the production process as it provides the producers with inputs. Previous studies showed that natural resources positively affect the flow of FDI (Ramasamy et al, 2012; Sanfilipo, 2010). This attracts foreign investors as they aim towards maximizing utility of the natural resources hence gain more. Asiedu, (2006) proved that natural resources affect the flow of FDI for African countries. Usually the foreign investors target the natural resource rich countries in order to benefit by buying inputs at lower prices and gain millions by selling at higher prices within the country as well as abroad (Asiedu, 2006; Rodriguez-Pose and Cols, 2017). Some scholars however disagree with the empirical findings those natural resources affect the flow of FDI to African countries more especially. For example, Cheung and Quian (2009) states that both market size and resource endowments are main drivers of FDI to Africa but they are not the main motivators and Zhang et al, (2013) states that China is attracted to the African markets than its natural resources. However, a positive relationship is expected between FDI flow and natural resources.

Openness (OPENS) is usually measured by the total trade as percentage of GDP. In the literature review, trade liberalization is a very important factor that affects the flow of FDI to foreign countries. This proxy is found as very important for foreign investors who are interested in the export market. A positive sign is expected.

Nominal exchange rate (NER), the effect of exchange rate on the flow of FDI is said to inconclusive. According to Elbadawi and Mwega (1997), who used Real exchange rate postulated that, depreciation of the currency will attract more FDI based on the fact that investors will be looking forward to making wealth and the easiness of company establishment as the raw materials and equipment's will be cheap to purchase. However, depreciation of currency leads to high costs of imported inputs and remittances becomes less. Therefore, in this study a negative sign is expected as an impact on FDI.

4.2. Type of data and method of data collection

The study uses panel data which will be collected using secondary method of data collection. The main data sources are the World Bank, International Monetary Fund's (IMF) financial statistics and World Development Indicator (WDI). The study period will be from 2001 to 2016.

4.3 Model Specification

Following the literature review above, the study employs the use of macroeconomic variables. It applies the (Dalia, 2010) and (Nicholas A, 2009) panel model which was adopted using the panel cointegration approach to some of the middle income African countries to establish the determinants of FDI in Africa. The selected middle income African countries are Botswana, Republic of South Africa, Nigeria, Morocco, Kenya, Mauritius, Egypt, Algeria and Angola. These countries show nearly the same pattern of growth and development even though Botswana relatively has smaller market size since it has small population. The model is also adjusted to fit the case of panel data analysis and for ease of implementation. In this study, FDI will be expressed as a function of Gross Domestic Product (GDP), Openness to trade (OPENS), availability of Natural resources (RES) and nominal exchange rate (NER). The equation is simply expressed as:

$$FDI = f(GDP, \quad RES, \quad Opens, \quad NER,)$$

This equation can be re-written as follows:

$$LFDI_t = \beta_1 LGDP_t + \beta_3 LNES_t + \beta_4 LRES_t + \beta_6 LOpens_t + \varepsilon_t$$

4.4. Techniques for Data Analysis

There is need to test stationary of variables in cross section data analysis. This is mainly to avoid the problem of having spurious correlations in the data. Therefore, for this purpose, Im et al. and Levin et al panel unit root tests were applied for the inspection of the existence of non-stationary problem in the variables.

Then the panel cointegration technique was employed to test for long term relationship between unemployment rate and the aforementioned variables adopted for the study. After estimation of the model, various diagnostic tests are carried out on the residuals to ascertain the validity of the model.

After establishing the panel cointegration, long run cointegration vector was estimated by using Fully Modified OLS (FMOLS) which was developed by Mc Coskey and Kao and Dynamic OLS (DOLS). The authors noted that DOLS has better sample properties as compared to OLS and FMOLS estimators. Descriptive summary statistics

of the variables in the model was undertaken to portray the basic features of the data in the study. This is followed by a unit root test, cointegration test and an interpretation of the vector error correction model. Lastly, diagnostic residual tests are provided.

4.5. Summary of descriptive statistics

Descriptive statistics are important in that they describe the main features of a collection of data. Through the use of descriptive statistics we can provide an analysis of data that describes or show, and summarizes data in a meaningful way such that, for example patterns emerge from the data. Measures of central tendency are employed in describing the central position of a frequency of a distribution of a group of data. The descriptive statistics results are presented in table 5.1 below.

Table 4

Summary of Descriptive Statistics

	LNFDI	LNGDP	LNNES	LNRES	LNTRADE
Mean	20.7	24.7	3.20	1.26	4.13
Median	21.0	24.9	2.97	1.79	4.14
Maximum	23.2	27.0	5.72	4.06	4.84
Minimum	15.5	22.2	1.50	-6.77	3.05
Std. Dev.	1.60	1.30	1.19	2.47	0.37
Skewness	-0.80	-0.14	0.26	-1.90	-0.30
Kurtosis	3.36	1.84	1.54	5.92	2.82
Jarque-Bera	16.7	8.79	14.86	143.8	2.52
Probability	0.00	0.01	0.00	0.00	0.28
Sum	3086.55	3688.35	477.02	188.36	616.64
Sum Sq.Dev.	379.63	250.50	212.99	904.54	21.14
Observations	149	149	149	149	149

From table 4.1 above, the availability of natural resources over the period of study had an average of 1.26 and a standard deviation of 2.47, which implies a variation of 1.21 from the mean. This variation of 1.21 from the mean indicates that natural resources have enormous impact on FDI in Africa. On the other hand, Inflation had a mean value of 1.82 and a standard deviation of 0.97 which implies a variation of -0.84

from the mean. The implication of this variation shows that Inflation has had a lower impact on FDI to African countries.

Newbold (1999) posits that the possible source for skewness in the data is the presence of outliers; this could result from large number of observations leading to large mean values resulting in positive skewness. On the other hand, small mean values results in negatively skewed data. If the distribution is symmetric, then the mean is equal to the median and the distribution will have zero skewness. Skewness is defined in terms of the relationship between the mean and the median; if the mean is greater than the median, then the data is positively skewed and vice versa. An examination of the distribution of the variables in table 5.1 shows negative values of skewness, implying that the distribution is skewed to the left except for LNES which is skewed to the right as it has positive values of skewness.

Kurtosis provides a measure of the weight in the tails of a probability density function. For a normal distribution, the Kurtosis should be 3. By examining the values of kurtosis in the table above, it can be seen that the values varies around 3 which simply implies that the distribution tends to follow a normal distribution.

4.6. Results of Panel Unit Root Test

Testing for stationary ensures that the variables in the model are not subject to spurious correlations. For panel data and for this study, Im, Perasan and Shin W-Stat and Levin, Lin and Chu Panel unit root tests were employed to determine the stationary status of each variable included in the model. This was based on the inclusion of both individual intercept and individual trend. The unit root tests were carried out at levels and first differences.

Table 5

IM, Pesaran and Shin W-Stat Panel Unit Root Test

	Individual intercept				intercept and trend			
Variable	Levels		First difference		Levels		first difference	
ln FDI	0.00	34.0			0.62	0.98	0.00	98.0
Lngdp	0.00	43.4			0.40	0.98	0.00	0.87
Lntrade	0.67	0.45	0.00	0.98	0.98	0.55	0.00	0.55
Lres	1.00	34.2	0.00	67.5	0.21	0.78	0.00	0.65
Lner	0.87	10.5	0.00	67.0	0.67	98.5	0.00	98.7

Significant at the level of 5percent

Table 6

Levin, Lin and Chu Panel Unit Root Test

	Individual intercept(prb**)				İntercept and trend (prob **)			
Variable	Levels		first difference		Levels		firstdifference	
ln FDI	0.00	0.76			0.00	0.87		
Lngdp	0.00	0.90			0.27	0.79	0.00	0.09
Lntrade	0.39	90.7	0.00	9.78	0.01	0.78		
Lres	0.71	34.7	0.00	0.70	0.00	0.78		
Lner	0.39	76.9	0.00	10.0	0.95	0.76	0.04	0.78

Significant at the level of 5percent

The results in the tables above show that 3 variables are stationary at levels for both Im, Perasan and Shin W-Stat and Levin, Lin and Chu panel data unit root test at individual intercept and when intercept and trend were employed in testing for stationary using Im, Perasan and Shin W-Stat panel test, all variables were stationary at first difference whereas for Levin, Lin and Chu all variables were stable at levels except for GDP and nominal exchange rate. These results provide evidence of non-stationarity of some series at levels. Therefore, we failed to reject the null hypothesis which implies that a panel unit root exist and it is satisfactory to say that there exist a panel unit root in

some variables at levels. Hence, most of the variables were differenced once. The results indicate that all the variables are stationary at first difference. The introduction of a trend made no difference as some variables remained non-stationary at levels. However, when first differenced the variables became stationary. This implies that the variables are integrated of order one (I (1)).

According to Im, Perasan and Shin W-Stat panel unit root test with intercept and trend result, all the variables are I(1), which means that we can investigate whether they are moving together or not. For that reason, we utilize panel cointegration test in order to present evidence that indeed there exist a long run relationship between FDI in Africa and the explanatory variables.

A summary of panel unit root test at first difference and no intercept (none) is presented below.

Table 7

Summary of Panel Unit Root Statistics at First Difference

Summary Statistics	LnFDI		lnGDP		lnNatRes		LnTrade		lnExc Rate	
Levin,Lin & Chu t	0.00	0.78	0.00	9.70	0.00	4.54	0.00	0.98	0.00	9.70
ADF-Fisher chi-square	0.00	0.98	0.00	9.05	0.00	4.89	0.00	0.89	0.00	0.89
PP-Fisher chi-square	0.00	78.7	0.00	98.0	0.00	8.90	0.00	0.89	0.00	9.00

Significant at the level of 1 percent

The table above is a summary of all panel unit root test conducted at 1st difference and no exogenous variable. The output shows that at first difference with no exogenous variable there is no unit root. Variables are stable and stationary at 1 percent level of significance. Through this output and the results obtained above, we conclude that all variables are stationary at first difference hence we proceed to test for long run relationship between variables using panel cointegration test.

4.7. Results of Panel Cointegration Test

The results of the panel unit root test above show that variables are integrated of order one. To determine the existence of a long run relationship between these variables, there is a need to carry out a panel cointegration test so as to integrate the short-run dynamics with the long- run equilibrium in the study. The analysis of cointegration test is that; if two or more series are non-stationary, but the combination of them is stationary, then the series are said to be cointegrated. That is, even though the variables are non-stationary at levels, they will move closely together overtime and the difference between them in the long-run will be stable or stationary. And that, for any specified model to be valid there must be at least one co-integrated vector (Green, 2008).

Table 8

Pedroni Panel Cointegration Test

Alternative hypothesis: common AR coefs. (within-dimension)				
Null Hypothesis: No Cointegration between variables				
			Weighted	
	Statistic	Prob.	Statistic	Prob.
Panel v-Statistic	-1.49	0.93	-1.94	0.97
Panel rho-Statistic	2.20	0.98	2.55	0.99
Panel PP-Statistic	-6.70	0.00	-5.95	0.00
Panel ADF-Statistic	-2.87	0.00	-2.03	0.02
Alternative hypothesis: individual AR coefs. (between-dimension)				
	Statistic	Prob.		
Group rho-Statistic	3.44	0.99		
Group PP-Statistic	-11.14	0.00		
Group ADF-Statistic	-2.52	0.00		

Panel cointegration results shows that out of the 11 probability output presented in table 4.5 there is cointegration of the variables. Whereas the same test with no deterministic intercept and trend only 2 variables are significant which means we can accept the null hypothesis. However, with the first two tests, there is clear indication of cointegration, therefore with majority rule principle; it is safe to conclude that, there is

long run relationship of variables hence rejecting the null hypothesis.

Table 9

Kao Panel Cointegration Test

			t-Statistic	Prob.
ADF			-1.68	0.04
Residual variance			0.83	
HAC variance			0.58	
Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID(-1)	-0.64	0.13	-5.95	0.00
D(RESID(-1))	-0.07	0.03	-0.78	0.44

The table above present the output of cointegration test using Kao Panel cointegration test. This test, like the Pedroni panel cointegration tests, it shows that there is cointegration of variables since the probability is slightly below 5percent.

Table 10

The Johansen Fisher Panel Cointegration Test at 5percent level of significance

Unrestricted Cointegration Rank Test (Trace and Maximum Eigenvalue)				
Hypothesized	Fisher Stat.*		Fisher Stat.*	
No. of CE(s)	(from trace test)	Prob.	(from max-eigen test)	Prob.
None	169.3	0.00	129.4	0.00
At most 1	89.26	0.00	68.52	0.00
At most 2	40.64	0.00	37.18	0.00
At most 3	17.65	0.34	17.65	0.34

The result indicates 2 strong regression cointegration of the variables. Therefore we reject the null hypothesis.

4.8. Results of the Panel Vector Error Correction Model Estimation

With the conclusion that there is long run relationship between variables there is need to run the panel vector error correction model (VECM). Therefore the system equation was run in order to obtain the p-value of error correction term C1 which shows

the causality direction between the dependent and the explanatory variables. When the error correction term is negative and significant there is a long run causality running from the independent variables to dependent variable or there would be speed of adjustment towards long run equilibrium.

From the system equation output the error correction term coefficient is negative (-0.5) and the p-value is statistically significant. Therefore is long run causality between variables. LNGDP shows causality direction in the long run as the error correction term coefficient is negative and the p-value is significant at 0.008. The Wald test shows that in the short run lnGDP also has causality direction with other variables as the p-value is significant at 0.00. We then reject the null hypothesis that C (10) = C (11) = 0.

The exchange rate error correction term coefficient is negative (-0.007) and the p-value is statistically significant (0.0067). This means there is a long run causality direction between exchange rate and the estimated variables in the model. However the Wald test shows that there is no short run causality direction between the values as the p-value is high at 22 percent.

The error correction term for trade is statistically insignificant at 17 percent but the C1 coefficient is negative. Therefore we conclude that there is no long run causality direction between trade and other variables. The Wald test also shows that there is no causality direction in the short run because the p-value is high at 46.1 percent. Therefore we accept the hypothesis that C (10) = C (11) = 0.

The C1 coefficient for natural resources is positive (0.004) and the probability is 17 percent. This means that there is no long run causality direction between natural resources and other model variables. The Wald test also indicates no short run causality direction between the variables as the p-value is 49 percent which is high. Therefore we accept the null hypothesis.

We conclude that natural resources and trade has no both long run and short run causality direction with other variables of the model. However, there is both short and long run causality direction between GDP and the other model variables. For nominal exchange rate, there is only the long run causality direction with other variables.

Table 11

Panel Fully Modified Least Squares (FMOLS)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNGDP	1.17	0.03	36.75	0.00
LNNES	-0.71	0.04	-14.72	0.00
LNRES	0.15	0.03	4.50	0.00
LNTRADE	0.96	0.03	26.83	0.00
R-squared	0.71	Mean dependent var		20.75
Adjusted R-squared	0.68	S.D. dependent var		1.52
S.E. of regression	0.86	Sum squared resid		92.97
Long-run variance	0.49			

$$LNFDI = 0.96C + 1.18lnGDP - 0.71lnnes + 0.15lnres + 0.96lntrade$$

The value of the constant is excluded from the table. Pedroni (2000) the fully modified OLS (FMOLS) technique for Heterogeneous cointegrated panel was estimated. The FMOLS table is presented above. The variables are carrying expected signs and they are all significant at 1 percent level of significance. Due to the fact that the variables were tested as logarithms, they can therefore be interpreted as elasticities. The results match literature review and theory.

The DOLS cointegration method was also estimated using 1 lag and 1 lead. The test was carried out as pooled weighted panel method and the estimated output is presented below.

Table 12

Panel Dynamic Ordinary Least Squares (DOLS)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNGDP	1.40	0.20	6.89	0.00
LNNER	-1.84	0.54	-3.43	0.00
LNRES	-0.23	0.18	-1.29	0.19
LNTRADE	2.18	0.59	3.68	0.00
R-squared	0.81	Mean dependent var		20.69
Adjusted R-squared	0.71	S.D. dependent var		1.56
S.E. of regression	0.83	Sum squared resid		57.63
Long-run variance	0.47			

The coefficients are fixed in the equation below:

LNFDI = 0.87C + 1.40*LNGDP -1.84*LNNES -0.23*LNRES + 2.18*LNTRADE

Both FMOLS and DOLS show the same output in terms of signs but the statistical significance is different. In FMOLS exchange rate has negative sign whereas in DOLS is positive. In addition to that, DOLS shows a negative sign for GDP while FMOLS has a positive sign for GDP. The sign for exchange rate is ambiguous as stated by many scholars before, therefore it is possible to have different signs from two different methods. However, GDP as stated in the previous chapter, it is a proxy for market size. Therefore, many scholars stipulated that, the larger the market size the larger the attraction of FDI therefore the expected sign is positive. On the other hand, if the country is fully occupied with production facilities and high technologies, it is possible that it may not attract more FDI flows.

Table 13

Pairwise Granger Causality Test

	$\Delta lnFDI$	$\Delta lnGDP$	$\Delta lnRES$	$\Delta lnNER$	$\Delta lnTRADE$	$VECM$
$\Delta lnFDI$	–	0.72	0.22	0.63	0.18	0.00
$\Delta lnGDP$	0.00	–	0.76	0.75	0.53	0.00
$\Delta lnRES$	0.24	0.01	–	0.18	0.85	0.00
$\Delta lnNER$	0.79	0.00	0.29	–	0.48	0.00
$\Delta lnTRADE$	0.31	0.53	0.89	0.16	–	0.00

The probabilities of the granger causality test results are presented in the table above. The series were first differenced, and they indicated that, $\Delta lnFDI$ does not lead to any of the independent variables stated above. The first difference of GDP ($\Delta lnGDP$) indicated that, GDP does cause a change in the value of FDI. The rest of the variables does not granger cause any variable as their p-value is greater than the conventional p-value.

CHAPTER V

CONCLUSION AND POLICY IMPLICATION

5.1 Conclusion

The study attempts to investigate the importance, effects and determinants of the inflow of FDI in Africa. The main focus was the natural resources, market size which was measured using GDP as a proxy, nominal exchange rate and trade which is also a proxy for openness or trade liberalization. A regression model was run on the panel data for the 10 countries which represents Africa's middle income countries and it covers a period from 2001 to 2016. The results shown by FMOLS test indicate that Natural resource, trade, nominal exchange rate and GDP are all statistically significant as the factors that determine the inflow of FDI to Africa. The empirical results conform to the location and eclectic theory as well as the perfect market assumption. For example, Nunnenkamp (2002) Kudina and Jakubiak (2008) supports the idea that many investors are market and resource seeking oriented in Africa. Therefore, Trade (Openness) and nominal exchange simultaneously affects inflow of FDI to Africa.

DOLS test results show that natural resources are not significant as a factor determining the inflow of FDI. This is against the location theory of resource seeking objective however it is supported by other scholars such as Cheung and Quian (2009) and Zhang et al (2013) who states that China's FDI inflows to Africa is not motivated by natural resources rather its market. Therefore, this simply means that some investors may be interested in market seeking objective while others are interested in the resources seeking objective, the findings are true in either way.

5.2 Policy Implication for African Countries

From the empirical results there is need for African countries to improve their strategies towards attracting FDI. Firstly, there is need to attract technology based FDIs which will contribute on increasing the level of production hence high GDP. Africa must diversify the economy, thus, most of the African countries attracts FDI's on the extraction sections of the economy and fails to spill technology to other sectors. This leads to unbalanced economies and causes problems as dutch diseases and other

unpleasant economic issues due to unstable performance of macro economic indicators such exchange rate, inflation and key indicators.

Secondly, Africa should focus on educating the citizens. Education is the key to success. High tertiary and secondary enrolments positively affect FDI flows because MNC wants to invest in countries where there can find appropriate labour. With educated labour, the citizens can easily benefit from MNC as they can learn better and be productive in the work environment which is good for the economy.

Thirdly, many of the African countries should revise their incentive policies to attract FDI because most of them are not lucrative enough. Thus, the tax policy must be taken into account and be set in a way that will attract investment. There is need for the government to improve governance, reduce corruption and crime cases. This is because the above mentioned issues are the main issues that prevent investors to establish their companies in Africa.

Africa should improve RD facilities and services as they are the foundation of the development of the country. RD gather useful information which indicates many things such as the response of citizens for many government executed policies and researchers helps the government on how best policies can be executed, their implications and their future predictions. Therefore, countries need strong RD.

5.3. Policies to Improve the Flow Foreign Direct Investment to Africa

There are several actions that can be put into place to improve the FDI inflow to Africa. Some of the measures may include:

The action that involves actions that needs to be taken by countries in the region such as image building, domestic regulatory reforms and marketing of investment opportunities. Image building includes working on improving the status of the region. For instance, Africa is perceived as an unstable and insecure environment to carry business, therefore there is need for African countries to work hard on improving that image about the country. They have to work on political stability, macroeconomic indicators improvement and security of property rights as well as the rule of law.

As a way to improve domestic regulatory reforms, there ought to be incentives placed for both the local and foreign investors. There is need to establish reasonable tax rates for business as that promotes and attracts investors. This will help the region to attract more investors and reduce the habit of capital flights which is highly observed in

the African countries. There is need to explore technology further more in the African region. Tool is a viable tool that can be used effectively to market the businesses, tourism and production taking place in the continent. With high rates and quality marketing techniques, there is a high rate of returns expected. African countries should always work on finding their strong area of production, where they are more comparative and competitive and try hard to market it effectively.

Most of the African countries rely mostly on one or two sectors, more especially on the natural resources sector. This is however not efficient as it results in a skewed production and growth. The growth does not spill over to other sectors. Therefore, African countries should balance the economy by diversifying it. There should equal focus across all the sectors in the economy. The service, manufacturing, industry and all other sectors by equalizing them there will be an overall growth and development hence foreign investors will be attracted more.

There are many sanctions and protection actions African countries place on trade as a way to protect economies. These include high custom duties, barriers to entry and others. There is limited openness to trade. There is need for African countries to open to trade a little bit more. This is the only best way to attract foreign investors. However, there is need to conduct balance and checks to make sure that the countries are not been cheated tremendously.

Just like the great scholar Adam Smith in the classical theory advocated for less government intervention and promoted the use of the invisible hand where markets operates by themselves. There is need for the governments to reduce intervening in the operation of the markets. However, governments must set the right rules that will make sure there is no cheating, minimum wages and working hours are well set. This will help reduce exploitation of the workers and create peaceful and conducive working environment.

The regional actions factor consists of certain sub actions such as market size, Agency of restraint, good governance and infrastructure development. They should focus more on initiating infrastructural development as a continent. That is telecommunication, transportation, power provision and the provision of water. These factors should be enforced at the regional level as they play a huge role in attracting foreign investors.

There is need for African countries to work on good governance. Where the foreign investors will be assured security of property and assets, where there is peace a

political stability. It is important to have an independent central bank, as it will operate without influence from political parties hence there will be stability of the macroeconomic indicators. If all these factors are achieved in a country, more foreign investors will be attracted.

Market size is vital to attract foreign investors, there is need to have a large market size as it determines the level of demand and supply. In this case there is need to strong regional integrated market size that will pool a large some of foreign investors to the region. Small market size constraints the amount of foreign investors flowing to the region. The establishment of strong and well-functioning regional economic communities such as African Union is imperative towards the building of African image and overall economic growth and development.

This includes the factors that need to place in order to enhance the international relations. These include improving market access, investment promotion and infrastructure development. As a way to improve market access, there is need to reduce or eliminate intense and excess trade barriers executed by African countries. Through some schemes such as The African Growth and Opportunity Act (AGOA) has given the African countries an opportunity to export to United State of America. Export of goods from Madagascar, South Africa, Lesotho, Nigeria and Swaziland has already increased in this scheme.

The "everything-but-Arms' scheme has been approved by the European Union in February 2001 with the objective of taking out the quotas and duties in all goods except arms from developed country. This will make it easier for African countries to increase their sales and improve their market size. It is worth noting that, despite establishment of all these schemes, the exports base created is not enough.

Given the fact that African countries are poor at marketing strategies, there is therefore a need for foreign investors to chip in and help support and promote African products through marketing. This will help African countries' efficiency and effectiveness. That is also because the developed countries are at the liberty of advanced technology and can explore it much better than African countries can.

REFERENCES

Acemoglu, D., Johnson, S., & Robinson, J. (2002). *An african success story:* Botswana.

Adams, S. (2009). Foreign direct investment, domestic investment, and economic growth in Sub-Saharan Africa. *Journal of policy modeling*, *31*(6), 939-949.

Addison, T., & Heshmati, A. (2003). *The new global determinants of FDI flows to developing countries: The importance of ICT and democratization* (No. 2003/45). WIDER Discussion Papers//World Institute for Development Economics (UNU-WIDER).

Aitken, B. J., & Harrison, A. E. (1999). Do domestic firms benefit from direct foreign investment? Evidence from Venezuela. *American economic review*, *89*(3), 605-618.

Alfaro, L., Chanda, A., Kalemli-Ozcan, S., & Sayek, S. (2004). FDI and economic growth: the role of local financial markets. *Journal of international economics*, *64*(1), 89-112.

Alfaro, L., Chanda, A., Kalemli-Ozcan, S., & Sayek, S. (2010). Does foreign direct investment promote growth? Exploring the role of financial markets on linkages. *Journal of Development Economics*, *91*(2), 242-256.

Altbach, P. G., & Balán, J. (Eds.). (2007). *World class worldwide: Transforming research universities in Asia and Latin America*. JHU Press.

Asakawa, K., & Som, A. (2008). Internationalization of R&D in China and India: Conventional wisdom versus reality. *Asia Pacific Journal of Management*, *25*(3), 375-394.

Asiedu, E. (2002). On the determinants of foreign, direct investment to developing countries: is Africa different? *World development*, *30*(1), 107-119.

Asiedu, E. (2006). Foreign direct investment in Africa: The role of natural resources, market size, government policy, institutions and political instability. *World economy*, *29*(1), 63-77.

Aslanoğlu, E. (2000). Spillover effects of foreign direct investments on Turkish manufacturing industry. *Journal of International Development*, *12*(8), 1111-1130.

Balasubramanyam, V. N., Salisu, M., & Sapsford, D. (1999). Foreign direct investment as an engine of growth. *Journal of International Trade & Economic*

Development, *8*(1), 27-40.

Barrios, S., Barry, F., & Strobl, E. (2002). FDI and Structural Convergence in the EU Periphery. *CORE Université Catholique de Louvain (mimeo)*.

Behera, S. R. (2015). Do domestic firms really benefit from foreign direct investment? The role of horizontal and vertical spillovers and absorptive capacity. *Journal of Economic Development*, *40*(2), 57.

Bieri, F. (2016). *From blood diamonds to the Kimberley Process: How NGOs cleaned up the global diamond industry*. Routledge.

Biggeri, M., & Sanfilippo, M. (2009). Understanding China's move into Africa: an empirical analysis. *Journal of Chinese Economic and Business Studies*, *7*(1), 31-54.

Blanchard, P., & Mathieu, C. (2016). Multinationals and domestic firms in France: who gains from knowledge spillovers?. *Review of Agricultural, Food and Environmental Studies*, *97*(2), 109-125.

Blomstrom, M., & Kokko, A. (2003). *Human capital and inward FDI.*

Blomström, M., & Persson, H. (1983). Foreign investment and spillover efficiency in an underdeveloped economy: evidence from the Mexican manufacturing industry. *World development*, *11*(6), 493-501.

Borensztein, E., De Gregorio, J., & Lee, J. W. (1998). How does foreign direct investment affect economic growth? 1. *Journal of international Economics*, *45*(1), 115-135.

Bornschier, V. & Chase-Dunn, C. (1985). *Transnational corporations and underdevelopment.*

Brouthers, K. D., Brouthers, L. E., & Werner, S. (2008). Resource-based advantages in an international context. *Journal of management*, *34*(2), 189-217.

Buckley, P. J., Clegg, J., Wang, C., & Cross, A. R. (2002). FDI, regional differences and economic growth: panel data evidence from China. *Transnational corporations*, *11*(1), 1-28.

Cantwell, J., Dunning, J. H., & Lundan, S. M. (2010). An evolutionary approach to understanding international business activity: The co-evolution of MNEs and the institutional environment. *Journal of International Business Studies*, *41*(4), 567-586.

Carvalho, F., Duysters, G. M., & Costa, I. (2010). *Drivers of Brazilian foreign investments: technology seeking and technology exploiting as determinants of*

emerging FDI.

Castellani, D., & Zanfei, A. (2003). Technology gaps, absorptive capacity and the impact of inward investments on productivity of European firms. *Economics of Innovation and New Technology*, *12*(6), 555-576.

Caves, R. E. (1974). Multinational firms, competition, and productivity in host-country markets. *Economica*, *41*(162), 176-193.

Chung, W., & Alcácer, J. (2002). Knowledge seeking and location choice of foreign direct investment in the United States. *Management Science*, *48*(12), 1534-1554.

Clark, D. P., Highfill, J., de Oliveira Campino, J., & Rehman, S. S. (2011). FDI, technology spillovers, growth, and income inequality: A selective survey. *Global economy journal*, *11*(2).

Cleeve, E. (2008). How effective are fiscal incentives to attract FDI to Sub-Saharan Africa?. *The Journal of Developing Areas*, 135-153.

Cogneau, D. (2003). Colonisation, School and Development in Africa-An Empirical Analysis. *Document de travail DT/2003/01*.

Cohen, W. M., & Levinthal, D. A. (1990). The implications of spillovers for R&D investment and welfare: a new perspective. *Administrative Science Quarterly*, *35*(1990), 128-152.

De Mello, L. R. (1999). Foreign direct investment-led growth: evidence from time series and panel data. *Oxford economic papers*, *51*(1), 133-151.

Denisia, V. (2010). *Foreign direct investment theories: An overview of the main FDI theories.*

Driffield, N., & Love, J. H. (2003). Foreign direct investment, technology sourcing and reverse spillovers. *The Manchester School*, *71*(6), 659-672.

Duce, M. (2003). Definitions of foreign direct investment (FDI): A methodological note. *Banco de Espana*.

Dunning, J. H. (1993). Internationalizing Porter's diamond. *MIR: Management International Review*, 7-15.

Dunning, J. H. (1998). Location and the multinational enterprise: a neglected factor?. *Journal of international business studies*, *29*(1), 45-66.

Dunning, J. H. (2000). The eclectic paradigm as an envelope for economic and business theories of MNE activity. *International business review*, *9*(2), 163-190.

Dupasquier, C., & Osakwe, P. N. (2006). Foreign direct investment in Africa: Performance, challenges, and responsibilities. *Journal of Asian*

Economics, *17*(2), 241-260.

Eurostat (bop_fdi_main) and(bop_fdi6_pos)

Faeth, I. (2009). C*onsequences of FDI in Australia-Casual Links Between FDI, Domestic Investment*, Economic Growth and Trade.

Fischer, B. B., & Queiroz, S. (2016). On the mediating role of systemic absorptive capacity: an assessment of FDI effects in developing countries' innovation systems. *Brazilian Journal of Innovation*, *15*(2), 193-218.

Franco, C., & Sasidharan, S. (2010). MNEs, technological efforts and channels of export spillover: An analysis of Indian manufacturing industries. *Economic Systems*, *34*(3), 270-288.

Gani, A. (1999). Foreign direct investment in Fiji. *Pacific economic bulletin*, *14*(1), 87-92.

Gershenberg, I. (1987). The training and spread of managerial know-how, a comparative analysis of multinational and other firms in Kenya. *World Development*, *15*(7), 931-939.

Girma, S. (2005). Absorptive capacity and productivity spillovers from FDI: a threshold regression analysis. *Oxford bulletin of Economics and Statistics*, *67*(3), 281-306.

Girma, S., Görg, H., & Pisu, M. (2004). The role of exports and foreign linkages for FDI productivity spillovers. *GEP Research Paper*.

Globerman, S. (1979). Foreign direct investment and'spillover'efficiency benefits in Canadian manufacturing industries. *Canadian journal of economics*, 42-56.

Görg, H., & Greenaway, D. (2004). *Foreign direct investment and intra-industry spillovers: a review of the literature* (No. 2001, 37). Research paper/Leverhulme Centre for Research on Globalisation and Economic Policy.

Görg, H., & Strobl, E. (2005). Foreign direct investment and local economic development: Beyond productivity spillovers. *Does foreign direct investment promote development*, 137-55.

Habib, M., & Zurawicki, L. (2002). Corruption and foreign direct investment. *Journal of international business studies*, *33*(2), 291-307.

Havranek, T., & Irsova, Z. (2011). Estimating vertical spillovers from FDI: Why results vary and what the true effect is. *Journal of International Economics*, *85*(2), 234-244.

Helmsing, A. H. J. (2003). Local economic development: New generations of actors, policies and instruments for Africa. *Public Administration and Development:*

The International Journal of Management Research and Practice, *23*(1), 67-76.

Hermes, N., & Lensink, R. (2003). Foreign direct investment, financial development and economic growth. *The Journal of Development Studies*, *40*(1), 142-163.

Hess, R. (2000). Constraints on foreign direct investment. In *Gaining from Trade in Southern Africa* (pp. 89-101). Palgrave Macmillan, London.

Hewko, J. (2002). FDI does the rule of law matter?. *Carnegie endowment*.

Hood, N., Young, S., Reeves, A., & Milner, M. (1983). *Multinational investment strategies in the British Isles: A study of MNEs in the assisted areas and in the Republic of Ireland*. HMSO.

Jakubiak, M., & Kudina, A. (2008). *The Motives and Impediments to FDI in the CIS* (No. 0370). CASE-Center for Social and Economic Research.

Jama, B., & Pizarro, G. (2008). Agriculture in Africa: Strategies to improve and sustain smallholder production systems. *Annals of the New York Academy of Sciences*, *1136*(1), 218-232.

Javorcik, B. S., Saggi, K., & Spatareanu, M. (2004). *Does it matter where you come from? Vertical spillovers from foreign direct investment and the nationality of investors.*

Jenkins, R. (2006). Globalization, FDI and employment in Viet Nam. *Transnational Corporations*, *15*(1), 115.

Jha, P. (2015). Impact of determinants of FDI on Indian economy. *International Journal of Academic Research in Commerce & Management*, *1*(1), 9-12.

Kalyvas, A. N., & Webster, A. (2011). *A simple measure of the Similarity of the Sectoral Composition of Inward Investment and Its Possible Uses*. Bournemouth University Working.

Kaushal, P. (2016). Study of FDI in India. *International Journal of Business Administration and Management Research*, *2*(1), 9-11.

Keller, W., & Yeaple, S. R. (2009). Multinational enterprises, international trade, and productivity growth: firm-level evidence from the United States. *The Review of Economics and Statistics*, *91*(4), 821-831.

Khoury, T. A., & Peng, M. W. (2011). Does institutional reform of intellectual property rights lead to more inbound FDI? Evidence from Latin America and the Caribbean. *Journal of World Business*, *46*(3), 337-345.

Kindleberger, C. P. (1943). Planning for foreign investment. *The American Economic Review*, *33*(1), 347-354.

Kinoshita, Y. (2001). *R & D and Technology Spillovers Via FDI: Innovation and Absorptive Capacity*. Davidson Institute.

Kok, R., & Acikgoz Ersoy, B. (2009). Analyses of FDI determinants in developing countries. *International Journal of Social Economics*, *36*(1/2), 105-123.

Kolstad, I., & Wiig, A. (2011). Better the devil you know? Chinese foreign direct investment in Africa. *Journal of African Business*, *12*(1), 31-50.

Köymen, S. (2009). *The role of human capital in productivity spillovers from FDI: an empirical analysis on Turkish manufacturing firms* (Doctoral dissertation, Bilkent University).

Krugman, P. R. (2000). Technology, trade and factor prices. *Journal of international Economics*, *50*(1), 51-71.

Kugler, M. (2006). Spillovers from foreign direct investment: within or between industries?. *Journal of Development Economics*, *80*(2), 444-477.

Kumar, N., & Pradhan, J. P. (2002). Foreign direct investment, externalities and economic growth in developing countries: Some empirical explorations and implications for WTO negotiations on investment. *RIS Discussion Papers*, *27*, 2002.

Lall, S. (1992). Technological capabilities and industrialization. *World development*, *20*(2), 165-186.

Lee, J. W., & Swagel, P. (1997). Trade barriers and trade flows across countries and industries. *Review of Economics and Statistics*, *79*(3), 372-382.

Lei, H. S., & Chen, Y. S. (2011). The right tree for the right bird: Location choice decision of Taiwanese firms' FDI in China and Vietnam. *International Business Review*, *20*(3), 338-352.

Lenger, A., & Taymaz, E. (2006). To innovate or to transfer? *Journal of Evolutionary Economics*, *16*(1-2), 137-153.

Loungani, P., & Razin, A. (2001). How beneficial is foreign direct investment for developing countries? *Finance and Development*, *38*(2), 6-9.

Lu, J., Liu, X., & Wang, H. (2008). Motives for outward FDI of Chinese private firms: Firm resources, industry dynamics, and government policies. *Management and Organization Review*, *7*(2), 223-248.

Markusen, J. R. (1995). The boundaries of multinational enterprises and the theory of international trade. *Journal of Economic perspectives*, *9*(2), 169-189.

Markusen, J. R., & Venables, A. J. (1999). Foreign direct investment as a catalyst for

industrial development. *European economic review*, *43*(2), 335-356.

Mayer- Foulkes, D., & Nunnenkamp, P. (2009). Do multinational enterprises contribute to convergence or divergence? A disaggregated analysis of US FDI. *Review of Development Economics*, *13*(2), 304-318.

McCormick, D. (1999). African enterprise clusters and industrialization: theory and reality. *World development*, *27*(9), 1531-1551.

Mickiewicz, T., Radosevic, S., & Varblane, U. (2000). *The value of diversity: Foreign direct investment and employment in Central Europe during economic recovery* (No. 5). One-Europe Programme.

Moosa, I. A. (2009). The determinants of foreign direct investment in MENA countries: an extreme bounds analysis. *Applied Economics Letters*, *16*(15), 1559-1563.

Moran, T. H., Graham, E. M., & Blomström, M. (Eds.). (2005). *Does foreign direct investment promote development?* Peterson Institute.

Morriset, J., & Pirnia, N. (2000). How Tax policy and incentives affect FDI. *World Bank, Working Papers*, (2509).

Musila, J. W., & Sigué, S. P. (2006). Accelerating foreign direct investment flow to Africa: from policy statements to successful strategies. *Managerial finance*, *32*(7), 577-593.

Narula, R., & Marin, A. (2003). *FDI spillovers, absorptive capacities and human capital development:* evidence from Argentina.

Naudé, W. A., & Krugell, W. F. (2007). Investigating geography and institutions as determinants of foreign direct investment in Africa using panel data. *Applied economics*, *39*(10), 1223-1233.

Nenovskı, T., Kostovskı, P. N., & Dejanoska, P. D. (2016). relatıonshıp between foreıgn dırect ınvestments and gross domestıc product ın case of republıc of macedonıa. *journal of sustainable development*, *6*(16), 18.

Nunnenkamp, P. (2002). *Determinants of FDI in developing countries: has globalization changed the rules of the game?* (No. 1122). Kiel Working Paper.

Obwona, M. B. (2001). Determinants of FDI and their Impact on Economic Growth in Uganda. *African development review*, *13*(1), 46-81.

OECD (2008), OECD Benchmark Definition of Foreign Direct Investment, Fourth edition, OECD publishing

OECD (2009), *OECD Benchmark Definition of Foreign Direct Investment 2008: Fourth Edition*, OECD Publishing,

Paris, https://doi.org/10.1787/9789264045743-en.

OECD (2014). *OECD International Direct Investment Statistics 2014*, OECD Publishing, Paris,https://doi.org/10.1787/idis-2014-en.

OECD (2018). FDI flows (indicator). doi: 10.1787/99f6e393-en

Okafor, G. (2015). Locational determinants of us outward fdi into sub-saharan Africa. *The Journal of Developing Areas*, *49*(1), 187-205.

Onyeiwu, S., & Shrestha, H. (2004). Determinants of foreign direct investment in Africa. *Journal of Developing Societies*, *20*(1-2), 89-106.

Pei, Y., & Yongping, S. (2011). The Impacts of Agglomeration on MNE's Location Choice in China [J]. *Economic Research Journal*, *1*, 71-82.

Perez, T. (1997). Multinational enterprises and technological spillovers: an evolutionary model. *Journal of Evolutionary Economics*, *7*(2), 169-192.

Pigato, M. (2000). *Foreign direct investment in Africa: old tales and new evidence*. World Bank.

Ramasamy, B., & Yeung, M. (2010). The determinants of foreign direct investment in services. *World Economy*, *33*(4), 573-596.

Razin, A., & Sadka, E. (2003). Gains from FDI inflows with incomplete information. *Economics Letters*, *78*(1), 71-77.

Reganati, F., & Sica, E. (2007). Horizontaland vertical spillovers from FDI: Evidence from panel data for the Italian manufacturing sector. *Journal of Business Economics and Management*, *8*(4), 259-266.

Sachs, J. D., & Warner, A. M. (1999). The big push, natural resource booms and growth. *Journal of development economics*, *59*(1), 43-76.

Sachs, J. D., & Warner, A. M. (2001). The curse of natural resources. *European economic review*, *45*(4-6), 827-838.

Sadik, A. T., & Bolbol, A. A. (2001). Capital flows, FDI, and technology spillovers: evidence from Arab countries. *world Development*, *29*(12), 2111-2125.

Sala-i-Martin, X., & Subramanian, A. (2013). Addressing the natural resource curse: An illustration from Nigeria. *Journal of African Economies*, *22*(4), 570-615.

Sánchez-Robles, B., & Bengoa-Calvo, M. (2002). *Foreign direct investment, economic freedom and growth:* New evidence from Latin-America.

Sánchez-Sellero, P., Rosell-Martínez, J., & García-Vázquez, J. M. (2014). Absorptive capacity from foreign direct investment in Spanish manufacturing firms. *International Business Review*, *23*(2), 429-439.

Sanfilippo, M. (2010). Chinese FDI to Africa: what is the nexus with foreign economic cooperation?. *African Development Review*, *22*, 599-614.

Sasidharan, S., & Ramanathan, A. (2007). Foreign Direct Investment and spillovers: evidence from Indian manufacturing. *International Journal of Trade and Global Markets*, *1*(1), 5-22.

Sauvant, K. P. (2008). Outward FDI from emerging markets: some policy issues. *Foreign Direct Investment, Location, and Competitiveness*, 279-283.

Savvides, A. (1995). Economic growth in Africa. *World development*, *23*(3), 449-458.

Sawada, N. (2004). Technology Spillovers and Welfare through Foreign Direct Investment in Developing Countries: An Oligopoly Approach.

Schoors, K., & Van Der Tol, B. (2002). *Foreign direct investment spillovers within and between sectors: Evidence from Hungarian data*. Working Papers of Faculty of Economics and Business Administration, Ghent University, Belgium, 2002/157.

Serwicka, I. E., Jones, J., & Wren, C. (2014). The Motives for the FDI Location Choice in the'Old'and'New'Europe.

Sethi, D., Guisinger, S. E., Phelan, S. E., & Berg, D. M. (2002). Trends in foreign direct investment flows: A theoretical and empirical analysis. *Journal of international business studies*, *34*(4), 315-326.

Seyoum, M., Wu, R., & Lin, J. (2015). Foreign direct investment and economic growth: The case of developing African economies. *Social Indicators Research*, *122*(1), 45-64.

Smarzynska Javorcik, B. (2004). Does foreign direct investment increase the productivity of domestic firms? In search of spillovers through backward linkages. *American economic review*, *94*(3), 605-627.

Tadesse, B., & Ryan, M. (2004). Host market characteristics, FDI, and the FDI–trade relationship. *The Journal of International Trade & Economic Development*, *13*(2), 199-229.

Teo, Z. S., Gan, J. H., Goh, T. W., Hong, H. S., & Hun, M. E. (2014). *The Nexus between FDI, Trade Openness, Real Exchange Rate and Infrastructure Quality: India's Post Liberalization* (Doctoral dissertation, UTAR).

UNCTAD World Investment Report (2017), available at https://www.tralac.org/news/article/11726-digital-radically-changes-global-investment-patterns-says-world-investment-report-2017.html

UNCTAD, G. (2013). *World investment report, global value chains: Investment and*

trade for development.

Wadhwa, K. (2011). Foreign direct investment into developing Asian countries: The role of market seeking, resource seeking and efficiency seeking factors. *International Journal of Business and Management*, *6*(11), 219.

Wei, Y., & Balasubramanyam, V. N. (Eds.). (2004). *Foreign direct investment: Six country case studies*. Edward Elgar Publishing.

Whalley, J., & Weisbrod, A. (2012). The contribution of Chinese FDI to Africa's pre crisis growth surge. *Global Economy Journal*, *12*(4).

Wooster, R. B., & Diebel, D. S. (2010). Productivity Spillovers from Foreign Direct Investment in Developing Countries: A Meta- Regression Analysis. *Review of Development Economics*, *14*(3), 640-655.

Xu, B., & Wang, J. (2000). Trade, FDI, and international technology diffusion. *Journal of Economic Integration*, 585-601.

Yudaeva, K., Kozlov, K., Melentieva, N., & Ponomareva, N. (2003). Does foreign ownership matter?. *Economics of transition*, *11*(3), 383-409.

Zhang, K. H. (2014). How does foreign direct investment affect industrial competitiveness? Evidence from China. *China Economic Review*, *30*, 530-539.

Zhihua Zeng, D. (Ed.). (2008). *Knowledge, technology, and cluster-based growth in Africa*. The World Bank.

ANNEX

Dependent Variable: LNFDI

Method: Panel EGLS (Cross-section random effects)

Date: 05/16/18 Time: 00:01

Sample: 2001 2016

Periods included: 16

Cross-sections included: 11

Total panel (unbalanced) observations: 150

Wallace and Hussain estimator of component variances

Cross-section SUR (PCSE) standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.534976	2.835433	-2.304754	0.0226
LNGDP	0.937045	0.088650	10.57020	0.0000
LNRES	0.157510	0.079030	1.993034	0.0481
LNTRADE	0.942780	0.314552	2.997211	0.0032

Effects Specification		
	S.D.	Rho
Cross-section random	0.619632	0.3237
Idiosyncratic random	0.895577	0.6763

Weighted Statistics			
R-squared	0.372807	Mean dependent var	7.312594
Adjusted R-squared	0.359919	S.D. dependent var	1.549407
S.E. of regression	0.901997	Sum squared resid	118.7853
F-statistic	28.92770	Durbin-Watson stat	1.087939
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.587054	Mean dependent var	20.70818
Sum squared resid	157.2163	Durbin-Watson stat	0.821996

Vector Error Correction Estimates
Date: 08/25/18 Time: 11:52
Sample (adjusted): 2004 2016
Included observations: 129 after adjustments
Standard errors in ( ) & t-statistics in [ ]

Cointegrating Eq:	CointEq1
LNFDI(-1)	1.000000
LNGDP(-1)	-0.015377
	(0.00270)
	[-5.69422]
LNNATURRES(-1)	15453410
	(2.2E+07)
	[0.70238]
LNTRADE(-1)	8888858.
	(1.2E+07)
	[0.76755]
LNEXCHRATE(-1)	8801165.
	(7199321)
	[1.22250]
C	-1.55E+09

Error Correction:	D(LNFDI)	D(LNGDP)	D(LNNATURRES)	D(LNTRADE)	D(LNEXCHRATE)
CointEq1	-0.544024	3.138717	3.05E-10	-5.51E-10	-8.71E-10
	(0.09975)	(0.93134)	(2.3E-10)	(4.0E-10)	(3.8E-10)
	[-5.45392]	[3.37011]	[1.34729]	[-1.36959]	[-2.30908]
D(LNFDI(-1))	0.322177	-1.978093	-5.24E-10	3.49E-10	5.26E-10
	(0.10851)	(1.01315)	(2.5E-10)	(4.4E-10)	(4.1E-10)
	[2.96907]	[-1.95242]	[-2.12579]	[0.79778]	[1.28314]
D(LNFDI(-2))	0.152127	0.535933	-1.70E-10	-8.95E-11	-4.74E-10
	(0.11046)	(1.03133)	(2.5E-10)	(4.5E-10)	(4.2E-10)
	[1.37723]	[0.51965]	[-0.67784]	[-0.20095]	[-1.13449]
D(LNGDP(-1))	0.012276	0.270941	4.79E-12	-1.50E-11	5.01E-12
	(0.00802)	(0.07488)	(1.8E-11)	(3.2E-11)	(3.0E-11)
	[1.53060]	[3.61820]	[0.26290]	[-0.46291]	[0.16521]

D(LNGDP(-2))	0.001407	0.185587	-2.66E-11	-5.14E-11	6.16E-11
	(0.00773)	(0.07221)	(1.8E-11)	(3.1E-11)	(2.9E-11)
	[0.18188]	[2.57004]	[-1.51679]	[-1.64856]	[2.10615]
D(LNNATURRES(-1))	34057342	-1.03E+09	-0.258066	0.156913	-0.140461
	(4.0E+07)	(3.7E+08)	(0.09116)	(0.16183)	(0.15178)
	[0.84826]	[-2.75140]	[-2.83099]	[0.96959]	[-0.92544]
D(LNNATURRES(-2))	-47395272	2.62E+08	-0.120145	0.164857	-0.328449
	(4.2E+07)	(3.9E+08)	(0.09537)	(0.16931)	(0.15878)
	[-1.12836]	[0.66872]	[-1.25983]	[0.97372]	[-2.06852]
D(LNTRADE(-1))	16333920	-2.86E+08	0.060785	-0.117237	-0.147895
	(2.7E+07)	(2.5E+08)	(0.06093)	(0.10817)	(0.10145)
	[0.60866]	[-1.14025]	[0.99765]	[-1.08383]	[-1.45787]
D(LNTRADE(-2))	43600249	-2.89E+08	-0.030107	-0.092968	0.071992
	(2.6E+07)	(2.5E+08)	(0.05981)	(0.10618)	(0.09958)
	[1.65510]	[-1.17619]	[-0.50338]	[-0.87555]	[0.72293]
D(LNEXCHRATE(-1))	-20292182	-2.40E+09	-0.154328	0.231213	0.601646
	(2.6E+07)	(2.4E+08)	(0.05811)	(0.10317)	(0.09676)
	[-0.79281]	[-10.0491]	[-2.65568]	[2.24112]	[6.21810]
D(LNEXCHRATE(-2))	3480039.	2.16E+09	0.190858	0.034898	-0.128745
	(3.8E+07)	(3.6E+08)	(0.08667)	(0.15388)	(0.14431)
	[0.09116]	[6.04783]	[2.20201]	[0.22679]	[-0.89212]
C	-24550278	5.61E+09	-0.288462	0.120861	0.641857
	(2.2E+08)	(2.0E+09)	(0.48888)	(0.86793)	(0.81399)
	[-0.11401]	[2.78987]	[-0.59004]	[0.13925]	[0.78853]
R-squared	0.269362	0.604560	0.202045	0.120846	0.453936
Adj. R-squared	0.200669	0.567381	0.127023	0.038191	0.402597
Sum sq. resids	4.34E+20	3.78E+22	2235.387	7045.487	6196.991
S.E. equation	1.93E+09	1.80E+10	4.371026	7.760015	7.277756
F-statistic	3.921272	16.26115	2.693161	1.462051	8.841879
Log likelihood	-2934.545	-3222.727	-367.0201	-441.0644	-432.7875
Akaike AIC	45.68287	50.15081	5.876281	7.024254	6.895930
Schwarz SC	45.94890	50.41684	6.142310	7.290283	7.161959
Mean dependent	1.32E+08	8.26E+09	-0.558337	-0.034898	2.813222
S.D. dependent	2.15E+09	2.73E+10	4.678236	7.912581	9.415941
Determinant resid covariance (dof adj.)		5.63E+43			

Determinant resid covariance	3.46E+43
Log likelihood	-7381.457
Akaike information criterion	115.4489
Schwarz criterion	116.8899

System: UNTITLED

Estimation Method: Least Squares

Date: 08/25/18 Time: 11:54

Sample: 2004 2016

Included observations: 129

Total system (balanced) observations 645

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.544024	0.099749	-5.453924	0.0000
C(2)	0.322177	0.108511	2.969069	0.0031
C(3)	0.152127	0.110458	1.377231	0.1690
C(4)	0.012276	0.008020	1.530604	0.1264
C(5)	0.001407	0.007734	0.181877	0.8557
C(6)	34057342	40149874	0.848255	0.3966
C(7)	-47395272	42003557	-1.128363	0.2596
C(8)	16333920	26835819	0.608661	0.5430
C(9)	43600249	26343010	1.655097	0.0984
C(10)	-20292182	25595355	-0.792807	0.4282
C(11)	3480039.	38175364	0.091159	0.9274
C(12)	-24550278	2.15E+08	-0.114015	0.9093
C(13)	3.138717	0.931340	3.370110	0.0008
C(14)	-1.978093	1.013149	-1.952421	0.0514
C(15)	0.535933	1.031330	0.519652	0.6035
C(16)	0.270941	0.074883	3.618199	0.0003
C(17)	0.185587	0.072212	2.570043	0.0104
C(18)	-1.03E+09	3.75E+08	-2.751402	0.0061
C(19)	2.62E+08	3.92E+08	0.668719	0.5039
C(20)	-2.86E+08	2.51E+08	-1.140254	0.2546
C(21)	-2.89E+08	2.46E+08	-1.176188	0.2400
C(22)	-2.40E+09	2.39E+08	-10.04909	0.0000
C(23)	2.16E+09	3.56E+08	6.047832	0.0000
C(24)	5.61E+09	2.01E+09	2.789869	0.0054
C(25)	3.05E-10	2.26E-10	1.347294	0.1784
C(26)	-5.24E-10	2.46E-10	-2.125791	0.0339
C(27)	-1.70E-10	2.51E-10	-0.677844	0.4981
C(28)	4.79E-12	1.82E-11	0.262903	0.7927
C(29)	-2.66E-11	1.76E-11	-1.516786	0.1299
C(30)	-0.258066	0.091157	-2.830994	0.0048
C(31)	-0.120145	0.095366	-1.259831	0.2082
C(32)	0.060785	0.060929	0.997646	0.3189
C(33)	-0.030107	0.059810	-0.503380	0.6149
C(34)	-0.154328	0.058112	-2.655681	0.0081
C(35)	0.190858	0.086674	2.202007	0.0281
C(36)	-0.288462	0.488882	-0.590045	0.5554

C(37)	-5.51E-10	4.02E-10	-1.369586	0.1713
C(38)	3.49E-10	4.37E-10	0.797780	0.4253
C(39)	-8.95E-11	4.45E-10	-0.200952	0.8408
C(40)	-1.50E-11	3.23E-11	-0.462908	0.6436
C(41)	-5.14E-11	3.12E-11	-1.648558	0.0998
C(42)	0.156913	0.161835	0.969589	0.3327
C(43)	0.164857	0.169306	0.973722	0.3306
C(44)	-0.117237	0.108169	-1.083830	0.2789
C(45)	-0.092968	0.106182	-0.875548	0.3816
C(46)	0.231213	0.103169	2.241116	0.0254
C(47)	0.034898	0.153876	0.226793	0.8207
C(48)	0.120861	0.867926	0.139253	0.8893
C(49)	-8.71E-10	3.77E-10	-2.309081	0.0213
C(50)	5.26E-10	4.10E-10	1.283143	0.2000
C(51)	-4.74E-10	4.18E-10	-1.134488	0.2571
C(52)	5.01E-12	3.03E-11	0.165210	0.8688
C(53)	6.16E-11	2.92E-11	2.106151	0.0356
C(54)	-0.140461	0.151777	-0.925440	0.3551
C(55)	-0.328449	0.158785	-2.068518	0.0390
C(56)	-0.147895	0.101447	-1.457866	0.1454
C(57)	0.071992	0.099584	0.722929	0.4700
C(58)	0.601646	0.096757	6.218100	0.0000
C(59)	-0.128745	0.144313	-0.892123	0.3727
C(60)	0.641857	0.813988	0.788534	0.4307

Determinant residual covariance	3.46E+43

Equation: D(LNFDI) = C(1)*(LNFDI(-1) - 0.0153767550032*LNGDP(-1) + 15453410.205*LNNATURRES(-1) + 8888857.95476*LNTRADE(-1) + 8801164.80357*LNEXCHRATE(-1) - 1545703764.12) + C(2) *D(LNFDI(-1)) + C(3)*D(LNFDI(-2)) + C(4)*D(LNGDP(-1)) + C(5) *D(LNGDP(-2)) + C(6)*D(LNNATURRES(-1)) + C(7)*D(LNNATURRES(-2)) + C(8)*D(LNTRADE(-1)) + C(9)*D(LNTRADE(-2)) + C(10) *D(LNEXCHRATE(-1)) + C(11)*D(LNEXCHRATE(-2)) + C(12)

Observations: 129

R-squared	0.269362	Mean dependent var	1.32E+08
Adjusted R-squared	0.200669	S.D. dependent var	2.15E+09
S.E. of regression	1.93E+09	Sum squared resid	4.34E+20
Durbin-Watson stat	2.030907		

Equation: D(LNGDP) = C(13)*(LNFDI(-1) - 0.0153767550032*LNGDP(-1) + 15453410.205*LNNATURRES(-1) + 8888857.95476*LNTRADE(-1) + 8801164.80357*LNEXCHRATE(-1) - 1545703764.12) + C(14) *D(LNFDI(-1)) + C(15)*D(LNFDI(-2)) + C(16)*D(LNGDP(-1)) + C(17)

*D(LNGDP(-2)) + C(18)*D(LNNATURRES(-1)) + C(19)
*D(LNNATURRES(-2)) + C(20)*D(LNTRADE(-1)) + C(21)*D(LNTRADE(
-2)) + C(22)*D(LNEXCHRATE(-1)) + C(23)*D(LNEXCHRATE(-2)) +
C(24)

Observations: 129

R-squared	0.604560	Mean dependent var	8.26E+09
Adjusted R-squared	0.567381	S.D. dependent var	2.73E+10
S.E. of regression	1.80E+10	Sum squared resid	3.78E+22
Durbin-Watson stat	1.782270		

Equation: D(LNNATURRES) = C(25)*(LNFDI(-1) - 0.0153767550032
*LNGDP(-1) + 15453410.205*LNNATURRES(-1) + 8888857.95476
*LNTRADE(-1) + 8801164.80357*LNEXCHRATE(-1) - 1545703764.12)
+ C(26)*D(LNFDI(-1)) + C(27)*D(LNFDI(-2)) + C(28)*D(LNGDP(-1)) +
C(29)*D(LNGDP(-2)) + C(30)*D(LNNATURRES(-1)) + C(31)
*D(LNNATURRES(-2)) + C(32)*D(LNTRADE(-1)) + C(33)*D(LNTRADE(
-2)) + C(34)*D(LNEXCHRATE(-1)) + C(35)*D(LNEXCHRATE(-2)) +
C(36)

Observations: 129

R-squared	0.202045	Mean dependent var	-0.558337
Adjusted R-squared	0.127023	S.D. dependent var	4.678236
S.E. of regression	4.371026	Sum squared resid	2235.387
Durbin-Watson stat	2.200314		

Equation: D(LNTRADE) = C(37)*(LNFDI(-1) - 0.0153767550032*LNGDP(
-1) + 15453410.205*LNNATURRES(-1) + 8888857.95476*LNTRADE(
-1) + 8801164.80357*LNEXCHRATE(-1) - 1545703764.12) + C(38)
*D(LNFDI(-1)) + C(39)*D(LNFDI(-2)) + C(40)*D(LNGDP(-1)) + C(41)
*D(LNGDP(-2)) + C(42)*D(LNNATURRES(-1)) + C(43)
*D(LNNATURRES(-2)) + C(44)*D(LNTRADE(-1)) + C(45)*D(LNTRADE(
-2)) + C(46)*D(LNEXCHRATE(-1)) + C(47)*D(LNEXCHRATE(-2)) +
C(48)

Observations: 129

R-squared	0.120846	Mean dependent var	-0.034898
Adjusted R-squared	0.038191	S.D. dependent var	7.912581
S.E. of regression	7.760015	Sum squared resid	7045.487
Durbin-Watson stat	1.813041		

Equation: D(LNEXCHRATE) = C(49)*(LNFDI(-1) - 0.0153767550032
*LNGDP(-1) + 15453410.205*LNNATURRES(-1) + 8888857.95476
*LNTRADE(-1) + 8801164.80357*LNEXCHRATE(-1) - 1545703764.12)
+ C(50)*D(LNFDI(-1)) + C(51)*D(LNFDI(-2)) + C(52)*D(LNGDP(-1)) +
C(53)*D(LNGDP(-2)) + C(54)*D(LNNATURRES(-1)) + C(55)
*D(LNNATURRES(-2)) + C(56)*D(LNTRADE(-1)) + C(57)*D(LNTRADE(

-2)) + C(58)*D(LNEXCHRATE(-1)) + C(59)*D(LNEXCHRATE(-2)) + C(60)

Observations: 129

R-squared	0.453936	Mean dependent var	2.813222
Adjusted R-squared	0.402597	S.D. dependent var	9.415941
S.E. of regression	7.277756	Sum squared resid	6196.991
Durbin-Watson stat	1.999314		

CURRICULUM VITAE

PERSONAL DETAILS

Name: Oikameng Cordelia Legwale

Place and Date of Birth: Gaborone / 10.08.1991

E-mail: ratilegwale@gmail.com

EDUCATIONAL BACKGROUND

2016 **(Master)** Çukurova University Institute of Social Sciences Department of Economics

2011-2015 (Under graduate Degree) University of Botswana Department of Economics