

**DETERMINANTS OF FOREIGN DIRECT INVESTMENT IN KENYA**

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REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF ARTS IN  
ECONOMICS OF THE UNIVERSITY OF NAIROBI.**

**NOVEMBER 2017**

**DECLARATION**

This is to declare that this research project is my own work and to the best of the information available to me has never been presented for the award of any academic degree in any institution.

Signature..... Date .....

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This research academic project has been submitted to the school of Economics, University of Nairobi with my consent as University Supervisor.

Signature..... Date .....

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## **DEDICATION**

This project is dedicated to all people both classmates and guardians who gave their financial, academic and moral support to me during the time of study no matter how big or small. God reigned over it all and thus special dedication to him.

## **ACKNOWLEDGEMENT**

It is with great joy in me that I take this time to express sincere gratitude deep from my heart for a couple of individuals who played great and important role during the writing of this project. First and foremost, I take this time to appreciate my Supervisor Mr. Raphael Kabando for his relentless efforts in reading my work and giving wise counsel progressively towards making this paper the way it is. Secondly, I am grateful to all the panelist who gave their inputs towards improving this project .Thirdly, I am grateful to School of Economics for its support in availing materials necessary and useful for this paper at the library.

Above all, God remained and kept me in good health during the entire period of my study at the university and I have so grateful this far.

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## **ABBREVIATION AND ACRONYMS**

AERC	: African Economic Research Consortium
AIBUMA	: African International Business and Management
ANOVA	: Analysis of Variance
COMESA	: Common Market for East and Southern Africa
EAC	: East African Community
FDI	: Foreign Direct Investment
GNP	: Gross National Product
GoK	: Government of Kenya
GoU	: Government of Uganda
IGAD	: Intergovernmental Authority for Development
IMF	: International Monetary Fund
IPC	: Investment Promotion Centre
KenInvest	: Kenya Investment Authority
KIC	: Kenya Investment Centre
KNBS	: Kenya National Bureaus of Statistics
MNE	: Multinational Enterprises
NSE	: Nairobi Security Exchange
ODA	: Official Development Assistance
OLI	: Ownership Locational and Internalization
OLS	: Ordinary Least Squares
PLMC	: Product Life Cycle Model
TNC	: Trans-national Corporation

UK : United Kingdom  
UNCTAD : United Nations Conference for Trade and Development  
USD : United States of America Dollars  
WAEMU : West African Economic and Monetary Union countries  
WDI : World Development Indicators

## ABSTRACT

FDI contributes enormously to the receiving nation through introduction of new technology, addressing the problem of savings deficiency, foreign exchange inadequacy, revenue gap, and issues relating to management etc. Due to these benefits, it is essential to understand the factors that affect the flow of FDI to be able to formulate and implement appropriate foreign investment policies. This study sought to investigate the role of real interest rate, trade openness, real effective exchange rate, rural population, urbanization and economic performance of neighbouring countries in EAC. The second objective of the study was to find out the nature of relationship that exists between the independent variables and FDI. Further, this study set out to shed light on the contested role of GDP, inflation and real exchange rate after different results were previously arrived at with Abala (2014) concluding that they significantly influenced FDI flow before Kwoba et.al (2016) finding them to be insignificant.

Using Cointegration test dependent and independent variables were found to have a long-run relationship. The OLS results found that economic performance of the neighbouring countries, real interest rates and urbanization were found to positively influence the flow of FDI to Kenya though they were insignificant. Urbanization and economic performance of neighbouring nations positively influenced the flow of FDI while rural population had a negative effect on the flow of FDI. Moreover, GDP was found to negatively and significantly affecting the flow of FDI to Kenya contrasting previous studies by Abala (2014) who found that GDP positively and significantly affected the flow of FDI to Kenya while Kwoba et.al (2016) had found out that it was positive but not significant.

The research utilized secondary time series data from Kenya National Bureau of Statistics (KNBS), World Development Indicators (WDI) and Statistical abstracts for the time period 1980.

In conclusion, the study recommended that government should take actions in urbanizing small towns to cities, ensuring it remains in the trading blocs with other trading partners in the region and ensuring trade openness and measures to increase returns on capital investment to increase flow of FDI to Kenya.

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Introduction**

Foreign Direct Investment (FDI) is defined as the net inflows of investment to acquire a lasting management, interesting an enterprise operating in an economy other than that of the investor. This is usually 10% or more of what is referred to as voting stock which offers stockholders the right to vote on matters relating to the company management such as policy, electing members of the directorial board or any other (World Bank, 1996). The idea is that lasting management interest is an indication of the long-term relationship between the investor and the investing enterprises in which the investor is actively engaged in the management of firms.

FDI can also be looked at as an investment involving a long-term relationship that reflects a permanent interest of foreign direct investor in one economy investing in an economy other than that of the foreign direct investor (UNCTAD, 1999). It can either be Greenfield investment also known as brick and mortar investment or merger and acquisition, which involves the acquisition of existing interest rather than new investment.

There are three distinctive types of FDI; capital, reinvested earnings and intra-company loans according to (UNCTAD, 2008) with ownership of at least ten percent of ordinary shares or voting stock in corporate governance as a method for existence of a direct investment relationship while a less than 10% ownership is recognized as portfolio investment. Horizontal FDI is when firms decide to carry out identical activities in both abroad and the country of origin. For instance is when companies like Toyota assemble motor cars in Japan and the UK. Vertical FDI involves carrying out different types of activities are carried out abroad. Vertical FDI is divided into two categories; Forward vertical FDI and backward vertical FDI. Forward vertical FDI is meant to bring the company nearer to a market while backward Vertical FDI is characterized by

international integration going back towards raw materials conglomerate – the idea is to acquire a non-identical business abroad. For this to actualize, two barriers must be conquered at the same time; first in on getting into anew country and secondly working in a new industry.

## **1.2 Sources and Trends in Flow of FDI**

FDI was initially assumed to flow from developed countries which are more capital intensive to developing countries which are less capital intensive. However, in the recent times, the situation seems to have changed with FDI too flowing from developing to the developed countries (FDI Markets Report, 2016). This has been a continuous process that has been going on since the second half of the 19th century which was interrupted only briefly by World Wars I and II and the Great depression of the 1930s.

This reverse seems to have become substantially significant enough to attract the attention of researchers. Official FDI from third world nations and medium economies called transitional economies increased from approximately USD293 billion in 2003 to USD351 in 2008 which indicated a significant rise in the reverse flow of FDI from the developing world. This was mainly an indication of the changing trend in which the flow was traditionally from the developed world. The highest percentage of this was mainly from Russia. Sauvart et.al (2009) noted that dramatic changes in the FDI flow have been witnessed with changes in economic organization in the world. For instance, Asia invests more in foreign nations relative to the amount that is invested by Caribbean nations and Latin America for a period of the last 30 years.

Kenya has been a strategic destination for attracting FDI in the region much of which came from UK, Germany, and Netherlands who have dominated since independence. Currently, China is the main source of FDI flows to Kenya. Other countries in the top five countries in term of investing to Kenya include India, South Korea, and South Africa. Statistics by the UNCTAD (2015),

indicated that Kenya FDI inflow was \$1.4 billion in 2015. Further, the FDI projects witnessed a commendable increase reaching 84 in the year 2015 which accounted for 47 percent increase (FDI Intelligence report 2016). Kenya Investment Authority in April 2017 projected that the FDI inflows could have gone as high as \$2.5 billion in 2016. Kenya remains a country of many opportunities for investments. The IMF estimates that Kenya's GDP will grow by 5.9 percent by 2017-2021. This growth is attributed to the mid-term prospects of the flow of FD into the country and these include communication technology and renewable sectors. Much of the investments in Kenya are Belgium, China, India, Israel, Japan, Mauritius, Netherlands, South Africa, the United Kingdom, and the United States.

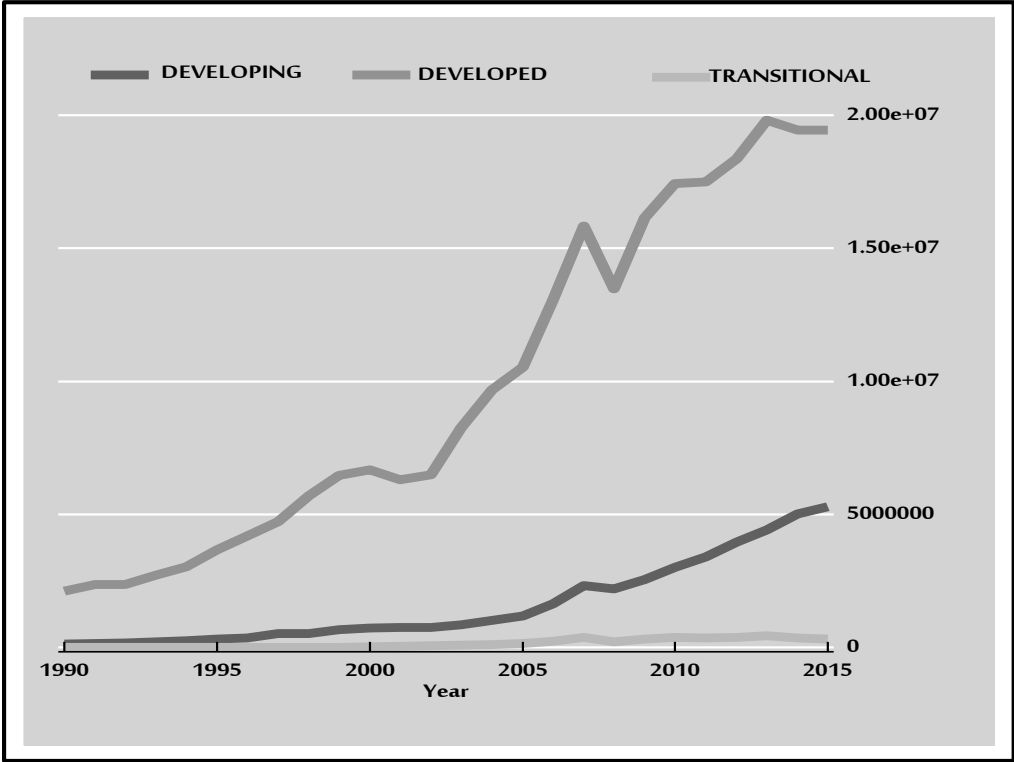
There was an increase in the global flow of FDI to \$1,700 billion in 2016 which was equivalent to 36 percent growth from 2015 according to (UNCTAD, 2016). The number of FDI projects into Africa in 2015 increased by 6%. The flow of FDI into the Middle East and Africa according to the number projects implemented increased by 0.6% in 2015.

In reference to the World Bank (2010), Africa witnessed an increase in capital investment from \$40.4 billion in 2000 to \$192 billion in 2013. The key feature was that the inward FDI from China increased with investment mainly going into a primary resource. Much of FDI in terms of capital investment to Africa came from West Europe which was a total of \$30.1 billion invested in 2015 and this was equivalent to 45% market share. Much of FDI projects to Africa in the same year came from the US and this was 4% decrease in the number of projects from the previous year. However, in monetary terms, the value decreased by 12% to \$6.8 billion. While UK had an almost 50% increase in the number of FDI related projects to Africa from 2014 reaching to 76 projects. There was also an increase in the capital investment from the UK to Africa. In terms of capital investment, Italy was leading by projects worth \$7.4 billion of the ten top source of capital

investment to Africa. Key investors were India and China and India had 5% of share market for all inward FDI projects (Africa Investment Report, 2016). According to the World Investment Report (2009), FDI inflows to Africa reached the US \$88 billion in 2008.

Kenya is the third largest beneficiary of FDI inflow in East Africa after Ethiopia and Tanzania. Ethiopia had \$2.1 billion, Tanzania \$1.5 billion, Kenya \$1.4 billion and Uganda \$1 billion (UNCTAD, 2015) since independence. Also according to World Development Indicators (2009), net FDI to East Africa (Kenya, Tanzania, and Uganda), increased from the US \$8.8 million in 1988 to \$1.9 billion in 2007. However, most of these inflows tend to go to the natural resource sector; according to UNCTAD, out of US \$516.7 million in FDI inflows to Tanzania in 1999, US \$345.3 million went to mining and petroleum. The main sources of FDI UK, US, India, and China

**Figure 1 FDI Outflow Trend by Economic Performance**



Source: UNCTAD, FDI/MNE database

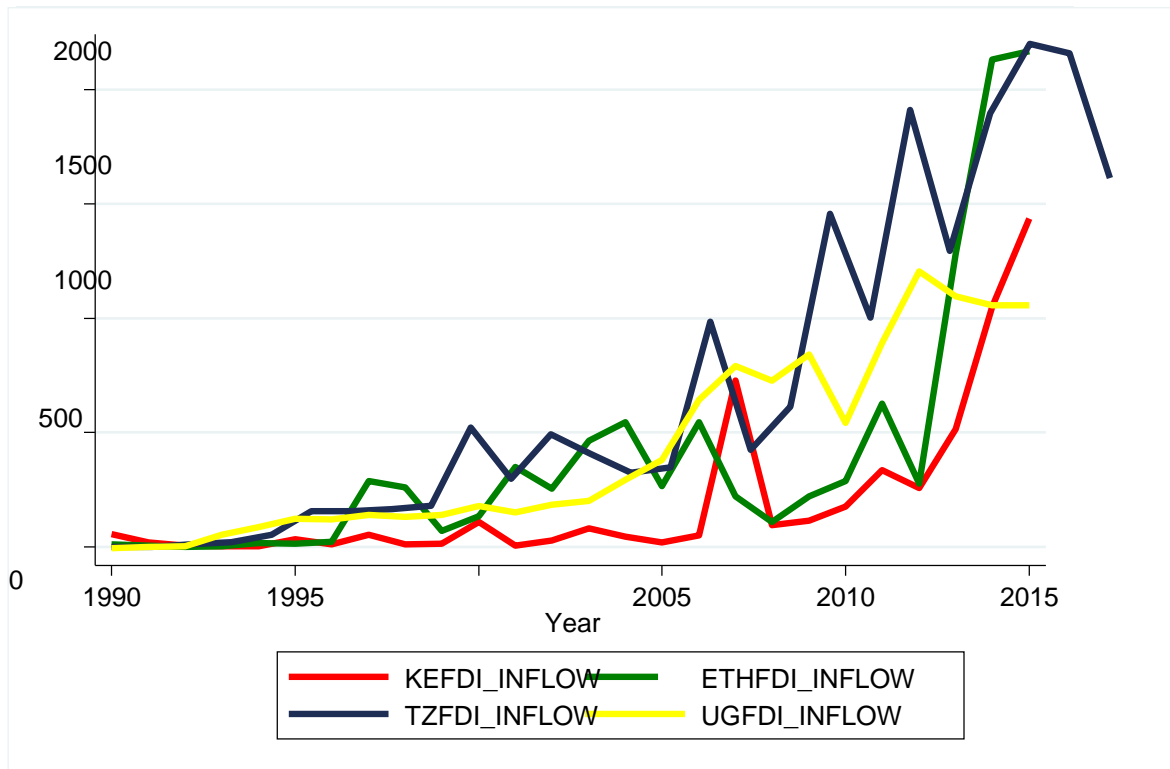
Figure 1, above shows a high level of foreign direct investments flowing from the developed world relative to developing and transition economies. It is clear from the graph that greatest percentage of FDI came from the developed world, followed by developing the world with the least coming out from transition economies. The graph shows an upward trend of the FDI flow from developed, transiting and developing economies has been rising in the period for which the data was collected dating from 1990 to 2015. Therefore this is evident from the graph that most of FDI come from the first world nations. However, the rest of FDI comes from Transitional economies and developing the world.

The flow of FDI from developing the world is thought to have started with Japan during the 1960s and 1970s, barely two decades after the country's industrial base was reduced to rubble during World War II. In Asia, Japan was the first nation to undergo modernization in the industrial sector in addition to sustained growth in economic performance. Investment from Japan - initially to world's Asian Tigers.

It is worth noting that on average close to three-quarters of annual FDI flows to Africa majorly go to 24 countries which are classified by the World Bank as oil-and mineral-dependent. Studies have shown that the following countries are the biggest recipients of FDI in Africa Nigeria, Libya, Morocco, the Sudan, Equatorial, Algeria, Tunisia, Madagascar and South Africa Africa's share of world FDI inflows has for a large part remained below 3 percent in spite of being at 5.88 percent in 1980. For instance, Africa's FDI share marginally declined from a level of 2.07 percent in 2000 to 2.02 percent in 2001 with successive shares as follows; 2002 is 2.23 percent, 2008 taking 2.59 percent, 2009 took 2.72 percent and 2010 was 2.89 percent according to (UNCTAD, 2009).



**Figure 2 FDI Inflow Trend for East African Countries**

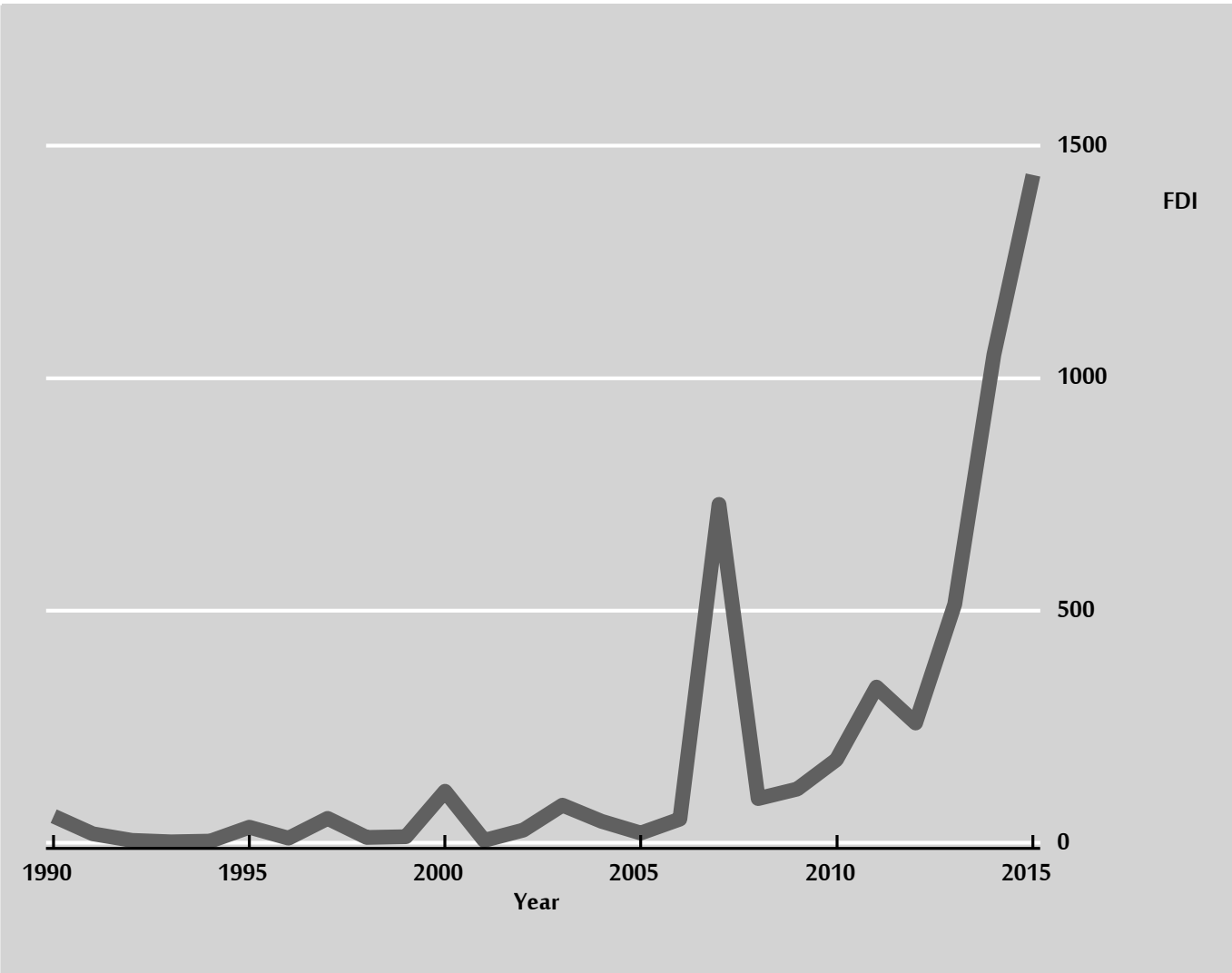


**Source: UNCTAD, FDI/MNE database**

The graph shows that there has been an increasing trend of the FDI to the East Africa as indicated in Figure 2, the constant flow of FDI was witnessed in 1970 as many international companies seeking to establish and invest in Eastern part of Africa. Figure 1.1.2 shows that Kenya's level of foreign direct investment has been increasing within the period from 1990- 2015. This too has been the case in the other nations in the region which include Uganda, Tanzania, and Ethiopia. This has been attributed to the government pursuit of various approaches to increase foreign direct investments with most notable ones such as vision 2030 which among other purposes was meant to make the Kenyan republic globally competitive for investors. These have been policy and institutional frameworks aimed at increasing FDI inflows since independence as discussed in 1.4.

Leaders in East Africa region has also shown their interests and will to encourage investments in the region through economic integration. East African community in which Kenya is a member attracted foreign direct inflows into the region due to an expanded market for good and services produced by the member countries. Trade barriers were also removed to allow free-flow of goods within the region.

**Figure 3 FDI Inflow Trend in Kenya (1990-2015)**

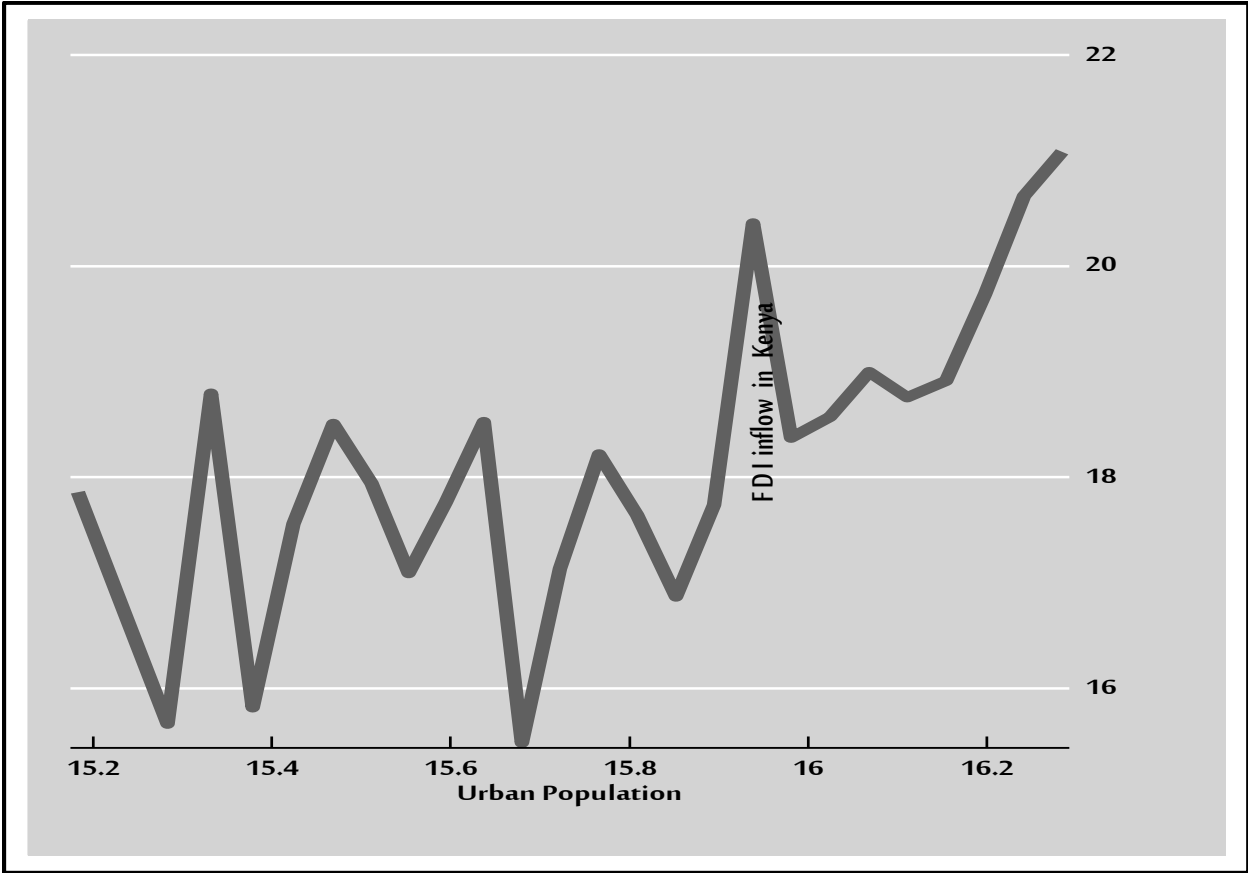


**Source: UNCTAD, FDI/MNE database**

Figure 3 on the flow of FDI in Kenya since 1990 has been fluctuating from one period to another. The graph depicts a general increase of FDI inflows to Kenya between 2010 to 2015. However, between 2005 and 2010 there was an upward trend before decrease and then starting to increase. In the previous period, the FDI trend from 1980 to 2005 has remained low and fluctuating as it is shown in the graph.

Kenya strategic location and favorable government policies since independence have seen many nations in the world want to invest since independence. The leading countries in terms of FDI inflow to Kenya have been United Kingdom, USA, Malaysia, Germany, France, Belgium, Netherlands, Portugal and South Africa (UNCTAD, FDI/TNC database). China, India, South Africa and South Korea have risen to be among the first five leading in terms of FDI flow to Kenya overtaking UK, Germany, and Netherlands (GoK, 2011). China seems to overtake the position that has been occupied by the UK since independence to become the number one source of FDI for Kenya according to (GoK, 2013)

**Figure 3 FDI Inflow in Kenya versus Urbanization for the Period 1990-2015**



**Source: UNCTAD, FDI/MNE database**

Figure 4 above shows the relationship between the flow of FDI to Kenya and urban population growth rate for the period (1990-2015). There is a positive relationship with an upward trend which indicates that the FDI increases with the increasing population for the last 25 years. This depicts some kind of influence of FDI flow by the population moving to cities. Current urbanization patterns should be more sustainable for economic, social and environmental development. High costs of environmental degradation in urban areas are large and increasing, adding to the economic and social challenges of urbanization.

### 1.3 Role of FDI

FDI comes with tremendous benefits to the receiving countries and also to the origin country. According to Mwega (2009), FDI is associated with profitability and enhanced output prospects of private domestic investment and particularly in terms of investable financial resources, the introduction of new technologies and increasing efficiency. Evidence has pointed out that FDI brings about efficiency and benefit of free market mechanism. In addition, it solves the problem of savings deficiency, foreign exchange inadequacy, revenue gap, and issues relating to management (Todaro, 1977). According to O'Connell *et al.* (2010), FDI enhance the manner in which credit and risk are shared across. Further, FDI brings about superior technology and new skills, results to the upgrading of skills, the creation of employment, as well as promoting innovation and this is why it is known to enhance productivity and consequently performance (Blamestorm, 1986).

On capital accumulation, DeMello (1997) finds that FDI is key in addressing insufficiency of capital and productivity in many developing economies as it results in allocative efficiencies, knowledge and technology transfers, and diversification of risks. (Polpat Kotrajaras, 2011) notes that FDI as a mode of financing remains prominent over other types of capital flows in East Asian countries. When countries are experiencing large current account balances, one of the most important decisions to take involves encouraging foreign capital inflows to increase investments. Sumner (2005) asserts that the position of capital level in the third world countries, this worsened by the commercial bank lending getting exhausted and unavailability of aid after the debt crisis of 1988. In this case, increase in the FDI was seen as the most appropriate solution and economies endeavored to attract FDI (Tobin and Kosak, 2006). Similarly, FDI results to domestic capital,

increasing the movement of technology and trade across borders, skills development to domestic labor, and improved technical and managerial in reference to (Abala, 2014)

FDI plays an important role is the immense contribution to economic growth directly through the financing of development projects, and indirectly through knowledge and technology transfers (Liargovas and Angelopoulou 2014). According to (DeMello, 1997) inwards, FDI enhances the adoption of new products and production techniques in the host economy, stimulate knowledge transfers (human resource training) and introduce superior managerial capacities. According to (Kyrkilis and Moudatsu 2011), higher quality requirements for the intermediate inputs purchased from the local manufacturers, economies of scale, improved competitiveness of domestic downstream industries and the entry of new producers are the main mechanisms through which technology is transferred amongst economies.

According to Mwega (2009), multinational companies which come through FDI opens the receiving nations to other trading partners through exportation, better infrastructures and the environment for doing business. The opening up results to economic integration of the which means better coordination trade policies, economic policies, and fiscal policies in addition to generating opportunities for internal and economic stability. The overall consequence will be a flow of FDI (Liargovas & Angelopoulou, 2014). At the firm level, FDI leads to improved labor productivity and total factor.

According to Feldstein (2010), the flow of FDI is associated with the opening of businesses in different sectors of the economy. These businesses are required to pay incomes taxes from the profits gained from the investments. The study concluded that profits earned by the firms lead to the generation of the cooperate taxes in receiving nation. Further, the FDI inflow is associated

with the development of human capital since it involves training of skills in different areas of the skills required by the operations of the foreign investments.

OECD (2002) in the exploration for the role played by the flow of FDI found out that foreign direct investments are very useful in the receiving country through the facilitation of enterprises development. This is through the endeavors to produce economically by reducing costs, synergies and the invention of the new product. The idea was that the efficiency gains may occur to the other firms not related to the foreign through demonstration. These lead to spillover effects to other industries in the firms and hence expanding the enterprises.

Multinational enterprises are known to create a unique asset of the market to the countries they do invest. This is done through opening markets for goods and services which are produced in the host economies. When such markets are created, firms in the host economies increase their exports which result in competitiveness, stimulation of market intelligence as well as a realization of economies of scale.

Further, the multinational firms are involved in what is described as corporate social responsibilities (CSR) which involves community-based projects which are expected to generate social benefits to the society. They do this as good citizens in which they engage authorities in the implementation of such projects. The projects involve spending money in the host nation and this becomes more beneficial.

#### **1.4 Government of Kenya Investment Policies**

Due to the important role played by the FDI, Kenyan government has put appropriate policy measures as part of her commitment to attracting more foreign direct investments into the country since independence. Seasonal paper No.10 1965 on African socialism and its application in

national planning described policy incentives and macroeconomic reforms implemented adopted between 1965-1985 and this promoted import –substitution strategy. This was reversed by Session paper No.10 of 1986 which was export oriented strategy concentrating on main exports. In the same year, there was the formation of Investment Promotion Center (IPC) was later renamed Kenya Investment Center(KIC) tasked with promoting FDI inflows by marketing Kenya as the best investment destination through the provision of a necessary environment for doing business and a legal requirement in terms of acquiring business licenses.

There has been a legal framework which was part of the enactment of investment promotion act 2004 in line with vision 2030, described as Kenya's development program for the time period 2008-2030. It is aimed at making Kenya a newly industrialized, middle-income state through providing quality life to all in a clean and secure environment. Some features of this act includes the appropriate tax and customs incentives, wave on the training costs depending on the type of and size of the firm which shows government commitment towards attracting and maintaining the flow of FDI into the country. The act also outlines the ways of removing the internal hindrances into the country which include a favorable business environment for investors. Various institutions mandated to marketing and promoting FDI include Kenya Investment Authority (Ken Invest), Export processing zones Authority and Ministry of Finance. This act further outlines the economic sectors which are restricted such as insurance, telecommunication, and those listed on the NSE. The others are allowed to be fully owned by the foreigners (GoK, 2001).

Macroeconomic reforms which were listed in the Kenya investment guide which was published by Kenya Investment Centre (KIC). Manufacturing under bond for exports by removing investors from value investments and customs duties is another reform. This is in a bid to instill confidence among investors both the existing in terms of maintaining them and the newly targeted ones. This



is in line with Vision 2030 which is more competitive in terms of achieving. This has seen government efforts in maintaining macroeconomic stability and its recovery since 2003. Issues such as low inflation, stabilized exchange rate and low interests rates enhances confidence (GoK, 2003)

Efforts by the Kenyan government have borne positive results and as a result, Kenya is the most preferred destination for investments in East Africa. World report on the ease of doing business showed that Kenya had improved by 16 points from 2016 placing Kenya at 189 in 2017 which gives an upper hand towards investments. Through these efforts, many sectors of the economy are open such as telecommunication industry. The industry has been growing since 2010 with the introduction of fiber optics of 2009-2010(GoK).

### **1.5 Factors that Determine flow of FDI**

Infrastructural development is a priority for the Kenyan government with much investment roads and air transport aimed at making it easy for movement of goods. In a bid to attract the investments in the counties through rural electrification and this has seen a substantial investment by the government towards increasing energy generation. The government has invested more than \$1.2 billion in solar energy generation across the country. Moreover, creativity and innovation have also been attributed to promoting investments in the country.

The exchange rate system is a key factor when dealing with imports and exports businesses. Devalued currency encourages imports since it makes it cheaper for the importing countries to purchase more goods while overvaluation of currency discourages imports since it makes goods expensive for the importers buying from a given nation. Unexpected devaluation affects negatively domestic businesses by raising prices of imported goods of production. (Wanjala,2001),in his

study concluded that macroeconomic instability, uncertainty, high exchange rate due to exchange and depreciation increase foreign direct investment if investors are export projected.

Kinuthia (2010) identified political instability as an important factor in determining foreign direct investments since no investors would be interested in the politically destabilized nation. This is key because it reduces their confidence level and creates uncertainty for their businesses. Political instability lead to forceful loss of assets through politically motivated violence and clashes which were evident in Kenya in 1991/1992 which was as a result of the calls for the multi-party democratic elections in the transition from the former dictatorial era of President Moi who ruled Kenya for the period 1978-2002. Further, in 2007/2008 clashes which arose due to disputed elections led to economic stagnation from the previous economic growth rate at 7% down to 1.6% in 2008. Many nations in the world which have faced political instability are characterized by loss of lives which results in investors closing their businesses and moving to other nations in search of conducive environment for their investments which include Iran, Iraq, Sudan and South Sudan ,Democratic Republic of Congo, Nigeria, Chad and most recent being Burundi all these were politically motivated.

Additionally, corruption in Kenya traced back to the single party state which was characterized by authoritarianism. However, during the multi-party state, corruption has gone heights with Kenyan political class using it as an avenue for raising money to fund their campaigns. Weak legal framework and political corruption lead to institutional decay and if not controlled their death which is a costly affair not only in Kenya but also in many African nations (Amundsen, 1999, & Bjorshol, 2006). Investors are always scared on corruption because of uncertainty and the costs associated with this menace.

Urbanization defined as the process by which people leave the countryside to live in the cities has been seen to change societies in the world and particularly in Africa. Statistics show that African is urbanizing fast .Urban residents have increased from 14% in 1950 to 40% today. It is forecasted that 50% of people in Africa will be dwelling in cities (World Bank, 2016).It is projected that the number of people living in cities will be about 56% in the year 2050.Despite the fact that the urbanization is significantly transforming societies, however, little attention has been paid to effective measures to harness the potentiality (Economic Outlook, 2016). African nations are urbanizing at a fast rate historically and consequently considerable opportunities and challenges. Further, urbanization results to structural transformation, if coupled with productive employment and enough public goods. Divergent African urbanization is evident from one nation to another which that that unplanned urbanization can challenge structural transformation (African Economic Outlook, 2016).

Gross domestic product of the neighboring countries and particularly the countries in the East African Community is always not fully financed by the local revenue collection. For instance, Uganda has relied on foreign aid big percentage of its budget and particularly international donations accounted for 42% of the entire budget in 2006 (GoU). In Kenya there has been decrease in the ratio of internationally funded budget to 25% in recent years, the government still relies heavily on donations to fund their bills (GoK).When officials in the prime minister’s office in 2011 were caught embezzling \$13 million in foreign aid, international donors withheld hundreds of millions of dollars in ODA – accounting for nearly 6% of government revenue, forcing them to raise money through borrowing instead (GoK, 2011).

Small and large scale farming operated in the monetary and non-monetary sectors which included industries which were both domestic and foreign, and the latter presented the government with

formidable problems of organization and taxation since it could not be quantified in monetary terms. By the late 1980s, government reports estimated that approximately 44 percent of GDP originated outside the monetary economy. Most (over 90 percent) of non-monetary economic activity was agricultural, and it was the resilience of this sector that ensured survival for most Ugandans.

Nations whose membership include Uganda, Kenya, Senegal, Uganda, Namibia, Madagascar and Mauritius impose conditions that are meant to regulate regional imports as well as other nations in the Sub-Saharan African countries. These are meant to shield consumers against counterfeits and ensuring right substandard measures. This affects the producers and traders who operate within East Africa Community. However, Kenya is the only country that imposes many rules and regulations on imports from its regional partners than on imports from the rest of the world (Kenya Economic update2012).

Kinaro (2006) and Opolot *et al* (2008) and UNCTAD (2005) found out that corruption and ineffective governance was associated with reduced FDI inflows in 1980 due to Kenya as many investors did not want to invest in a nation in which future was uncertain. Foreign investments have attracted attention to policy-makers as it is a key sector in employment creation. Efforts have been made in the country's endeavor to woo investors which were the enactment of investment promotion Act 2004 which was meant to facilitate investments by helping potential investors to get licenses necessary for doing businesses in the country. It was further to offer enticing incentives for the investors. It was as a result of this that the Kenya investment authority was established to promote investments.

Ngowi (2000) argued that investors who want to invest in other nations look at the factors of interest that give them confidence and interest to venture in the host nations. They mainly look at the include rules that regulate incoming of the new firms and operations, political and economic stability. Market size plays an important role in the multinational firms in their decision to invest in a given nation (Dunning, 1995). This was confirmed by Holland (2000) who found out that it played an important role in Europe when it came to the determination of the flow of FDI.

Odero(2015) in his study for impediments of FDI within Turkana county in Kenya, corruption was found to negatively affect its flow because it creates uncertainties and it leads to increased risk of investment since the investors fear to invest in where they can not be able to forecast their returns from their capital investments. Furthermore, corruption results to higher costs of doing business since it leads to increased time and resources spent in the complex regulations and bribes to bureaucrats. The increased cost is then transferred to consumers through inflated prices or compromised the quality of goods and services which in turn affects privately employed labor, the ability to innovate, efficiency in production, competitiveness and thus poor economic growth. In his analysis, he further noted that these effects can result to shift into informal sector to divert from using public goods possible.

## **1.6 Problem Statement**

FDI plays an important role in the receiving country which make it vital in policy formulation. According to Todaro(1977), FDI results to increased efficiency, benefits of free market mechanism, solves the problem of savings deficiency, foreign exchange inadequacy, revenue gap, and issues relating to management .Further, FDI brings about new technology which results to new production techniques as well as diversification of output and production of variety of products which are exported (DeMello, 1997; Mwega ,2009; Feldstein,2010). Capital investments increased

incredibly from USD 914.92 million in 2012 to USD 3,378.98 million in 2013 (Ken Invest, 2014). Indirect functions of FDI in the economy include employment creation to the labour force employed in the foreign firms. For instance, jobs created through FDI in Kenya rose to 8,223 in 2013 from 2,491 in 2012 (Ken Invest, 2014). According to Economic Survey (2014), FDI accounted for 1.2% on Kenya's gross domestic product GDP. Due to the enormous contribution of FDI, appropriate measures should be taken to ensure a constant flow of FDI and hence the study.

Different studies carried out in this area such as (Hasli et.al, 2015; Abala, 2014; Blonigen et.al 2014; Ballard et.al, 2013; Wanjala, 2001 and Asiedu, 2006) established that FDI and economic growth are market-seeking and requires growing the gross domestic product, political stability, good infrastructure, available markets for the goods, low debt levels, trade openness, low lending rates, rate of return on capital investment, reduced level of corruption and taxation policy. Increased number of crimes and insecurity were found to be great stumbling blocks to foreign direct inflows and economic growth. However, these studies were contradicted by the Kwoba et.al (2016) who found that inflation, exchange rate, and GDP had an insignificant impact on FDI flow and as a result, they concluded that FDI flow was affected by other market forces.

Furthermore, FDI seems to be affected by a myriad of factors in different regions in the world. Previous studies have not exhausted on the key drivers of FDI flow and as a result and Kenya being among many other nations has not reached their desired levels of FDI for optimizing associated benefits. In fact flow of FDI in Kenya has been fluctuating from one period to another (UNCTAD, 1990-2015).

Researchers have adopted different methods of analysis in their studies and data types in their study for the FDI flow. Hasli et.al (2015) using panel data employed fixed effect model, Blonigen et.al (2014) Bayesian statistical technique while, Njoroge (2015) used descriptive analysis for

primary collected data. As a result, they have reached to different conclusions. Tools of analysis used could have been the main sources of varying results.

Following the contradiction on the past studies on the role of GDP, exchange rate and the inflation rate in the flow of FDI, this study seeks to provide more insight on their role towards the FDI flow and additionally incorporate urbanization, rural population and economic performance of the trading partners in East Africa region as new factors. Use of different methods and data types could have been the source of different conclusions. Since FDI is time-dependent, this study seeks to use time series data in the analysis with most recent data up to 2015 because it takes into account the concept of time. This makes the results more reliable.

### **1.6.1 Research questions**

- i. What factors determine FDI in Kenya?
- ii. How do the identified factors affect FDI in Kenya?
- iii. What policy implications does the study recommend?

### **1.6.2 Research Objectives**

The main objective of this study was to determine factors that affect foreign direct investments inflow in Kenya. The specific objectives are:

- i. To identify factors that affect FDI in Kenya.
- ii. To determine how the factors identified affect FDI in Kenya.
- iii. To draw appropriate policy implications from the study findings

## **1.7 Relevance of the Study**

Foreign direct investments play a very important role in both developed and developing the world with its association to macroeconomic issues such as addressing unemployment issues. Policy makers will benefit from this research through guiding the design of investment policies and putting in place necessary institutions for diversifying flow of FDI to Kenya from other nations of the world. Further, this study will be beneficial to the government in exposing the factor that should be prioritized in foreign economic policy for international trade. This will indeed point out to the policy part that will facilitate the flow of FDI. The results will form the basis for further research in which students and scholars can have it as a basis for research and deliberation.



## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter presents both theoretical and empirical review relevant to this paper. First, starts with the theoretical review, followed by the empirical review and finally a summary of the literature.

### **2.2 Theoretical Review**

The four theories of FDI discussed below have been found useful in explaining why firms invest in other nations and particularly from the developed world to developing countries hence their application in this study.

#### **2.2.1 Monopoly Theory of Advantage**

The intuition in this theory is that for the firm that invests in other nations usually have monopolistic advantages. These are basically strengths relative to other firms and they are mainly in form of markets; possession of restricted resources provided by nature, possession of copyrights and symbol rights (Hymer, 1976). Thus, the monopolistic powers give the firm investing in the foreign nation strengths relative to local firms in the receiving country. Particularly, the firm enjoys monopolistic advantage specifically in loftier information and improved knowhow and cost advantage with increased production.

According to Roots (1978), this refers to mainly skills and new technology possessed by industries and they are the ones that give competitive advantage. Consequently, a firm to create unique product differentiation. The per unit cost of moving powerful knowledge asset to countries where they invest will be lower in relative to domestic firms which must invest entire cost to make such asset (Kindleberger, 1969).

### **2.2.2 Oligopoly Theory of Advantage**

According to Lin et.al (2010), two firms make decisions independently on whether to invest or not invest in the foreign country. One of the firms produces intermediate goods while the other produces final products. The decision by one of the firms to invest in the host country is associated with some fixed costs and technological spillover effects to the local firms in the receiving country as well as reducing the marginal cost of production. According to Hoenen et.al (2009), the concept of FDI is seen as mechanisms by the firms to defend themselves against the move made by the other firm in this theory. When the risk averse firm finds out that its main competitor has invested in the foreign nation, it also follows and does the same to avoid market disturbances. In fact, Schenk (1996) argued that any action by one firm in the oligopolistic kind of market results to a countermove by the other locally and internationally. Consequently, if a market leader invests abroad other firms in the oligopoly respond by investing in foreign nations for the equilibrium to be achieved and thus FDI.

### **2.2.3 Product Life Cycle Model**

According to Vernon (1971)'s Product Life Cycle Model (PLCM), a product goes through five stages in its life. The initial stage involves the development and introduction of the product in which the product in which consumers do not know of it and thus low demand. At the growth stage, there is increase in the demand for the product and this is associated with high profits. The next stage is the maturity stage and the demand levels and sales are increasing at a slower rate. The profit margin is decreasing too and the next step will be the decline in the product demand and thus low profits

Growth stage comes before the declining stage, the firm will explore tactics and this will be FDI in other nations. Consequently, firms capitalize overseas and sell to other nations from the foreign

country and this is intended to ensure that its monopoly power is retained when the product is standardized in its growth product phase. Competing firms follow suit and invest in the nation abroad. Consequently, in cooperating time factor to monopolistic hypothesis advantage, a product life cycle model suggests that firm change from exporting to FDI. Thus, the flow of FDI by firms.

#### 2.2.4 Neoclassical Theory of Investment

Jorgesen (1963) and Jorgesen et al (1967) are credited for this basic theory in investment. This is a supply-side theory of investment which suggests that investment decision is affected from the supply side by the output on the basis of cot-benefits analysis. The production function relates inputs which are mainly Capital and Labour to the output. In fact, the theory is built on the assumptions that firms maximize profit= (Revenues-Cost) and that the amount of capital and labor must satisfy the condition that marginal benefit=marginal cost. The implicit or explicit cost of using capital is not the actual price of the capital because capital can actually be resold.

The costs incurred include the cost of investment goods and cost of expenditure to pay wages which must be deducted. Consequently,

Profit=Sales-Wages-Expenditure on investment goods. According to them, this can be expressed by the following equation:

$$\pi = P_t Y_t - P_t^I I_t - N_t W_t \dots \dots \dots 2.1$$

Where,

$\pi$ - Profit

$P_t$ ,-Price of output

$Y_t$ -Output

$P_t^I$ -Price of investment goods

$I_t$ - Investment goods

$N_t$ -Labour force

$W_t$ -Wage Rate

t- Time period since the flow of profits is discounted over indefinite time.

At market interest, the worth of all future flow of profits is given as

$$PV_0 = \sum_0^{\infty} \frac{1}{(1+r)^t} (P_t Y_t - P_t^I I_t - N_t W_t) \dots \dots \dots 2.2$$

The intuition in this theory of investment is that investment of firms, both net and gross are a negative function of real interest rate because the cost of capital is positively affected by changes in real interest rate.

The idea in explaining FDI is that capital movement by firms is explained by the variation in terms of return on capital and that firms which seek to invest their capital in a country where high returns will accrue. The former theory of early neoclassical theory stated that flow of capital internationally is determined by the difference in the returns amongst different countries in which the capital is invested in the destination of high returns (Jorgesen et al, 1967)

### **2.2.5 Eclectic Paradigm**

According to Dunning (1973, 1980, 1988), the eclectic paradigm is FDI theory known as OLI-Model or OLI-Framework because it comprises of three theories of FDI. According to this theory, for the firm to invest in another country it must enjoy to be advantageous in three dimension; ownership advantages, locational advantages, and internalization advantages. Ownership advantages entail mainly intangible assets and exclusive of the company and the idea is that they

can be transmitted in multinational corporations with truncated overheads hence high incomes towards the company. Net ownership advantages basically show the strengths that a firm has in the foreign market. The ownership advantages include rights, monopoly power in terms of property rights, technological advantages and enjoyment of large economies of scale.

The locational advantage is the second concern by the firm that wants to invest in the foreign country. The main issue is that after the fulfillment concerned the ownership advantage then it becomes more viable for the firm to use them for its own benefits. These which are mainly in the host countries include economic factors such as availability of factors of production, transport costs, telecommunication and market availability. The second factor is a political advantage which is mainly government policies in the receiving country for FDI flow to the country. Finally, it is the social factors which include cultural diversity, attitude towards the foreigners.

Upon ownership and location advantages is the firm using them together with at least some factors outside the country of origin for its establishment in the foreign investment (Dunning, 1973, 1980 & 1988). This involves the assessment of different ways in which a company can use its power in terms of advantages from the sale of goods and services that may be signed between firms.

Finally, the OLI model provides ways for evaluation of how firms can make use of their powers ranging from selling goods and providing service area to settlements that can be signed between firms. The intuition here is that if internalization advantages are higher, then the firm would prefer to engage in oversea production relative to giving out the patent rights through licensing and franchise. The OLI parameters vary from one firm to another and this is dependent on economic, political, social orientation of the foreign nation. As a result, the objectives and strategies of the firms are that the benefits are higher when the firm engages in production in a foreign country than

when it offers the right under license or franchise. The firm operates in a country where there are more opportunities (Dunning, 1973, 1980&1988)

### **2.2.6 The Flexible Accelerator**

Accelerator theory developed by Chenery et.al (1952) is basically an advancement of the simple accelerator model. The principle defines the relationship between changes in output and level of investment. It did away with the former theory's weakness that capital stock was optimally changed without lagging in the time factor (Aftalion 1909 & Clark 1917). The flexible accelerator theory takes into account that some optimal relationship between capital and output with time lags in the process of adjustments. In this model, the time structure of the investment process is characterized by lagging of geometric distribution. Capital stock depends on the on the expectations about future output (Koyck, 1952)

In reference to this theory, a firm has expectations about its future output relying on the past output of the firm itself, same industry or even both. The use of capital adjustment process is justified by the fact that firms are uncertain about future demand and the additional costs that are as a result of the rapid payment. Thus, when it comes to FDI by the firms investing foreign countries will consider its past output in making its capital investment in both in both domestic and FDI.

#### **Model**

The model makes use of lagging in its adjustment process between capital stock and output.

$$KE = K(Y, UC, PO) \dots\dots\dots 2.3$$

Where;

*KE* -Capital stock at equilibrium

$Y$  -Level of output

$UC$  -User Cost

$PO$  -Price of output

This theory assumes that capital stock depends on all past output levels in which weights are declining geometrically and this is called lag investment described in the following equation below by Chenery et.al (1952) who are modern economists

$$K_t = g(Y_t, Y_{t-1}, Y_{t-2}, Y_{t-3} \dots Y_{t-n}) \dots \dots \dots 2.4$$

$K_t$  Is the Equilibrium capital stock

This theory says that capital is expanded until its user cost is called it  $c/p$  equals to marginal profit or benefits. What this theory means in terms of FDI by firms in foreign countries is that they will keep on increasing the capital until the cost is equal to marginal profit. However, it is important to note that this model is that it is purely presented mathematically and thus it's non-generalizable and the model has no economic basis and the use lagged, independent variable results to unreliable results because  $Y_t$  and  $Y_{t-1}$  are related. However, this model is useful in the sense that it admits that there are other variables that output is not the only factor that influences investment.

### **2.3 Empirical Review**

This part of the review analyzes the various studies that have been carried out to identify the determinants of FDI in various nations of the world.

Hasli, Catherine et.al (2015) carried out the analysss of the factors that determined FDI inflow in Asia in 1993-2013 using fixed effect model. Panel data was used applying unit root tests, integration analysis, and regression. Macroeconomic factors were tested to assess their influence

on the flow of FDI. Their findings established the lending rate, trade openness and money supply have a positive significance to FDI per capita whereas debt, unemployment rate and environmental pollution have a negative significance to FDI per capita

Kahouli et.al (2015) studied the FDI flow mainly interested in understanding the challenges for the FDI in countries that participate in international trade. Their study involved the use of both static and dynamic gravity model to test the determinants for FDI flow. They sampled 14 partners and 39 host nations in the period 1990 to 2011 in their study. They established that FDI has major benefits in the host nation such as increasing labor productivity, the creation of employment, the introduction of new technology and productivity. Further, it leads to increased level of incomes.

Blonigen et.al (2014) using Bayesian statistical techniques indicated that cultural distance factors, relative labor endowments of a nation played an important role in attracting FDI. However, comparing to their empirical results to the previous studies, they found that their results did not find a significant influence of business costs, the state of infrastructure and institutions on the flow of FDI in the receiving nations. This meant that government policies of the host nation did not have a greater impact on determining the FDI flow.

Ballard et.al (2013) using data set with the bilateral foreign direct investments in which twenty-four organizations for Economic Cooperation and Development economies. They considered the time period 1985-2007. Their results indicated that nominal and real volatility had a great impact on the flow of FDI. Gross domestic product (GDP) and volatile exchange rate play a critical role in the potential investors to invest in a particular nation. The interest rates on the amount of capital investment. High returns on the capital investments lead to high levels of FDI.



Factors such as natural resources, market size, government policy, institutions and political instability have a role to play in the flow of foreign direct investment to Africa according to Asiedu (2006). Using data from investor surveys and in cooperating twenty-two countries in Africa for the time period 1984-2000 established that restrictions imposed on investments, unstable macroeconomic, levels of corruption and political instability negatively influenced the flow of FDI to Africa. Large markets and natural resources were the recipes to FDI flow. Further, low inflation rates, developed infrastructure, educated human capital, openness, low levels of corruption proper legal system and political stability encourage the flow of FDI. Similarly, in 2002 in his study to determine the factors that determine the FDI to developing economies in Africa found out that higher returns to investments and improved infrastructure positively affected the flow of FDI. He further noted that trade openness promoted FDI inflow to Sub-Saharan Africa and non-Sub-Saharan Africa. In his remarks his recommendations he says that policies applied differently in different regions.

Wanjala(2001) using panel data analysis collected from 20 countries in the Sub-Saharan Africa to study factors that determine FDI with reference on Kenya from 1990 to 1999 established that taxation policy, rate of return ( which was captured by the real GDP growth rate) and openness of an economy were significant factors that affected FDI inflows.

Schneider (1985) endeavored to explain the flow of FDI by mainly concentrating on eighty countries in the in the developing world. The analysis involved the econometric estimation and the comparative analysis and they established that higher levels of real per capita Gross National Product (GNP) and a favorable balance of payments play an important role in the flow of FDI. The findings further established that bilateral aid that comes from Western nations, as well as multilateral aid, encourages the FDI flow. Further, the aid from communist nations negatively

affects the FDI inflows. According to the results estimated, political instability negatively affected the flow of FDI because of uncertainty that exists.

Batana (2011), in his AERC Research paper analyzing the determinants of foreign direct investment in West African Economic and Monetary Union countries, the main econometric results obtained in this study showed that domestic investment, literacy and degree of openness affected FDI flows to West African Economic and Monetary Union countries (WAEMU) which included Benin, Burkina Faso, Cote d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo. Factors which included foreign debt, public consumption, GDP and real exchange rate had a negative impact on FDI. Real GDP was found to be too low for its evolution to give any reflection to the investors since from their point of view it showed a significant increase in the size of the market. On the other hand, foreign debt had not reached a point that could show that tax rate would change in future due to the debt levels.

Kwoba et.al (2016) investigated the impact of macroeconomic variables on foreign investments in Kenya and found out that inflation, exchange rate, and GDP did not have a significant impact on foreign direct investment. The findings seemed to contradict findings by other studies and thus concluded that FDI is affected by other market factors. Time series data were analyzed using SPSS to obtain the relationship between the variables.

Njoroge et.al (2015) in their study endeavored to determine the relationship that existed between foreign direct investments and manufacturing sector. The study involved the use of descriptive statistics for primarily collected data; they established that there was a significant relationship between corporate governance and FDI inflows in the manufacturing sector. They also carried out Analysis of Variance (ANOVA) to assess the overall significance of the model. The model of the study was found to significantly explain the variation in FDI growth in the Kenyan manufacturing

sector. In fact, the model accounted for 55.6% of the variation in FDI growth in Kenya. Unique with the results is that 44.4% of FDI growth was accounted for by factors outside the model.

Odero (2015) in his study to find out challenges of FDI in Turkana County found political instability to adversely affect the flow of foreign FDI in the country. Using qualitative data, the analysis was done using content analysis which was meant to summarize the essential features and relationships of data in order to generalize and determine patterns of behavior and particular outcomes. Ethnic conflicts that have been occurring in the northern regions of Kenya where Turkana County lies were found to have contributed to reduced FDI in these areas. The study reached a conclusion that corruption was a key impediment to FDI in Kenya because it resulted in lack of certainty and high risk of investment because of unpredictable costs. Moreover, corruption was associated with poor management of resources in Turkana County and thus increased poverty levels in these areas.

Abala(2014), while studying the key drivers of real gross domestic product in Kenya, he found out that FDI and economic growth are market-seeking and requires growing the gross domestic product, political stability, good infrastructure, available markets for the goods and reduced level of corruption in a country. Increased number of crimes and insecurity were found to be great stumbling blocks to foreign direct inflows and economic growth. Time series data from 1970-2010 was used for the analysis in this study.

Elly et.al (2013) carried out a study to find out the relationship between volatility of Kenyan exchange rate and FDI. The results of their study found a positive relationship existed between the two, though weak was attributed to uncontrolled macroeconomic variables in Kenyan environment. The study suggested that this should be regulated to stabilize fluctuations of macroeconomic variables for investment.

Empirical studies by Uwubanmwene et al (2012), Antwi et al (2013) and Igosina (2015) in to find out the determinants of FDI flow in developing nations reached a conclusion that governance is a key determinant of the investment flows. On the other hand, this opposed the findings of some studies carried out both in Africa and other continents that indicated although politics and governance influence FDI inflows; their influence is just but negligible (Kuzmina et al., 2014 and Saidi et. al, 2013).

Kinuthia (2010) in the paper submitted for the annual African International Business and Management (AIBUMA) conference in Nairobi in August 2010 to establish the factors that determine flow of FDI, political instability, crime and insecurity and factors related to institutions which mainly included corruption were found to be key factors that determine flow of FDI in Kenya. Interestingly, many studies concurred that human capital, openness, and market size as major determinants of FDI. Perhaps the issue of political instability was not looked at intensively.

Also according to Nyamwange (2009) while using annual time series data identified market size (proxied by GDP), stable macroeconomic policies and a level of human capital that is tolerable by investors as the main determinants of FDI in Kenya.

Research by Socrates (2009) sought to investigate the causes of low inflow in which the main interest was to provide new evidence by examining the determinants of FDI. The study employed macroeconomic data in conjunction with other countries based on several factors deemed to determine FDI with political instability as new factor under investigation. According to the results, FDI inflow in Kenya is affected by exchange rate and inflation rate political instability. However, GDP growth rate undermine FDI in Kenya. The study relied on time series data for the period 1980 to 2010.

Prague (2008) carried out a cross-sectional analysis for 38 developing countries over the period of 2000–2004 in trying to find out the factors that influence FDI flows. The study used averaged values of data for the 2000–2004 period in the cross-section estimates. Data analysis results indicated that market size, openness, infrastructure and willingness of a country to accept foreign investment have positively affected FDI, being significant to Per capita real GDP as a proxy for market size, because absolute GDP reflects the size of the population rather than income. Use of absolute GDP or per capita GDP for market size showed that they do not affect FDI. The conclusions from this result clearly indicated that investors prefer growing economies to large economies. Low tax and inflation positively affected FDI. Risk and wage were found to have no impact on FDI.

Ajayi (2007) identified market size and growth, costs and the skills of workers, availability of good infrastructure, country risk, openness, institutional environment, natural resources, agglomeration effects, returns on investment, macroeconomic policies among others as factors that affect the flow of FDI.

Mwega et.al (2007) using panel data for forty-three countries found that Kenya was not different from other countries and that FDI is determined by growth rates, terms of trade shocks, external debt ratio and quality of institutions. Similarly, UNCTAD (2005) report established that Kenya's inability to attract FDI was associated with serious issues of corruption and governance, economic policies considered inconsistent, and structural reforms, poor public service delivery as well as bad infrastructural development.

According to Kinaro (2006) in the study to determine the factors that affect FDI flow in Kenya found that economic openness, human capital, real exchange rate, inflation and FDI in previous periods played an important role as factors that affect the flow of FDI. The study was based on

time-series data. Similarly, Opolot et al( 2008) on wide scope concentrating Sub-Saharan Africa in which Kenya was considered established that FDI flow was affected by market potential, openness to trade, infrastructure, urbanization and the rate of return on investment positively affect FDI inflows into the region Sub-Saharan Africa which is considered to be developing world. On the other hand, macroeconomic instability was found to discourage FDI. This study involved the use of panel data.

## **2.4 Overview of Literature**

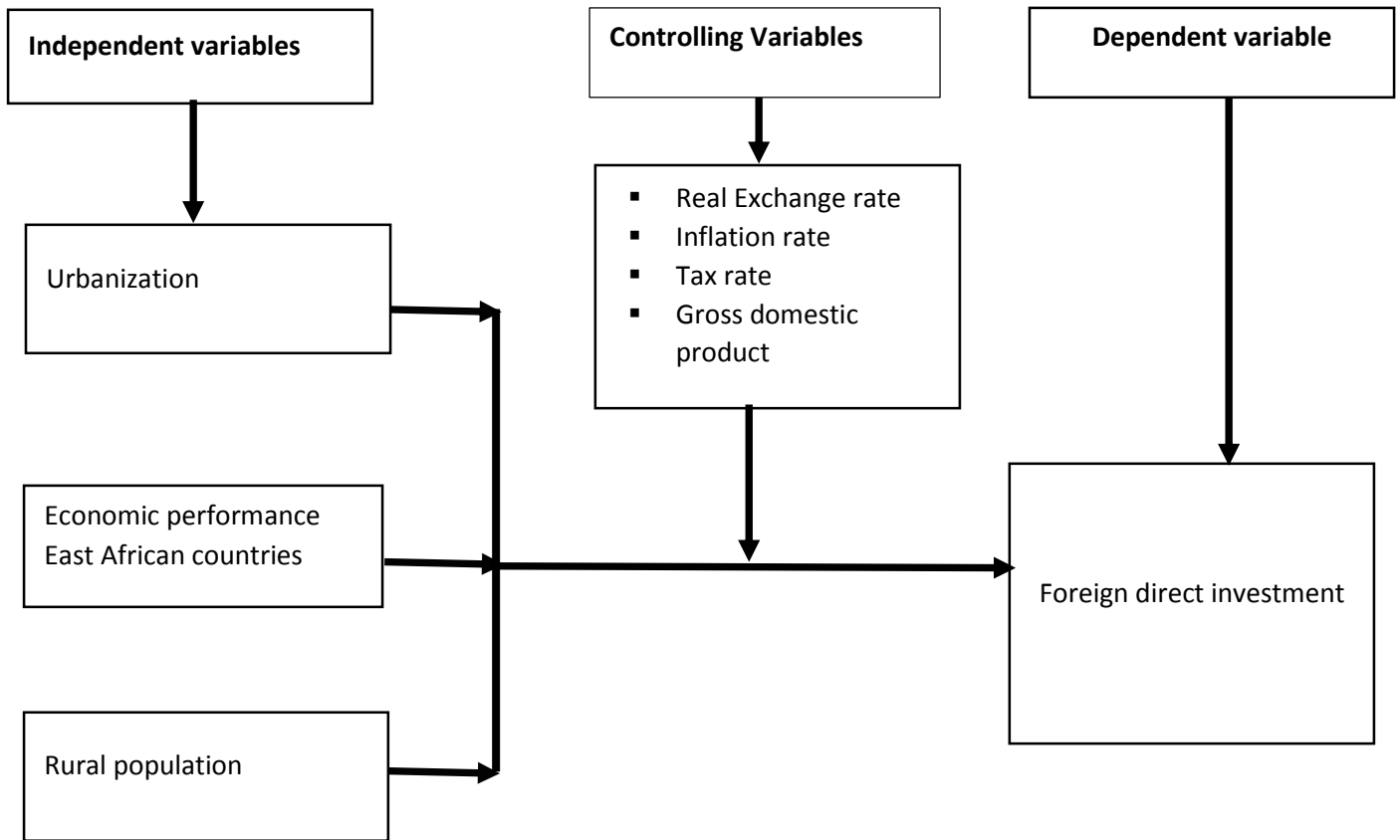
A critical review of the literature has shown that FDI in developing world and particularly Kenya is affected by inflation, real exchange rate, political instability, external debt levels, labor costs and institutional quality and particularly corruption. Studies carried out have pointed out that there is a need for further research in examining the factors that influence FDI in Kenya given the fluctuations which have been evident in different time periods (Njoroge et.al 2015; Ellyet.al, 2013; Kinuthia, 2010 &Prague, 2008) . There seems to be a unanimous view that countries that invest in other nations must possess some economic advantages and thus validate the four theories of FDI used by this study.

## **2.5 Conceptual Framework**

The review of empirical literature has found contradiction on the role of GDP, inflation and real exchange rate with studies such as that of Abala (2014) and Ibrahim(2015) finding them significantly affecting the flow of FDI. However, Kwoba et.al (2016) found them insignificant. This leaves unaddressed problem. Further, in all the studies reviewed there is none that has explored the role of the following factors: Urbanization, rural population and economic performance of the countries in the same regional or trading block. Consequently, this creates a gap on what their role is in determining the role of FDI. This section presents a conceptual

framework in figure 5 below for easy analysis. This starts with the independent variables which were tested and are mainly the new variables of interest; Urbanization, rural population and economic performance of the countries in the same regional or trading block. The Controlling variables maintain the balance between the dependent and independent variables. The outcome of the model is the FDI stock indicated on the far right of the framework.

**Figure 4 Conceptual Framework**



Source: Researcher (2017)

## CHAPTER THREE: METHODOLOGY

### 3.1 Introduction

This part describes the methodology, sources of data, technique for data analysis and tests for data quality that will be used in the study.

### 3.2 Theoretical Framework

A couple of theories have been used to explain determinants of FDI from the countries of origin to the receiving nations. Several factors that determine the flow of FDI in economic theory include expected returns to capital investment and the expectations on the demand of the firm's products from theoretical review. Further, possession of economic advantages which is mainly in form of resources in the production, technological and market monopoly advantages by the foreign firms over the domestic firms makes it possible for them to invest in foreign markets.

For the purpose of this study, the flexible accelerator model by Chenery et.al (1952) which explains the decision by firms on investments was adopted. According to them if a firm expects high output depending on the past output, then they invest because this results in high economic benefits. The relationship between investment and output need not be limited but can be affected by other variables. The motivating factor for firms to invest and in this case is either domestically or in foreign countries is the expected output from the capital invested. The model makes use of lagging in its adjustment process between capital stock and output for its operationalization.

$$KE = K(Y, UC, PO) \dots \dots \dots 3.1$$



Where;

*KE* -Capital stock at equilibrium

*Y* -Level of output

*UC* -User Cost

*PO* -Price of output

According to this theory assumes, firms make a decision on the amount of capital stock to invest based on all past output levels in which weights are declining geometrically and this is called lag investment.

$$K_t = g(Y_t, Y_{t-1}, Y_{t-2}, \dots, Y_{t-n}) \dots \dots \dots 3.2$$

It is the equilibrium capital stock

This theory implies that capital is expanded until its real user cost which is represented by *c/p* and captured in equation 3.1 above, equals to marginal profit or benefits. It is important to note that this model is purely presented mathematically and thus it is non-generalizable and the model has no economic basis and thus the use of lagged, independent variable results to unreliable results because *Y<sub>t</sub>* and *Y<sub>t-1</sub>* are related. However, this model is useful in the sense that it admits that there are other variables that output is not the only factor that influences investment.

**Model**

Investment is as a result of changes in capital stock.

$$I_t = K_{t+1} - K_t + \beta K_t \dots \dots \dots 3.4$$

Where

$I_t$  – is gross investment

$K_t$ -Capital stock at time t

$K_{t+1}$ -Capital stock at period t+1

$I_t^n$  – Net investment

$I_t^r$ -Replacement investment

This means that

$$I_t = I_t^n + I_t^r \dots\dots\dots 3.5$$

But  $I_t^r$  is replacement investment which is expressed as  $I_t^r = \alpha K_t$  which is the provision for depreciation of capital while  $I_t^n$  is a net investment over time. The Equilibrium capital stock  $K^e$  is inversely proportional to the real cost of capital.

Using output function by Cobb-Douglas, the output function is defined as below:

$Y = AK^B L^{1-B}$ . The theory is expanded until the real user cost, expressed as  $\frac{c}{p}$  equals marginal product. Therefore the marginal product of capital  $K$  is;

$$MPK = \frac{c}{p} \dots\dots\dots 3.6$$

There is no trend in real user cost of capital and thus net investment is

$I_t^n = \Delta K^e$ . This is what is called the basic accelerator principle.

The basic idea in this theory is that investment is related to output and thus the total investment can be expressed as;

$$I_t^n = K_t - K_{t-1} = \alpha(Y_t - Y_{t-1}) \dots\dots\dots 3.7$$

The nation is composed of both domestic investments and FDI which for the total investments for locals and foreigners.

$$I^n = (I_f^n + I_d^n) \dots\dots\dots 3.8$$

Where  $I_f^n$  is FDI and  $I_d^n$  is the domestic investment

### 3.3 Model Specification

Based on the adopted theory and particularly equation 3.8 investment is influenced by variation capital stock in the country and output. Suppose that total investment in a country come from FDI.

Economic theory and literature review analyzed established that FDI was affected by real exchange rate, Inflation, institutional quality, tax rate, gross domestic product, political stability and labor costs, trade balance, GDP growth rate, external debt, wage rate, macroeconomics and incentives by the government to attract investments. This study has introduced urbanization, economic growth of the selected countries (Ethiopia, Uganda, and Tanzania) as new factors using the most recent data.

The model was modified as:

$$Z = f(REER, INF, TR, GDP, NGDP, UNZ, RPZ) \dots\dots\dots 3.9$$

Due to problems of heteroscedasticity which results to biased estimators, natural logarithm is used to curb this and increase the reliability of the results. Upon transformation by taking the natural logarithms, the following model will be used for estimation:

$$\begin{aligned} \ln Z_t = & B_0 + B_1 \ln INFL_t + B_2 \ln REER_t + B_3 \ln RIR_t + B_4 \ln NGDP_t + B_5 \ln GDP_t + \\ & B_6 \ln UNZ_t + B_7 \ln RPZ_t + B_8 \ln TO_t + E_t \dots\dots\dots 3.10 \end{aligned}$$

This study used the OLS estimation technique after testing for Normality, Multicollinearity, Stationarity and Cointegration. These pretests were undertaken to ensure that the coefficients are best linear unbiased estimators. Further, this model is flexible, easy and successful to use in time series analysis and hence justification for its use. The model is suitable for when the data is stationary. In the event that the data is found to be non-stationary, then this will called for differencing to make them stationary. Cointegration test was also carried to test for long run relation between the variables. Upon estimation, the results were changed to normal values by taking the antilog of each variable for easy interpretation.

### 3.4 Definition of Variable

**Table 1 Definition of Variable**

<b>Variable</b>	<b>Symbol</b>	<b>Expected Sign</b>
FDI Net stock	Z	
Inflation	INFL	Negative
Real Effective Exchange Rate	REER	+Ve
Real Interest Rate	RIR	-Ve
Gross Domestic Product	GDP	+Ve
Averaged GDP for the neighboring countries who are East Africa Community Members	NGDP	+Ve
Urbanization	UNZ	+Ve
Rural Population	RPZ	-Ve
Trade Openness	TO	+Ve

#### 3.4.1 Foreign Direct investments

FDI stocks is taken as the total level of investment at a given point in time and in this case it was measured annually as the difference between the FDI inflows and outflows. The outward FDI stock

is the value of the resident investors' equity in and net loans to enterprises in foreign economies while inward FDI stock is the value of foreign investors' equity in and net loans to enterprises resident in the reporting economy. FDI stock was measured in USD and as a share of GDP. FDI creates stable and long-lasting links between economies.

### **3.4.2 Inflation**

Inflation is the rate at which the general level of prices for goods and services rise and, as a result the purchasing power of currency falls. There are generally costs associated with the increase in prices of goods. The average annual price changes as percentages for the specified period were used.

### **3.4.3 Real Effective Exchange Rate**

REER is used as a proxy because it is the nominal exchange rate adjusted for the relative changes in prices in the respective countries in addition to revealing countries degree of competitiveness in the world market (Kapila et.al, 1996). The strength of the currency gives it a world competitiveness in imports and exports. This was be measured as the weighted average of Kenya's currency relative to an index or basket of other major currencies adjusted for the effects of inflation. Determination of weights was done by comparing relative trade balance of the country's currency against Kenya within the index.

### **3.4.4 Real Interest Rate**

This variable is taken as the Long-term interest rates refer to government bonds maturing in ten years. Rates are mainly determined by the price charged by the lender, the risk from the borrower and the fall in the capital value.

### **3.4.5 Gross Domestic Product**

Economic performance was measured with the annual growth rate in gross domestic product for the specified period. The GDP growth rate was measured annually as a percentage of real GDP.

### **3.4.6 Economic growth of the Neighboring Countries**

The gross domestic product for the selected countries (Uganda, Tanzania, and Ethiopia) was averaged to study the influence of economic growth of the neighboring countries.

### **3.4.7 Urbanization**

The growth of cities and its influence in attracting investments has raised questions on the role it plays in wooing investors. African Economic Outlook (2016) outlines the social, economic and environmental role of cities with keen interest to understand the specific role. Urbanization was measured by the ratio of the people living in cities over the total population expressed in percentage.

### **3.4.8 Rural Population**

The trend to in rural-urban migration has become one of the important issues in the demographic profile in Africa in search for white color jobs. The trend has to be continuous but people living in rural areas have remained to be large in numbers taking approximately 80% in the developing areas. Therefore rural population was measured by the ratio of the people living in rural areas over the total population.

### **3.4.9 Trade Openness**

This was measured as a ratio of imports and exports to total gross domestic product to indicate the ease of carrying out business with other nations in the world.

### **3.5 Data Source and Analysis**

This study used time series data for the period 1980 to 2015 and all variables are converted to natural logarithms. FDI was the dependent variables for the model while exchange rate, inflation, real interest rate, growth in gross domestic product, openness, institutional quality, urbanization and growth of the neighboring members of East Africa Community averaged.

Secondary data from Kenya National Bureau of Statistics (KNBS), Kenya National Treasury and World Development indicators from the World Bank database was used. KNBS publications; Economic Surveys and Statistical Abstracts was used to extract data on the tea export earnings and tea export prices over the specified period. World Development Indicators (WDI) was used to provide data on the inflation rate, exchange rate and Gross Domestic Products for the neighboring Uganda and Tanzania who are members of East Africa Community.

#### **3.5.1 Pretest**

##### **3.5.1.1 Normality test**

Test for normal distribution was carried out using Shapiro-Wilk Approach. The study results was tested at 5% significance level using the Shapiro-Wilk Approach. The smaller value of t statistic less than 0.05 signified non normality while values greater than 0.05 signified normality.

##### **3.5.1.2 Multicollinearity test**

According to Hair et.al (1998), Multicollinearity leads to difficulties in clearly getting the effect of variables because it leads to the biased estimates of the coefficients since the independent variables used to predict dependent variable are related. This study employed the employed the Vector Integrating Factor (VIF) and its tolerance defined as  $1/VIF$  in detecting this problem as one of the pretest. In making decision on whether there is Multicollinearity or not; the requirement in

this test is that the VIF value should be less than 10 for absence of Multicollinearity and greater than 10 for the presence of Multicollinearity.

### **3.5.1.3 Stationary test**

Stationarity refers to statistical properties which are mean, variance, autocorrelation among others being constant over time. Time series data is faced with the problem of non-stationarity which is characterized by lack of independence across observations. Non-stationary of time series data causes unreliable and spurious results. Consequently, poor understanding and prediction. Transformation of the time series data to make it stationary for analysis has been suggested as the solution to this problem. Differencing is applied to the non-stationary process which is random walk with or without a drift to make it stationary and if the time series data exhibits deterministic trend, then de-trending helps in avoiding the spurious results. In situations where non-stationary series has both stochastic and deterministic trend at the same time, to avoid misleading results both differencing and de-trending should be applied in which case differencing removes the trend in the variance and de-trending removes the deterministic trend.

This paper shall use Augmented Dickey Fuller (ADF) test to test for stationary because it is applicable to larger and more complicated set of time series models. It is an augmented version of the Dickey–Fuller test and the following hypotheses to be tested are:

$H_0$ : series is non-stationary

$H_a$ : series is stationary.

The null hypothesis of non-stationary is rejected if the ADF test statistic is greater than the McKinnon's critical values.



#### **3.5.1.4 Cointegration and Error correction Mechanism**

Since differencing leads to loss of long-run properties in time series data, error correction mechanism is used to remedy the problem by measuring variables in the level form as well as retaining both long-run and short-run at the same time. This can also be addressed by the use of feedback mechanism in cointegration analysis. Use of cointegration is justified by the fact that it solves the problem of losing information through detrending and differencing (Odedokun, 1993). This study employs Engel-Granger test for cointegration.

## CHAPTER FOUR: DATA ANALYSIS AND DISCUSSION

### 4.1 Introduction

This chapter presents the empirical results and their interpretation. It begins with descriptive statistics which gives summary of the variables, pretests which are diagnostic results followed by the model results and ends with the discussion of the results.

### 4.2 Summary of Descriptive Statistics

**Table 2 Summary of Descriptive Statistics**

Variable	Mean	Std.dev.	Min	Max	Skewness	Kurtosis
Z	1.47e+08	2.81e+08	-1803112	1.22e+09	2.697375	9.495387
GDP	3.789997	2.332717	-0.79949	8.402277	-.1799954	2.064406
NGDP	4.871674	3.611569	-4.81691	9.507245	-0.756466	2.837679
INF	12.44272	8.75313	1.554328	45.97888	1.878419	7.418904
REER	90.39194	17.24629	58.4600	134.92	0.676531	3.227418
RIR	7.440417	6.695364	-8.00986	21.09633	0.068579	2.759432
UNZ	4.480247	0.228938	4.043507	5.012678	0.827142	3.340947
RPZ	80.43994	3.195857	74.37800	84.417	-0.384142	1.819834
TO	0.019219	0.019427	0.004520	0.088160	1.974133	6.629421

**Source: Author (2017)**

Table 1 above gives a summary of basic characteristics for the variables of the study in the specified time period 1980-2015 .The FDI stock mean of USD1.47e+08 with as standard deviation of USD. 2.81e+08.The highest value of FDI stock was USD1.22e+09 and the least recorded as USD -1803112.GDP growth rate was 3.78% and the standard deviation of 2.33% .The highest growth rate achieved was 8.4% annually while the least was -0.79% .In factoring the NGDP which included Uganda, Tanzania and Ethiopia by averaging their economic growth rate annually, the mean 4.87% and a standard deviation of 3.61% .However, the highest averaged

growth rate was 9.51% and the least at -4.82%. In measuring the price levels inflation was used and it stood at 12.44% and its standard deviation was 8.75%. The highest inflation rate achieved was 45.98% while the least was as low as 1.55%. The mean for the REER was 90.39% and the deviation was 17.25%. The data collected showed that 134.92 was the highest amount level of REER and 58.46 was the lowest. UNZ measured as the percentage of the entire population in Kenya had a mean of 4.48% and a standard deviation of 0.23%. The highest level of urbanization was 5.01% and the lowest was 4.04% in the Kenyan case. RPZ expressed as the percentage of the total population had an average of 80.44% and the standard deviation of 3.20%. In the same, the greatest number of people who lived in the rural areas in Kenya was 84.42% and the smallest was 74.38%. The summation of imports and exports as ratio of the GDP whose highest level was attained was 0.088 and the lowest was 0.0045 was the measure of TO. The mean was 0.0192 and the standard deviation of 0.0194.

Kurtosis and Skewness measures the behavior or trend of each variable. Kurtosis measures the distribution of the data and specific variables relative to the normal distribution. It determines the level of tailing whether heavily or lightly tailed relative to the normal distribution curve. On the other hand, skewness measures symmetry or lack of it. Symmetry values should be skewed towards zero while the negative values indicate that data is skewed towards the left. Positive shows skewness to the right. Therefore, from the results tabulated apart from the RPZ which has a negative value and its skewed to the left, the rest GDP, NGDP, INF, REER, UNZ, RIR and TO are positive hence skewed to the right.

### 4.3 Normality test

**Table 3 Normality Test -Shapiro-Wilk Approach**

Symbol	W	V	Z	Pro>Z	Comment
Z	0.55112	16.368	5.845	0.00000	Not-Normal
GDP	0.96668	1.215	0.407	0.34195	Normal
NGDP	0.93066	2.529	1.940	0.02621	Not-Normal
INF	0.82714	6.303	3.850	0.00006	Not-Normal
REER	0.96137	1.409	0.716	0.23686	Normal
RIR	0.96231	1.374	0.665	0.25300	Normal
UNZ	0.88756	4.100	2.951	0.00159	Not-Normal
RPZ	0.91680	3.034	2.321	0.01015	Not-Normal

**Source: Author (2017)**

The study carried out normality test and the study results presented in table 3 are for the hypotheses tested at 5% significance level using the Shapiro-Wilk Approach. The smaller value of t statistic less than 0.05 signified non normality while values greater than 0.05 signified normality. Consequently, from the results in table 3, GDP, REER and RIR were found to be normally distributed while the rest Z, RPZ, UNZ, NGDP, INF and TO did not follow normal distribution.

### 4.4 Multicollinearity test

**Table 4 Test for Multicollinearity**

Variable	Model with Multicollinearity		Model without Multicollinearity	
	VIF	1/VIF	VIF	1/VIF
lnTO	17.39	0.057509		
LnRPZ	33.66	0.029708	6.32	0.158221
LnREER	9.88	0.101170	6.02	0.166008
lnRIR	2.92	0.343024	2.07	0.482973
lnUNZ	2.12	0.471716	1.96	0.511079
lnGDP	2.03	0.492791	1.78	0.562168
lnNGDP	1.96	0.510519	1.43	0.697854
LnINF	1.78	0.562050	1.42	0.702752
<b>Mean VIF</b>	<b>8.97</b>		<b>3.00</b>	

**Source: Author (2017)**

This study used Vector Integrating Factor (VIF) and its tolerance defined as  $1/VIF$  in detecting the problem of Multicollinearity as one of the pretest. In making decision on whether there is Multicollinearity or not; the requirement in this test is that the VIF value should be less than 10 for absence of Multicollinearity and greater than 10 for the presence of Multicollinearity. From table 4, the results indicated that Z, GDP, NGDP, RIR, UNZ, REER and INF did not have Multicollinearity. However, RPZ one of the main variables of interest and TO were found to have Multicollinearity. The study went ahead and carried out the second test by dropping TO and all the variables were found not to have Multicollinearity. Therefore dropping TO solved the problem of Multicollinearity.

#### 4.5 Stationarity test

**Table 5 Stationarity test**

Variable	levels		Order of differencing	Difference	
	Statistic	Comment		Statistic	Comment
LnZ	-2.669	Non Stationary	1	-8.259 ***	Stationary
LnGDP	-5.405***	Stationary	0		Stationary
LnNGDP	-3.839***	Stationary	0		Stationary
LnINF	-4.553 ***	Stationary	0		Stationary
LnREER	-0.356	Non Stationary	1	-6.709***	Stationary
LnRIR	-3.374 **	Non Stationary	1	-6.311***	Stationary
LnUNZ	-3.031**	Non Stationary	1	-6.175***	Stationary
LnRPZ	11.279	Non Stationary	1	-5.010***	Stationary
LnTO	-2.821*	Non Stationary	1	-5.098***	Stationary

Asterisk (\*) = Significance at 1%; (\*\*) = Significance at 5%; (\*\*\*) = Significance at 10%

Source: Author (2017)

This study employed Augmented Dickey Fuller (ADF) to test for stationary because it is applicable to larger and more complicated set of time series models. The hypothesis

Ho: series is non-stationary

Ha: series is stationary.

The null hypothesis of non-stationary is rejected if the ADF test statistic is greater than the McKinnon's critical values. Therefore the decision was taken and null hypothesis rejected if the test statistic in absolute terms was greater than the critical values at different levels of significance as indicated by asterisk 1% ,5% and 10%. Since the model was run in natural logarithm form, the variables were also tested for stationarity in logarithms form .The results from table 5 showed that LnGDP, LnNGDP and LnINF were stationary without station differencing. That is to say that they were stationary at order zero i.e. I (0).However, LnZ, LnUNZ, LnREER, LnRIR, TO and LnRPZ were found to be stationary after the first difference .i.e. Integrated at order one .I (1).

#### **4.6 Cointegration test for Long run Relationship**

As one of the pretest this study used cointegration to test for long-run relationship between the dependent variable and independent or predictor variables.This justified by the fact that it solves the problem of losing information through detrending and differencing( Odedokun, 1993).The cointegration test is associated with Granger (1996) and Granger and Engle(1997).This test is useful because it takes care of the problem spurious errors .The existence of cointegration relationship indicates that regressing non stationary series results to good and results with no spurious errors.This study used Engle-Granger test for Cointegration and the following results in table 6 were obtained.

**Table 6 Cointegration test**

Variable	Symbol	T Statistics	1% Critical Value	5% Critical Value	10% Critical Value
Residuals	RESID	-6.193	-3.750	-3.000	-2.630

**Source: Author (2017)**

Table 6 shows t statistic and critical values at different levels of significance .The absolute t value of residuals was found to be greater than the critical values. This translates to the rejection of the null hypothesis that there is cointegration among variables. Consequently, the variables in the model have a long run relationship towards equilibrium. Thus, the non-stationary time series in their levels give results which are sensible and do not suffer from spurious errors.

## 4.7 Summary of Regression Results

**Table 7 Level Regression Results in the Long-Run**

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	D.lnZ		
lnGDP	-0.694**	(0.202)	
lnNGDP	0.246	(0.216)	
LnINF	-0.367	(0.289)	
D.lnREER	-10.26***	(2.407)	
D.lnRIR	0.226	(0.248)	
D.lnRPZ	-380.9*	(139.8)	
D.lnUNZ	0.0128	(1.557)	
Constant	-0.289	(1.039)	
Observations	23	<b>R-squared</b>	0.7316
Adjusted $R^2$	0.457	<b>Prob &gt; F</b>	0.0054

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**Standard errors in parentheses, Asterik (\*) = Significance at 1%; (\*\*) = Significance at 5%; (\*\*\*) = Significance at 10%**

**Source: Author (2017)**

## 4.2 Discussion of the Results

In examining the level and how the independent variables explained the dependent variable and in this case it is the FDI stock and how it is explained by the predictors, the results generated an R-squared of 0.7316. This indicates that 73.16% of the changes in the FDI stock is explained by the predictor variables. The coefficients of lnNGDP, D.lnRIR and D.lnUNZ were found to be positively related with FDI flow. D.lnTO was not indicated in the model because it was dropped



to solve the problem of Multicollinearity. On the other hand, the coefficients of D.LnZ, LnGDP, LnINF, D.LnRIR and LnRPZ were all negatively related the FDI stock.

Further, the results from the model indicate that if all the explanatory variables had zero values, the FDI stock would decrease by 0.289% as captured by the constant value of the model. The dependent variables are discussed below by taking their antilog to take them back into their initial form for easy interpretation.

#### **4.2.1 Gross Domestic Product Growth Rate**

The FDI stock would decrease by 2.00% when all other variables are constant and the GDP grew by 1%. The coefficient of growth for the Gross Domestic Product is negatively related to the FDI stock in Kenya. This variable was also very significant in determining the FDI stock. These findings contradicts the results of Kwoba and Kibat (2016) who found that GDP affects the FDI significantly. Further, the study results had a reverse findings to that of Abala (2014) who found that GDP had a significant impact on the flow of FDI to Kenya.

#### **4.2.2 Economic Growth of the Neighbouring Countries**

While the growth of the of economies of the neighbouring nations would by 1% rate would lead to 1.28% increase by the FDI Stock in Kenya. The indication is that when the economies of the countries whom Kenya is in the same trading blocs in the region and specifically in East Africa which include Ethiopia, Uganda and Tanzania improve leads to the increase of FDI stock though insignificantly. Secondly, looked from a different perspective is that the flow of the FDI to the country is encouraged by the fact that the investors look at the growth of the neighbouring economies as creation of ready markets for their goods and services where they can sell their goods given the nations have free flow of goods and service.

### **4.2.3 Inflation**

Inflation as one of the factor is negatively and insignificantly related to the FDI stock in Kenya. The results shows that a 1% increase in inflation would lead to a corresponding decrease in the FDI stock by 1.44%. This means that inflation erodes the currency purchasing value which also affects the cost of production with increase in the costs of inputs such as Labour, reduced capital returns e.tc .These therefore scares away investors from investing in a country because they look for where they can have high profit margins and controlled inflation. These findings are in line with the studies by Prague (2008), that low tax and inflation positively affected FDI .

### **4.2.4 Real Effective Exchange Rate**

Increase in the Real Effective Exchange rate in Kenya by one unit would lead the decrease of the FDI stock by 28,566.79 units. This relationship between the FDI stock and the Real Effective Exchange Rate was significant which means that REER negatively influences the flow of FDI to the country. It is also important to note that previous studies in this area applied the Real Exchange Rate and some of these studies found that the Real Exchange Rate significantly plays an important role in affecting the flow of FDI (Abala, 2014). However, Batana(2011) similar to the findings of this study found that RER was negatively related to the flow of FDI .This therefore mean that if real exchange rate was proxies REER, then this findings is in agreement with his results that real effective exchange rate negatively affects the flow of FDI.

### **4.2.5 Real Interest Returns**

There was a positive relationship between FDI stock and RIR; an increase by 1% in the Real Interest rate would lead to 1.25% increase in the FDI stock. The coefficient of this variable was found to be positively and insignificantly influencing the flow of FDI .The intuition here is that when investors expects high returns to their capital investments are more likely to invest in the

receiving country and in this case Kenya. Opolot et al (2008) had similar findings that the expected rate of return on investment positively affect FDI inflows into the region Sub-Saharan Africa which is considered to be developing world. This is also consistent with neoclassical theory stated that flow of capital internationally is determined by the difference in the returns amongst different countries in which the capital is invested in the destination of high returns (Jorgesen et al, 1967)

#### **4.2.6 Urbanization**

On the other hand, urbanization was positively related to the FDI stock and 1% increase in the urbanization rate would lead to the increase of FDI stock by 1.01%.The coefficient was found to be positive but with insignificant influence on the flow of FDI. The idea is that that the flow urbanization plays an important positive role in attracting FDI into the receiving country and in this case Kenya. This seems to be agree with findings by Opolot et al (2008) that urbanization has role to play in the flow of FDI to Kenya. Similarly, Economic Outlook (2016) outlined key roles played by cities in which economic role was one of them .Most of the investment s were found to be mainly located in the cities such as Nairobi, Mombasa, Kisumu, Eldoret etc. This was associated with ready markets and access to services required by the firms ranging from statutory requirements to utilities such as electricity.

#### **4.2.7 Rural Population**

Equally, increase in the rate of the people living in rural areas would lead to decrease in FDI stock in the country .The coefficient for this variable which was also found to be significant from the model estimated indicated that rural population plays a critical role in attracting investments to Kenya but negatively. However, these results seemed to in line with the expectation because of the obvious reasons; One of the main reasons is the fact that majority of the population in Kenya live in rural areas or what is described as the countryside or remote areas and they form a key

segment of the market for the goods produced from these investments. Secondly, rural population plays an important role in production of raw materials that are used in the foreign related firms. Thirdly, with devolution taking shape in the country, firms prefer to invest in rural areas where they can have easy access to the raw materials and cheap Labour in the rural areas.

## **CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter presents summary of the results of the study, policy relevance, limitations of the study and finally point out the areas of further research.

### **5.2 Summary and Conclusion**

The main objective of this study was to investigate factors that determine the flow of FDI to Kenya using time series data for the time period 1980-2015 within which there has been fluctuations of the FDI from one period to another. The study specifically sought to find out the role of RPZ, UNZ and NGDP (choosing mainly Uganda, Ethiopia and Tanzania) in determining the flow of FDI to Kenya. The study attained its objective by Cointegration test for long run relationship in which all the variables which included dependent and independent variables in the study used in the model were found to have a long-run relationship. After the pretests which were mainly normality, Multicollinearity and stationarity tests the study went further to run a regression to test for the effect of the inflation, REER, RIR, RPZ, UNZ, NGDP and Economic growth of Kenya taken as the growth in GDP on the flow of FDI to Kenya. GDP was found to negatively and significantly affecting the flow of FDI to Kenya contrasting previous studies by Abala (2014) who found that GDP positively and significantly affected the flow of FDI to Kenya while Kwoba and Kibat(2016) had found out that it was positive but not significant.

REER was found to negatively and significantly influence the flow of FDI as well as rural population which was also significant and negatively influencing FDI. INF had a negative effect on the flow of FDI though it was not significant. The other factors such as GDP growth, NGDP, RIR and UNZ were found to positively influence the flow of FDI to Kenya though they were

insignificant. The study also found among the new factors that included UNZ, RPZ and NGDP that play an important role with UNZ and NGDP having a positive influence on the flow of FDI while RPZ had a negative effect on the flow of FDI.

The other objective of this study was find out how these factors of study affect the flow of FDI and this was addressed by explaining the sign obtained upon estimating the regression for coefficients which was also discussed on either positive or negative .The study also clearly elaborated on the whether the effect of the independent variables was significant or insignificant to the flow of FDI.

### **5.3 Policy Relevance**

The study results indicated that various factors such as GDP growth, NGDP, RIR and UNZ positively affected the flow of FDI into Kenya. Therefore it is necessary for the government to put appropriate policies in place to enhance these factors since FDI comes with numerous benefits such as FDI results to increased efficiency, benefits of free market mechanism, solves the problem of savings deficiency, foreign exchange inadequacy, revenue gap, employment creation and issues relating to management(Todaro,1977, Mwega ,2009 &Feldstein,2010).

First, since the FDI firms are mainly located in the urban centers, the government should come up with appropriate policies towards growing small towns to big cities so as to attract the firms to set up their branches in these areas .This will positively influence the flow of FDI as they move with speed to set up industries especially with the heave of devolution when Kenya is implementing devolution and taking government services closer to people in all areas of the country.

Secondly, NGDP whose Kenya trade with and within the economic blocs was found to play an important positive role in affecting the flow of FDI to Kenya. Therefore Kenya should come up

with appropriate foreign trade policies with her neighbors who form a great share of market for FDI related firms. The government should advocate for strengthening of the trading ties in EAC, IGAD and COMESA so that as their economies perform better, it becomes an economic advantage to Kenya in term of the flow of FDI.

Thirdly, Kenya should also make the economy so open by being able to transact with other nations of the world through importation and exportation of goods and services. This will make the economy more open to the rest of the world and consequently increase the flow of FDI. This requires sound government policies in terms of conditions for exporting and importing such as custom duties, standard specifications, quotas and any other barriers to trade.

Finally, in order to keep investors flowing and increasing their capital to Kenya, economic measures should be put in place to increase real interest rate in their capital investments that comes to the country. This is also in line with neoclassical theory of investment that the motivation behind investors to invest is the expected rate of return to their capital invested.

#### **5.4 Limitation of the Study**

This study did not include all the variables known or unknown that affect the flow of FDI to Kenya because despite many factors having been established to affect, Kenya has not really optimized the flow of FDI because the trend keeps on fluctuating from one period to the other. This is a clear indication that there are many other unknown factors which have not been addressed and they play an important role in the flow of FDI. This study dependent mainly on the data from the WDI and KNBS for consistency.

### **5.5 Gap for further research**

FDI has proved to play an important role in the country given the enormous benefits that it is associated with. This therefore makes it important for further investigation of the role of other factors such as devolution and privatization in influencing FDI.



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