THE RELATIONSHIP BETWEEN EXCHANGE RATES AND FOREIGN DIRECT INVESTMENT IN KENYA

BY

GITAU TERESIA KABURA

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DECLARATION

This research project is my original work and it has not been submitted for examination in any other university. Where other sources of information have used, they have been acknowledged.

Signature   ……………………..……   …………………….
             Gitau Teresia Kabura   Date
             Reg. No. D61/61011/2013

Declaration by the Supervisor

This research project has been submitted for examination under my approval as the university supervisor.

Signature   ……………………..……   …………………….
             Mr. Martin Odipo   Date
             Lecturer
             Department of Finance & Accounting
             School of Business

DEDICATION

To my parents for their absolute belief in me.

To my siblings Nyokabi, Muthoni, Irungu and Makena; my friend Mary for their constant love and support.

To Brayo, Kui, Gitau and Wangari, who have grown up knowing that there is no end to education.

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ABSTRACT

An exchange rate is the rate at which one currency is exchanged for another in order to enable trading in a host country. It determines how much of one currency is available to be used to purchase goods and services in a country. FDI is an integral part of Kenya as it not only provides Kenya with the much needed foreign exchange but also has enabled the country to benefit from new technology and efficiency. The purpose of the study was to determine the relationship between Exchange Rates and FDI. Exchange rates influence the rate of FDI because an investor seeks a country whose currency is weaker than that of his country but at the same time, this currency must show signs of growth that will enable an investor to make a profit.

The study was conducted for a ten year period from 2004-2013 using secondary data on FDI remittances as well as the spot rate for exchange rate over that period with data being collected quarterly. Inflation and GDP were used as control variables. A trend analysis between the FDI & Exchange Rates revealed a relationship that one was determined by the other. A correlation analysis of the two variables showed a strong positive association meaning that an increase in one variable was likely to result in an increase in the other variable. The regression analysis revealed a strong relationship between FDI, KES/USD exchange rate, GDP per capita and the inflation rates.

The study concluded that exchange rates do influence the levels of FDI in Kenya. A strong currency that can grow attracts FDI. An increase in exchange rates resulted to an increase in FDI. While the research was limited to exchange rates as a determinant of FDI, the policy makers are to ensure a stable economy in the attraction of FDI as the currency will grow based on its supply and demand. The findings recommend that the policy makers put in place structures to ensure stability of the Kenyan shilling in order to ensure FDI matches the increase in exchange rate.

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ABBREVIATIONS

CBK   Central Bank of Kenya

EPZ   Export Processing Zone

FDI   Foreign Direct Investment

FFI   Foreign Institutional Investors

GDP   Gross Domestic Product

KES   Kenya Shilling

KNBS   Kenya National Bureau of Statistics

MNC   Multinational Corporation

OECD   Organization for Economic Co-operation and Development

OTC   Over the Counter

RBI   Reserve Bank of India

UNCTAD   United Nations Conference on Trade and Development

USD   United States Dollar

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

In the advent of globalization, importation and exportation of goods and services along the boundaries of countries is no longer enough for the sustenance of trade between two countries. Technology has greatly made it easier to transact across borders regardless of the time differences. Trade between countries is affected by the currencies of the countries involved in that transaction. One country's currency will need to be expressed in terms of the other's currency where the demand and supply of these currencies will determine the prices of domestic and foreign goods. The trading of currencies and bank deposits denominated in particular currencies takes place in the foreign exchange market (Mishkin and Eakins, 2009).

These transactions determine the rates at which currencies are exchanged which in turn will determine the cost of purchasing foreign goods and financial assets. The transactions however, are not the only determinants of foreign exchange. Central banks of the currencies trading attempt to determine the exchange rate by buying and selling the currencies involved. Exchange rates are important because when the Kenyan shilling becomes more valuable relative to other currencies, goods in other currencies become cheaper for Kenyans favorably impacting on the economy. This study sought to determine the impact of the exchange rates in the performance of companies that have invested in Kenya as Foreign Direct Investments.

In order to maximize economies of scale and reduce costs of administration, an organization may set up its operations in a different country from its origin of conception. These firms seek to take advantage of the costs they may reduce by operating in foreign countries. When these firms operate globally, they become sources of foreign exchange in these countries that they choose to operate in. Ryan (2006) defines FDIs as 10% ownership interest in a legally recognized foreign entity. This investment involves real assets that is land, buildings or existing plants.

Foreign Direct Investment remittances are the largest form of foreign exchange in Kenya. These remittances totaled $611.2 in 2008 (CBK). The country relies heavily on the FDI for capital and employment, as is evidenced by the fact that a third of Kenyan banks are foreign owned, controlling 51% of total banking assets in the country. FDI therefore is an integral part of the Kenyan economy. This study seeks to determine the role of exchange rates on the determination of FDI and the resulting effect on the foreign exchange market in Kenya.

1.1.1 Exchange Rates

In order for currencies to trade in a common market, one currency must be expressed in terms of the other. An exchange rate is the price of one currency in terms of another (Mishkin and Eakins, 2009). They can either be direct or indirect whereby a direct quotation refers to how much of the home currency is required to buy a unit of the foreign currency while an indirect quotation refers to how much a unit of the foreign currency can be obtained for a unit of the home currency (Howells and Bain, 2007).

Exchange rates can also be spot or forward whereby a spot transaction is a two day exchange of bank deposits while a forward exchange rate is an exchange at some future specified date (Mishkin and Eakins, 2009). Exchange rates can further be classified according to government control. Madura and Fox(2011) classified exchange rates as either fixed whereby the exchange rates are held constant or only allowed to fluctuate within very narrow boundaries or managed which is the exchange rate system that is in use today whereby exchange rates are allowed to fluctuate on a daily basis without any official boundaries. An exchange rate system may also be pegged to a foreign currency or a basket of foreign currencies and lastly a freely floating exchange rate system which is determined by the market forces without any intervention by the government. In Kenya, Obondi (2013) in her study of the relationship between foreign exchange rates and the central bank rate determined that a central bank sells foreign reserves when the exchange rate is going up thereby dampening its rise and buys when it is going down in order to reduce the variability of the exchange rate.

Foreign exchange rates are used by parties that are directly involved in the in the acquisition of goods and services that require foreign currencies. These may be either governments or by individuals that source goods and services from abroad. International banks that enable trading of different currencies use exchange rates in order to arrive at profits. This is achieved through the difference between the bid and ask rates of exchange. The central bank of each country is interested in the exchange rates because it seeks to maintain the value of its currency.

A rise in the exchange rate of a country's currency means that the home currency has weakened while fall in the value of the home currency is reflected in a fall in the exchange rate.

1.1.2 Foreign Direct Investment

The common goal of all businesses is wealth maximization and businesses will seek all ways to remain profitable and increase shareholders wealth. Muema (2013) defined FDI s as investments that are meant to be long lasting and those that are outside the economic or physical boundaries of the investor. The beneficiary country of FDI is equipped with capital flow as well as technology flow that will aid in its development. When a country seeks to invest in another, the benefit it seeks to achieve must be higher than the risks it must deal with. UNCTAD (2002) describes three different types of FDI. These are: equity capital, reinvested earnings and other capital which mainly consist of intra-company loans.

FDIs create new job opportunities as upon setting up setting of the business, Recruitment and training of the locals in the host country is undertaken transferring skills and technological know- how as well as providing jobs. According to Kinuthia (2010) FDI usually represents long term commitment to the host country. It is a preferred form of investment because it has no obligations to the host country.

Investing in Kenya requires compliance with the Laws of Kenya. The Investment Promotion Act (2004), Section 2 defines a foreign investor as either a non-citizen, a

partnership in which the controlling interest is owned by non citizens as well as a company or other body corporate incorporated under the laws of any other country apart from Kenya. FDIs are attracted to the countries that offer them new sources of demand as well as provide profitable markets for their goods and services. Diversification is also a reason as to why FDIs are created; they seek to grow beyond their boundaries. A firm that posses resources or skills that are not available to competing firms may seek to transfer these resources and skills at a profit to those that do not in the form of FDIs.

A country's economy is influenced by the funds that flow from these FDIs. Their contribution to the country's economy is affected by transactions that occur in the host country that may reduce or increase remittances thereby directly affecting the host country's economy. Madura and Fox (2011) argued that capital flows resulting from FDI change whenever conditions in a country change thus changing the desires of firms to conduct business operations there. A country's appeal for FDI is affected by changes in restrictions, that includes removal of government barriers to trade as well as privatization whereby some governments sell off some of their operations to corporations and other investors as was seen in the Safaricom sale of the Government owned shares in the telecommunications service provider. Potential economic growth is also a factor that affects a country's appeal for FDI as countries that have greater potential for economic growth may enable the firms to be able to capitalize on that growth by establishing business there. Exchange rates and tax rates are also factors that affect a country's appeal for FDI.

Low tax rates on corporate earnings are more likely to attract FDI while firms prefer to direct FDI to countries where the local currency is expected to strengthen against their own. This study sought to find out how exchange rates affected Kenya's position in attracting FDI.

1.1.3 Exchange rates and Foreign Direct Investment

A company that seeks to invest in another will always seek out a host country that has a local currency that will be expected to strengthen against their own. Madura and Fox (2011) argue that a firm will invest funds in a country whose local currency is currently weak in order to earn from new operations that will be periodically converted back to the firm's currency at a more favorable exchange rate. Exchange rate movements affect FDI values because they affect the amount of cash inflows received from their investments and the amount of cash outflows needed to pay to continue operating these investments. Currencies appreciate and depreciate according to prevailing market conditions. Firms that have operations in other countries other than their mother countries must understand the forces that cause exchange rates to change over time in order to gauge how currencies may be affected by these forces and in so doing be in a position to mitigate these losses.

Theoretically, Exchange rates affect FDI because the rate at which one currency is expressed in terms of another will determine how viable an investment will be. In determining exchange rates, the factors that influence how much of a currency will be exchanged for another will ultimately determine how much of FDI will be invested in a country.

The two cannot be held in isolation as FDI is determined by how much of a currency is available for use. An investor will identify a country that will enable him to gain in expressing his currency in terms of the host currency. The theories that explain the determination of exchange rates will help to determine how these exchange rates affect FDI in a country. The cost of goods in one country as determined by the amount of money that a particular currency will enable an investor to seek a country that will provide the best exchange rate.

Madura and Fox (2011) assert that demand and supply of currencies is price driven and at any point in time, a currency should exhibit the price at which the demand is equal to that currency in order to represent the equilibrium exchange rate. Goldberg and Klein (1998) in investigating FDI and the real exchange rate concluded that there was a linkage between the real exchange rate and direct investment between South East Asia and Latin America as well as both the United States of America and Japan.

Goldberg (2006) reporting on Exchange Rates and FDI argued that exchange rates influence both the total amount of Foreign Direct Investment that takes place as well as the location of this spending across a range of countries. When a host currency has its value declining, it becomes cheaper to operate in that country relative to the foreign country. Goldberg, (2006) further argued that the exchange rates must not be anticipated. If the exchange rates are anticipated, the costs of financing become higher as others seek to benefit from such news.

Exchange rates therefore affect FDI in that when a currency, expressed in terms of another loses its value relative to the currency of the foreign country, investors will be attracted to that host country because it will be cheaper to operate in that host country. The relationship that exists between exchange rates and FDI being that if they are make a currency lose its value, FDI is expected to increase while if a currency gains value, FDI is expected to reduce.

1.1.4 Foreign Exchange Rates and FDI in Kenya

In international transactions, country and currency risks are encountered. Country risk occurs when financial claims and business contracts become unenforceable while currency risks occur when the values of currencies fluctuate relative to each other. Foreign Exchange Markets developed in order to enable conversion of cash to different currencies to be able to transact (Kidwell et al, 2008).There is no physical location for the foreign exchange market in Kenya as there are no physical goods being exchanged at any given time, rather it is an over the counter (OTC) market, a linkage of bank currency traders. Mishkin and Eakins (2009) define a foreign exchange market as a place of trading of currencies and bank deposits. It encompasses the conversion of purchasing power from one currency into another, bank deposits of foreign currency, the extension of credit denominated in a foreign currency, foreign trade financing, trading in foreign currency options and futures contracts, and currency swaps.(Eun and Resnick,2009). These transactions ultimately determine the rate at which currencies are exchanged and will in turn determine the cost of purchasing foreign goods and financial assets.

Trading that occurs in the foreign exchange market will determine the rate at which an investor will trade his foreign currency in order to invest in Kenya. The Central Bank of Kenya Act Cap 491 Section 28 provides that CBK may engage in foreign exchange transactions with authorized dealers, public entities, foreign central banks as well as foreign governments or their agencies as well as international financial institutions and any other person or body of persons who may be gazetted for that purpose.

FDI in Kenya is covered in all the sectors be it in the banking, automobile or telecommunications sector. Various multinational companies have set up operations in Kenya and they include Car and General, Coca-cola as well as communication firms like Airtel. In every aspect of our lives, FDI is felt that is in the goods and services that we use. FDIs are not in isolation as they have provided jobs and with them, technical knowledge as they train their Kenyan employees to maintain the standards that are there in their other investments all over the world. They are the major source of foreign exchange to the country. FDI has not been consistent over the years with some periods recording low inflows. In the 80s and 90s, FDI inflow was low due to deterioration in economic performance as well as rising problems of poor infrastructure and the high cost of living greatly impacted negatively on FDI inflows in Kenya (KPMG, 2012).In total, Kenya has more than 200 multinational companies across the sectors with Britain, US, Germany, South Africa, Netherlands, Switzerland, China and India being the main traditional sources of FDI (Kinuthia, 2010).

According to the report of the Office of the President of Kenya (2008), Kenya serves as the East African business hub for many international businesses. This translates to a dependence of FDI for capital flow that in turn reflects on provision of jobs and an economy that is helped to grow by these foreign investments.

Kenya's FDI average growth between 2007 and 2013 was forty percent (40%) with the inflows primarily going into retail and consumer products, telecommunications , technology, media , minerals ,oil and natural gas sector mainly from the UK,US and India (Ernest & Young,2014). This growth rate earning Kenya the status of an FDI hotspot joining Ghana, Mozambique, Zambia, Tanzania, Uganda, Nigeria and Rwanda. In 2013, FDI inflows stood at $514 million (KES 45.18 billion), up from $259 million (KES 22.7 billion) a year earlier which is a ninety eight per cent (98%) increase. This capital mainly went to oil, gas and the manufacturing industries (UNCTAD 2014).

The foreign exchange rates in Kenya over the last two decades have been characterized by volatility which creates uncertainty in the investment market meaning potential international businesses are naturally exposed to exchange risks if they are to invest in Kenya (Otieno,2012). Foreign exchange rates determine how much of each currency is available as determined by forces of demand and supply. This in turn will affect the domestic goods being sold as the transactions are not done in isolation .Once the costs of production rise in a country, FDI is not easily attracted, this makes the country lose out on foreign exchange.

The foreign exchange market is not like other markets because when the currencies are exchanged; the impact is not only felt along telecommunication networks but instead, it is felt in the prices of local goods and services. Anything that affects the demand for a country's exports or imports has the potential to cause shifts in the supply and demand curves for foreign currency and hence alter the price of its currency in the foreign exchange market (Kidwell et al, 2008). When the exchange rate between the Kenyan shilling and other foreign currencies changes in favor of the foreign currency, goods in Kenya become more expensive. The value of the shilling depreciates meaning; less can be bought for the same amount than was previously bought. Foreign exchange markets are also unique because of the intervention of the government. CBK has reserves of foreign currency that it can use to restore the exchange rate by reducing or increasing the local currency. The demand and supply will in turn affect the prices of goods and services being sold in the country as ultimately, profit as a goal will be attained by these firms.

1.2 Research Problem

When a country's borders are opened and people with different ideas are welcomed into it, the host country is given a chance to learn new ways of doing things. Wealth is transferred not only through the exchange of goods and services but also through the exchange of ideas, exchange of technology and the exchange of manpower. FDI, which involves the investment of assets in a host country subjecting it to the laws of that land, seeks to provide a country such as Kenya with its many advantages. One of the determinants of FDI is the exchange rate. A country whose currency is weaker compared to that of the foreign country will make it attractive as the costs of production are bound to be cheaper than in the FDI's home country.

When a currency for example a dollar is exchanged at the current rate, it will gives Kshs. 87.6486 (CBK, 2014) that will enable the firm to pay for the goods and services it requires to set up business in Kenya. This rate is beneficial to the firm as it gets more shillings for less dollars thereby making Kenya as a country an attractive location for FDI. This should be the ideal that because one dollar provides more shillings, investors in the United States should be flocking to Kenya to take advantage of the exchange rate provided. This has not been the case observed .The foreign exchange market is expected to maintain a balance between attracting FDI and ensuring that the local currency is able to maintain its strength in a bid to ensure that the cost of living does not escalate to a point whereby the gains of FDI are used to offset poverty.

Exchange rates as one of the determinants of FDI are one of the reasons that a foreign investor would seek to invest in Kenya, mostly that the Kenyan shilling should be weaker than the currency of the home of the foreign investor. What is in question is the price the country has to pay in order to attract these investments and whether the benefits outweigh the costs associated with them. If a currency is weaker, is it obvious that FDI will flow into that country? This has not been researched about. Once FDI has been attracted, it is expected to help the economy grow and with its growth, a stronger shilling is expected to be a characteristic of a country with FDI. This is far from what the country has experienced. Despite being home to a number of FDIs, the currency has not vastly improved. The exchange rates have been skewed to enabling FDIs to thrive which in reality has not been observed. Kinuthia (2010) finds that FDI is a key element in the reduction of poverty levels in developing countries.

He further attests that those factors that are favorable to domestic investment are often likely to propel FDI. This would in effect mean that a weak currency, as a determinant of FDI should also encourage local investments.

Currencies trading at the foreign exchange market determine the exchange rates to be used as the market is expected to determine which currency is demanded more than it is supplied. The advent of FDIs would mean that more shillings are required in order to buy assets as well as set up operations in Kenya. The high demand would be countered by the demand for foreign currencies when remitting revenue after operations. As such market forces would determine the exchange rate holding all other factors constant. This would be the ideal whereby the exchange rates would signify that there will be a significant rise in FDI in a country. Unfortunately, this has not been observed. The question that arises therefore is to what level do exchange rates determine FDI?

Ideally, FDI should enable the host country to benefit from the capital invested as well as the advancements in technology at the expense of a weaker currency. The current situation is that despite the Kenyan currency's decline, there has not been any record of any new FDI. It is evident that there exists a gap. This study seeks to ascertain why there is a deviation from the ideal and the effects of this deviation on the Foreign Exchange Market in Kenya. What has been the role of exchange rates on the declining FDI. While there have been studies on the determinants of FDI (Muema,2013 and Kinuthia, 2012), on the other hand, Otieno (2012) focused on the impact of exchange rate fluctuations on FDI, no known study has been undertaken to determine the relationship between

exchange rates and FDI in Kenya. The question that this study sought to answer was, to what extent do exchange rates influence FDI in Kenya?

1.3 Research Objective

The objective of this study was to establish the relationship between the exchange rate and Foreign Direct Investment in Kenya.

1.4 Value of the Study

This study will be useful in the determination of the exchange rates to achieve a balance of domestic and foreign levels of investment in a bid to attract FDI. It will be useful for key players of the foreign exchange market as the relationship between exchange rates and FDI will determine the level of trading at any given time. The findings of this study are expected to explain the relationship between foreign price levels and domestic price levels and why an increase in FDI may not always be favorable to a country. The findings of this study will also be useful in adding to the literature on exchange rates and FDI developed by previous studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter is divided into three sections, the first section will cover the theories in the study, the second section will cover the empirical studies and the third section will cover the summary of the theoretical and empirical reviews.

2.2 Theories on Exchange Rates

Kidwell et al (2008) defined an exchange rate as the price of one monetary unit stated in terms of another currency rate. These theories are differentiated by the long and short run. In the long run, if two countries produce an identical good, holding all factors that include transportation and legal costs constant, the price of that good should be constant throughout the world no matter which country produces it. This is referred to as the law of one price. This law is only relevant in the long run (Mishkin and Eakins, 2009).

2.2.1 Theory of Purchasing Power Parity (PPP)

PPP was first stated by the Swedish economist Gustav Cassel in 1918 in using it as a basis for recommending a new set of official exchange rates at the end of World War I to allow for the resumption of normal trade relations (Shapiro, 1992). This theory was founded on the law of one price which is held to be true in the absolute version. PPP states that exchange adjusted price levels should be identical worldwide, that is a unit of the home currency should have the same purchasing power around the world. The theory

bases its prediction of exchange rate movements on the changing patterns of trade due to different inflation rates between countries.

Kidwell et al (2008) argue that exchange rates tend to move to levels at which the cost of goods in any country is the same in the same currency. If PPP holds for exchange rates, all goods cost the same in the same currency in all countries therefore there is no net saving from buying goods in one place rather than in another. The absolute form of PPP is based on the notion that without international trade barriers and transport costs, consumers shift their demand to wherever prices are low; suggesting that prices of the same basket of products in two different countries should be equal when measured in a common currency (Madura and Fox, 2011). If one currency is undervalued, goods produced in that country tend to cost less than similar goods produced elsewhere therefore growing exports and diminishing imports unless trade barriers , transportation costs or the perishability of products makes it feasible for people to buy the same products in various places. It is in effect the application of the law of one price to national levels (Mishkin and Eakins, 2009).

The relative form of this hypothesis is that PPP exists when the rate of depreciation of the home currency relative to the foreign currency matches the difference in aggregate price inflation between the two countries in point (Sarno and Taylor, 2002). This means in effect that issues such as transportation costs, tariffs and quotas are taken into account. This relative form of PPP is more commonly used. PPP is not a complete theory of

exchange rate determination because deviations from PPP have prevailed throughout the history of the world (Shapiro, 1992).

The PPP theory suggests that the exchange rate will not remain constant but will instead adjust to maintain the parity in purchasing power. The percentage change in the foreign currency should change to maintain parity between the new price indexes of the two countries. This theory cannot fully explain exchange rates because the assumption that all goods are identical as well as the fact that transportation costs and trade barriers are low is not realistic in two different countries.

PPP is important as it helps us to observe the ideal situation. In perfect conditions, FDI would not be influenced by exchange rates as the profit gained by operating in a country whose currency is weaker would not materialize. All costs would be the same thus no need to invest elsewhere other than your home country.

2.2.2 International Fisher Effect (IFE)

The International Fisher Effect is an exchange-rate model designed by Irving Fisher in the 1930s.It does not use inflation to determine exchange rates but rather nominal interest rates. In its purest form, risk free aspects of capital must be allowed to flow between nations that comprise a particular currency pair. According to Fisher, the monetary or nominal rate is approximately the sum of the real and inflation rates.

The theory uses interest rate rather than inflation to explain why interest rates change over time. High inflation is almost always accompanied by high interest rates.

The assumption is that when investors in different countries require the same real (non-inflation) return for the same level of risk, the only reason why interest rates should differ for a given risk is the difference in expected inflation (Madura and Fox, 2011). It suggests that foreign currencies with relatively high interest rates will depreciate in the same way as currencies with high inflation rates.

IFE is a theory of market expectations. Fisher provides that an unexpected increase in interest rates would attract foreign investors who may wish to invest in the home market to take advantage of high interest rates but where there is no flood of inward investment, the market must be expecting that the value of the home currency will fall as it should if the foreign exchange market is efficient. The relationship between interest rates and inflation rates may not always hold and exchange rates can be affected by other factors other than interest rates (Madura and Fox, 2011).

IFE essentially provides that arbitrage between financial markets should ensure that the interest differential between any two countries is an unbiased predictor of the future change in the spot rate of exchange. The interest deferential is not an accurate predictor; rather, the prediction errors tend to cancel out over time (Shapiro, 1992).

2.2.3 Interest Rate Parity (IRP)

IRP as a theory was first developed by J.M.Keynes in 1930. It is based on the law of one price such that when securities are quoted in a common currency, identical securities should have the same price in all the markets. It is defined as an equilibrium state that exits when market forces cause interest rates and exchange rates to adjust (Madura and Fox, 2011). This occurs when the forward rate differs from the spot rate at equilibrium by an amount equal to the interest differential between two countries.

It is an arbitrage condition that must hold when international financial markets are in equilibrium. Capital is easily transferrable and foreigners can easily buy assets in Kenya and indeed each person who is not a resident of one country can still easily buy assets that in this case refer to local and foreign bank deposits, in whichever country he deems fit. When capital is mobile and when assets are perfect substitutes, if the expected return on a local asset is above that of a foreign asset, both locals and foreigners will want to hold only local assets and will be unwilling to hold foreign assets (Mishkin and Eakins, 2009).

Conversely, if the expected return on foreign assets is higher than on local assets, both foreigners and locals will not want to hold any local assets and will want to hold only foreign assets. The domestic interest rate equals the foreign interest rate minus the expected appreciation of the domestic currency. When the domestic interest rate is higher than the foreign interest rate, there is a positive expected appreciation of the foreign currency which will in turn compensate for the lower foreign interest rate (Mishkin and

Eakins, 2009). This theory is important as it describes the situation whereby an investor decides on which country to invest in. IRP does not mean that all currencies must have the same interest rate. A currency experiencing high inflation and high interest rates can neutralize the effects of other currencies by devaluing (Madura and Fox, 2009). IRP is generally supported.

2.2.4 Comparison of the theories

Madura and Fox, 2011 contend that although the three theories relate to the determination of exchange rates, they have different implications. While PPP refers to the spot rate of one currency with respect to another changing in reaction to differential in inflation rates between two countries, IFE refers to the spot rate of one currency changing in accordance with the differential in interest rates between the two countries. IRP on the other hand refers to the forward rate of one currency in respect to another containing a discount that is determined by the differential interest rates between two countries.

2.3 Theories on FDI

2.3.1 The OLI Paradigm

The OLI Paradigm proposed by John. H. Dunning in 1977 provides that a firm must have some competitive advantage in its home market "O" or Owner specific that can be transferred abroad if the if the firm is to be successful in FDI. The firm must also be attracted by specific characteristics of the foreign market "L" or location specific that will allow it to exploit its competitive advantages in that market. Lastly, the firm must be able to maintain its competitive position by attempting to control the entire value chain in its

industry. This refers to "I" or Internalization. This is what in effect will lead it to FDI rather than licensing or outsourcing (Eiteman, Stonehill and Moffett, 2010).

2.3.2 The Product Life Cycle Theory

This theory according to Vernon (2005) provides that the goods of a particular firm are destined for different markets according to the stage the product is in the life cycle. In the first stage, the goods are produced to meet the needs of the local customers although some could be for exports. In the second stage of the goods, the product has become more mature and is well known. This leads to standardization of the goods being produced. In the last stage of the goods, the product is completely standardized and there is competition from local firms .This leads the firm to diversify into other markets and areas that will enable it to produce the goods less costly and thus be able to enjoy profits.

2.4 Determinants of Foreign Direct Investment

FDI involves real assets and this ensures that an investor will take an active role in the management of the assets he is acquiring. There are various factors that make one country more attractive than the others and these factors can also vary from one period to another. These determinants have contributed to studies on why some countries are more successful than the others in attracting FDI. A large number of studies have been conducted to identify the determinants of FDI but no consensus has been reached. The different approaches to the determinants of FDI do not replace each other but instead explain different aspects of the same phenomenon (Kinuthia, 2010).

2.4.1 Restrictions

While a government strives to ensure that trade within its boundaries is a reflection of market forces of supply and demand it imposes some restrictions to protect its citizens from being exploited by other developed nations. Restrictions such as quotas and tariffs have an impact on the trade that can be carried out in a country. Multinational Corporations seek countries that have lowered restrictions on FDI (Madura and Fox, 2011). These could include reduction of tariffs on imported inputs. This can also be referred to as the level of openness a country has in relation to its trade (Muema, 2013).

2.4.2 Economic Growth

Countries that show a potential to grow are a determinant of FDI because the investors seek countries that show a potential of growth as their businesses are likely to grow as well. Any investor would want a country that seeks to increase his worth. A business may be established in a country that is seen as having the potential to grow (Madura and Fox, 2011).

2.4.3 Costs

When the costs of labor and transport are found to be cheaper, it may encourage investment in a country. Some countries are even attractive to foreign investors because of their central geographic location or efficient transport systems (Clark, 2002). This also goes hand in hand with good infrastructure and communications network as it enables work to be done efficiently. Profit will be higher when investors find a country that will enable them to operate their business at a low cost and produce at full scale in a competitive price.

2.4.4 Tax Rates

After-tax cash flows are considered in the determination of profits therefore countries that impose relatively low tax rates on corporate earnings are more likely to attract FDI (Madura and Fox, 2011). Factors such as tax concessions, tax holidays that may include the setting up of areas such as EPZs.

2.4.5 Exchange Rates

An investor seeks a country whose local currency is expected to strengthen against his own in order to periodically convert back earnings at a more favorable exchange rate. This study seeks to investigate this relationship between exchange rates and FDI.

2.5 Empirical Literature Review; The relationship between Exchange Rates and FDI

Aizenman (1992) investigated the factors that determine the impact of exchange rate regimes on the behavior of domestic investment and FDI concluded that a fixed exchange rate regime is more conducive to FDI relative to a flexible exchange rate. Volatile nominal shocks reduce expected profits under a flexible exchange rate regime.

Goldberg and Kolstad (1994) in relating FDI, exchange rate variability and demand uncertainty from 1978 to 1991 ,using bilateral FDI flows between the United States and the United Kingdom, Canada and Japan concluded that exchange rate volatility does increase the share of productive capacity located abroad.

Ndung'u (1997) in determining price and exchange rate dynamics between 1970 and 1993 concluded that exchange rate movements and changes in the foreign exchange reserves and the domestic credit drive each other. Further, that a pass through effect from exchange rate and foreign price level are found to drive the domestic price level.

Goldberg and Klein (1998) in their determination of the relationships among trade, foreign direct investment and the real exchange rate between a set of South East Asia and Latin American countries and both the United States and Japan concluded that the domestic currency depreciation potentially raised the return to Japanese investment in South East Asia relative to investment in Japan. They also concluded that a real depreciation of the currencies of the South East Asian countries with respect to the yen both increased FDI to these countries from Japan and decreased FDI investment to these countries from the United States while increasing imports from Japan which largely consisted of inputs to production.

Ndung'u (2001) concluded that when the local currency starts sliding, capital flows in to take advantage of the weak shilling. Interest rate differential increases with real exchange rate appreciation. He argued that volatility of capital flows and the changes in the foreign interest rate account for almost half of the historical innovations of the real exchange rate movements. His conclusion was that the volatility of private capital flows drives the exchange rate movements via the risk premium.

Behera,Narasimhan and Murty (2008) in investigating Exchange Rate Volatility and Central Bank intervention using monthly data on Rupee-US Dollar bilateral exchange rate and Net Foreign Institutional Investors (FFI) inflows as well as net dollar purchases of the Reserve Bank of India (RBI) with Treasury bills of India and the US over the post-reform period from June 1995 to December 2005, observed that FII investments increase exchange rate volatility in India.

Osinubi and Amaghionyeodiwe (2009) on FDI and volatility of exchange rates in Nigeria, using secondary data from 1970 to 2004 argued that there is a positive relationship between inward FDI and exchange rates. The findings implied that the depreciation of the Naira increased real inward FDI. They further concluded in 2010 while investigating Foreign Private Investment and Economic Growth in Nigeria that Foreign Private Investment, Domestic Investment growth and net export growth were positively related to economic growth in Nigeria having analyzed data on foreign private investors from 1970 to 2007.

Otieno (2012) in determining the impact of exchange rate fluctuations on FDI in Kenya for a period of thirty years from 1981 to 2010 concluded that the impact of exchange rate fluctuations on FDI is insignificant. The relationship between the two variables is however positive whereby an increase in the exchange rate fluctuations of the local currencies leads to an increase in FDI inflows although the impact is weak.

Parajuli (2012) examined the relationship between the exchange rate, Foreign Direct Investment and Trade in the developing economy of Mexico from the Organization for Economic Corporation and Development (OECD) countries and the impact of the exchange rates, exchange rate volatility and the expectations of exchange rates on FDI flows from 1994 to 2008.The results suggested that exchange rates and expectations of the exchange rates are positively related with FDI. The positive and significant coefficient corresponding to the exchange rate (home per host currency) variable suggests that an appreciation of the home currency encourages outward FDI from the OECD member countries to Mexico.

Sifunjo and Mwasaru (2012) in investigating the relationship between exchange rates and stock prices from November 1993 to May 1999 with the data set consisting of monthly observations of the Nairobi Stock Exchange stock price index and the nominal Kenya shilling per US Dollar change rates concluded that a perceived risk with respect to the foreign exchange market and hence the stock market led to a higher cost of capital that in effect led to reduction in the sources of supply. This arose not only from the falling investor confidence in these two markets but also the financing capacity of the investors may decline.

Muema (2013) in analyzing the determinants of FDI in Kenya concluded that the mean rate of change in annual average of exchange rates of the Kenyan shilling to the dollar was 7.66%. The highest change in the exchange rates was 80.03% realized in 1992 when the value of the shilling dropped from Sh.58 to the US Dollar to Sh.32.22. The lowest

change was -8.24% realized in 1994 when the Kenyan shilling appreciated to Sh.56.05 from Sh. 51.43. He concluded that there was a strong positive correlation between FDI rate and the change in the rates of exchange indicating that higher FDI inflows were associated with the weakening shilling. The conclusion of his study was that the key factor that determined changes in FDI in Kenya was the exchange rate of the Kenyan Shilling to the other currencies proxied by the rate of change to the US dollar.

Mwenda (2012) provided that the determinants of FDI in the determination of Inward FDI and the Transfer of Technology by Information Technology MNCs in Kenya, being market availability ,political stability, absence of maximum retail price , a stable and growing economy , the availability of human resources and the availability of a strategic infrastructure. The impediments to FDI on the other hand included delays in licenses and work permits, corruption, political instability and unreliable infrastructure.

2.6 Summary of the Theoretical and Empirical Reviews

The theories advanced on explaining exchange rates can only work in a perfect market. The law of one price in the absence of market impactions arbitrage ensures that exchange –adjusted prices of identical traded goods and financial assets are within transaction costs worldwide (Shapiro,1992).The theories advocate for equilibrium relationships which may not be achieved. This is because the motives of the different players in the market are never the same. While profit making is the ultimate motive for any investor, the other players that include the government are more occupied with a currency that will sustain

growth. The theories do not explain the differences that ultimately exchange rates have on influencing FDI.

Weeks and Mungule (2013) argued that while an appreciation of a currency reduces the foreign exchange cost of imports, it also reduces the rate of return to tradable goods, in part through the foreign exchange cost of exports and import substitutes. When the local currency is not trading as well as a foreign one, the host country is deemed attractive. Some studies done show that this statement is not always correct (Barell et al, 2003).

Muema (2013) concluded that exchange rates were a determinant of FDI. Ndung'u(2001) focused on the liberalization of the Foreign Exchange Market having looked at the previous regimes of the foreign exchange systems Kenya had before(Ndung'u, 1997). In view of the above, there exists a gap on the relationship between exchange rates and FDI in the Foreign Exchange Market in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1   Introduction

This chapter focused on the methodology that was used in gathering data, its analysis and the reporting for a ten year period from 2004 to 2013. It consisted of the research design, the data collection and its analysis.

3.2   Research Design

This study used a descriptive-explanatory research design to investigate the relationship between exchange rates and foreign direct investment. An explanatory research seeks to explain the phenomena being studied; to determine the correlation between exchange rates and FDI while a descriptive research design including fact finding enquiries in order to describe affairs as they exist (Kothari, 2004).

3.3   Data Collection

The study used secondary data from publications of foreign exchange transactions as stipulated by CBK guidelines. Data was also collected from KNBS. Quantitative data that would be useful in the analysis of FDI under the study was collected from the CBK website for a period of ten years covering years 2004-2013 and clustered in quarters either by an average or total.

3.4 Data Analysis

Data was analyzed using MS Excel and IBM™'s Statistical Package for Social Sciences (SPSS). Regression analysis was used to determine the relationship between exchange rates and the level of FDI (remittances) as indicated in the model below. The regression model was used to test the relationship of exchange rates with FDI. Multiple regression analysis and correlation analysis was used to predict the nature and significance of the relationship.

3.4.1 Analytical Model

The analytical model was;

$$Y = \alpha + \beta 1 E_X + \beta 2 I + \beta 3 E_G + Є e$$

Where

$Y = \log (FDI)$

$\alpha = y$ intercept

$\beta = $ regression co-efficient

$E_X = $ exchange rates as guided by CBK monetary policies based on the spot rate of the USD

$I = $ inflation rates as measured by the Consumer Price Index

$E_G = $ Economic growth as measured by total per capita GDP

$Є e = $ error component that represents the deviation of the response from the true relation.

All factors were calculated on a quarterly basis.

Test of goodness of fit was done by co-efficient of determination, R^2.

Test of significance was by Pearson's product moment correlation co-efficient, r.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND INTERPRETATIONS

4.1   Introduction

This empirical study sought to establish the relationship between exchange rates and FDI. This chapter presents the results of the analysis of the secondary data that was consolidated from various data sources including the Central Bank of Kenya (CBK) and the Kenya National Bureau of Statistics (KNBS) and further attempts to explain on these findings. The study employed a descriptive-explanatory research that sought to explain the relationship between exchange rates and FDI as well as the factors that may lead to this relationship. The tables, charts and figures in this chapter were derived from the data accessed for this study only.

This chapter will be in three sections, the first will be the presentation of a trend analysis of all the variables in the proposed analytical model, the second and third segments will seek to establish the relationship between FDI and foreign exchange rates specifically the KES/USD rates quarterly over the 10 year period under review through Pearson correlation analysis and regression analysis.

The data accuracy, validity and reliability were assumed on the authority of the publishers' credibility as trusted market information source and as the industry regulator.

4.2 General Information on the data sources

CBK is the regulator of foreign exchange transactions as well as the body vested with providing guidelines on the financial transactions that take place in Kenya.

CBK provided the data on exchange rates for the entire period under the study. KNBS is a semi-autonomous government agency established by the Statistics Act (2006) with its core mandate being the collection, compilation, publication and dissemination of statistical information for public use with an additional role of coordinating, monitoring and supervising the National Statistical System.

4.3   Ten Year Trend Analysis of the FDI and Foreign Exchange Rates

The line chart below is a trend analysis presentation of total quarterly remittances in US Dollars representing FDI and quarterly average KES/USD foreign exchange rates (in percentage) for the 10 years period running from 2004 to 2013.
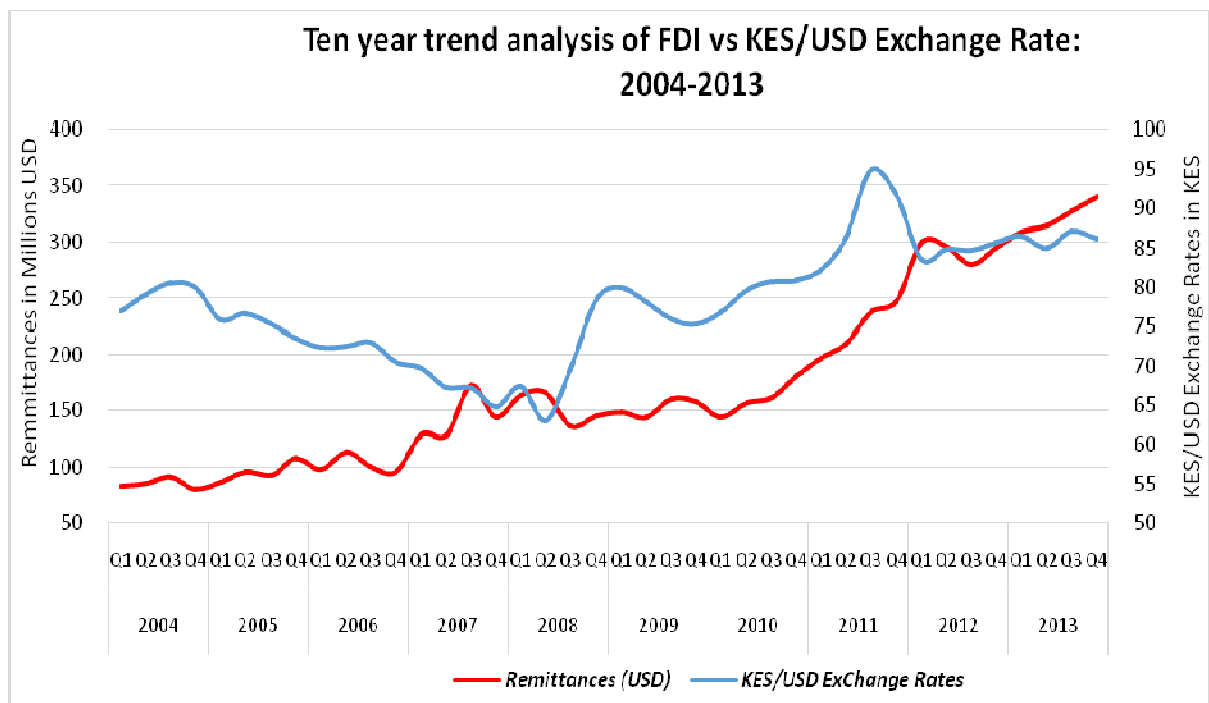

Figure 1: FDI vs Foreign Exchange Rates Trend Analysis for 2004-2013

The two variables; remittances in US dollars and the KES/USD exchange rates reveal a consistent upward trend over the 10 year period. The two variables reveal a relationship that one is determined by the other. In the period 2004-2007, the two variables showed that increase in exchange rates did not increase remittances .Ideally, FDI should be encouraged by a local currency that has the potential to grow. A company seeks to invest in a country whose currency is lower than that of its country of origin yet it should have the potential to grow in order to ensure that remittances are profitable. The trend in the third quarter of 2007 whereby remittances almost equalized exchange rates could be explained by the fact that the exchange rate trend attracted FDI in hope that the strength of the KES would continue.

The exchange rates again went up in the fourth quarter of 2008; the remittances dropped but picked up in 2012. This was the recovery period after the contested elections that may have kept away potential investors. After the recovery period, increases in the exchange rates increased remittances as seen in the fourth quarter of 2011 to the fourth quarter of 2013. This in effect means that an increase in exchange rates influenced remittances of FDI in these periods holding all other factors constant.   Illustratively; the remittances in the trend analysis above seem to be reactive to changes in the KES/USD exchange rates; case in points include the increase in the foreign exchange rates in Q3 2011 that seems to have spurred an upward surge in remittances in Q4 2011 and Q1 2012 while the drop in exchange rates in Q1 2012 resulted in a drop in remittances in Q2 and Q3 of the same year. Below; we further test for the strength and significance of the association of these two variables using Pearson Correlation method.

FDI remittances have been sporadic, they rose marginally in the third quarter of 2007 whereupon the exchange rates.

4.4   Correlation Analysis of FDI and Foreign Exchange Rates

The results for a Pearson correlation analysis for the two variables of interest FDI (remittances) KES/USD exchange rates are as illustrated in the table below;

Table 1: FDI/Exchange Rates correlation rates

Pearson correlations analysis		
		KES/USD Exchange Rates
FDI (Remittances)	Pearson Correlation	0.635[**]
	Sig. (2-tailed)	0.000
	N	40
[**]. Correlation is significant at the 0.01 level (2-tailed).		

The two variables FDI (remittances) and KES/USD exchange rates return a Pearson correlation co-efficient of 0.635 which is significant ($\alpha << 0.05$) at the 0.01 level of significance.

The association between these two variables is relatively a strong positive association meaning an increase in one variable is significantly likely to result in an increase in the other variable and the converse is also true. In essence, an increase in exchange rates is likely to increase FDI. The currency of any country therefore is a determinant of FDI. How much of that currency as earlier discussed in this study will be exchanged for the currency of the foreign firm will determine how attractive a country is.

A strong positive relationship therefore means that exchange rates are a significant part of the reason why an investor chooses to invest in one country over the other.

In relation to the trend analysis conducted earlier; this means there exist a statistically significant relationship between these two variables that requires to be investigated further. Below; we therefore instructively attempted to find the degree of this relationship while controlling with the other proposed factors like inflation rates and GDP.

4.5   Regression Analysis Results

4.5.1 Regression Data

The data below in table 2 was used to model a regression equation using a linear stepwise regression method;

Table 2: Regression data

Year	Quarter	Total Quarterly Remittances (USD '000)	KES/USD Quarterly Average Ex Rate (KES.)	GDP at Market Prices (KES. Million)	CBK Inflation Rates (%)
2004	Q1	82,774	76.89	273,983	9.10
	Q2	84,751	79.08	260,382	6.07
	Q3	90,975	80.52	279,699	14.42
	Q4	79,826	79.95	295,274	17.06
2005	Q1	85,839	75.81	281,335	14.32
	Q2	95,934	76.62	277,857	14.24
	Q3	92,508	75.27	303,053	7.63
	Q4	107,876	73.49	313,004	4.27
2006	Q1	98,143	72.35	298,153	8.88
	Q2	113,463	72.44	295,111	4.73
	Q3	100,493	72.97	327,868	5.00
	Q4	95,495	70.46	328,338	7.06
2007	Q1	129,025	69.68	319,276	3.28
	Q2	128,057	67.28	319,661	2.63
	Q3	172,728	67.16	348,660	5.44
	Q4	143,833	64.74	349,249	5.72
2008	Q1	163,651	67.46	322,737	10.63
	Q2	165,900	62.95	326,640	17.53
	Q3	136,478	69.76	357,680	18.06
	Q4	145,212	78.42	350,206	18.70
2009	Q1	148,249	79.89	343,449	14.17
	Q2	143,644	78.06	333,253	10.21
	Q3	159,666	75.95	364,395	7.51
	Q4	157,597	75.32	353,290	5.65
2010	Q1	143,849	76.70	359,706	5.03
	Q2	156,392	79.64	349,356	3.68
	Q3	161,202	80.69	386,302	3.33
	Q4	180,500	80.84	379,398	3.84
2011	Q1	196,475	82.21	379,208	7.05
	Q2	210,083	86.33	361,372	13.16
	Q3	237,214	94.85	401,810	16.51
	Q4	247,357	91.52	396,915	19.19
2012	Q1	299,923	83.54	378,914	16.87
	Q2	296,108	84.76	381,611	11.78
	Q3	280,074	84.61	425,420	6.38
	Q4	294,787	85.71	424,708	3.53
2013	Q1	308,735	86.50	398,511	4.08
	Q2	314,952	84.98	399,156	4.37
	Q3	327,335	87.17	446,247	7.00
	Q4	339,555	86.15	442,235	7.42

The results for the regression analysis using the data above are as tabulated and explained here-under;

4.5.2 Model Summary

The regression analysis for the data above after log transformation of the FDI to standardize it returns the following results;

Table 3: Model summary table

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.926^a	0.858	0.847	0.17357
a. Predictors: (Constant), KES/USD Exchange Rate, GDP, Inflation Rates.				

All the predictor variables; exchange rates based on the spot rate of the USD, GDP per capita at constant prices and inflation rates as measured by the consumer price index and CBK interest rates returned significant coefficients to model a regression equation. The model did not reject any predictor variables.

The R and R-square values (0.926 and 0.858) revealed a strong relationship between the FDI and the KES/USD exchange rate, the GDP per capita and the inflation rates. Translated, the R-square value reveals that 85.8% of the change in Log (FDI) can be explained by the consequent regression equation which is significant enough to be considered. The analysis of variance (ANOVA) below further analysed the significance of this relationship.

4.5.3 The ANOVA(Analysis of Variance)Table

The ANOVA table generated from running the data through a regression analysis is as shown below;

Table 4: Analysis of Variance

ANOVA[a]						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1 Regression	6.570	3	2.190	72.693	0.000[b]	
Residual	1.085	36	0.030			
Total	7.654	39				
a. Dependent Variable: LOG_FDI						
b. Predictors: (Constant), GDP, Inflation Rates, KES/USD Exchange Rate						

The significance (Sig.) of the F-Value ($Fischer$ Value) = 72.693 is small enough (Sig.

F=0.000[b]<<0.05) to consider proceeding to model the regression equation that should

reveal the exact degree of dependence of the four variables of interest i.e. FDI, KES/USD

exchange rates, GDP per capita and inflation rates.

4.5.4 Regression Equation

The coefficients table returned by running the data through analysis software (IBM SPSS

20) is as illustrated below;

Table 5: Regression co-efficient table

Coefficients[a]						
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
1 (Constant)	15.698	0.298		52.630	0.000	
KES/USD Rate	0.003	0.005	0.048	0.590	0.559	
Inflation Rates	0.004	0.006	0.052	0.786	0.437	
GDP	0.00000835	0.000	0.902	11.257	0.000	
a. Dependent Variable: LOG_FDI						

4.6 Interpretation of the Findings

The study was undertaken to establish the relationship between exchange rates and FDI

in Kenya. From the findings, the study found a significant relationship between exchange

rates and FDI. A Pearson correlation coefficient of 0.635 indicates a relatively strong positive relationship meaning that an increase in exchange rates will statistically increase FDI holding other factors constant. After incorporating inflation and GDP as control variables, the R value of 0.926 while the R^2 as 0.858 indicate a strong relationship between FDI and exchange rates, GDP and inflation. The findings of the study as expressed in the analytical model to determine the relationship between exchange rates and FDI;

The proposed analytical model;

$Y=\alpha+\beta 1 E_X+\beta 2I+\beta 3E_G+\text{€}e$ after incorporating the findings became

$$Y = 15.698+ 0.03(E_X) + 0.004(I) + 0.00000835(E_G) + \text{€}e$$

This in effect meant the following;

The log (FDI) in any period during the time series is equal to 15.698 when all other factors are equal to zero (0).

Exchange Rates; a 0.03 increase in the KES/USD exchange rate results in a unit increase in Log (FDI).

Inflation rates; a 0.004 increase in the inflation rates causes a unit increase in the Log (FDI).

GDP per capita; a 0.00000835 increase in GDP per capita causes a unit increase in the Log (FDI).

According to the findings of the analytical model, an increase in exchange rates do increase FDI, the relationship between FDI and exchange rates being determined as statistically significant.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the conclusion of this study and is divided into the summary of findings, conclusion, recommendations for policy, the limitation of the study and lastly the suggestions for further research based on the objectives of the study to determine the relationship between exchange rates and FDI in Kenya.

5.2 Summary

In the determination of FDI, the location, timing and industry to invest in is determined by various factors. Exchange rates are identified as one of the determinants of FDI, they have the ability to make a country more or less desirable because the firm's goals of profit making is directly influenced by the amount of money involved in setting up, operating and ultimately the amount of money that can be counted as profits. The currency of a foreign entity must be able to be converted into the local currency at a rate that enables saving on the setting up costs. The same local currency must also be able to gain in order to ensure that when the profits are converted into the foreign currency, there are gains to be made by the foreign entity.

The study was conducted to assess the relationship between exchange rates and FDI in Kenya covering a period of ten years with data being collected quarterly across all sectors of the Kenyan economy with no specific focus being on any sector or industry. Secondary data was collected from the regulator of foreign exchange transactions, the

Central Bank of Kenya for the foreign exchange rates in this period as well as the Kenya National Bureau of Statistics on the FDI remittances over this period, having inflation and economic growth as measured by GDP as control variables. Data analysis was done using regression and descriptive analysis. A trend analysis was carried out between the two variables for the ten year period which illustratively showed that in certain periods an increase in one led to an increase in the other case in point being the years between 2011 and 2013. In light of the trend analysis, a correlation analysis was also carried out whereby a strong positive association was also discovered. The regression analysis revealed a strong relationship between FDI, Exchange Rates, GDP, and inflation rates.

5.2 Conclusion

The impact of FDI is felt in the country not only as a source of foreign exchange but also as a source of new technology, a way of opening the borders of a country. The impact of exchange rates on the other hand is not only felt by foreign investors but also in the domestic market whereby the local currency is affected by exchange rates in the prices of goods and services accessed in the domestic market as investors will seek to ensure profits are made.

From the findings, the study concludes that foreign exchange rates determine the levels of FDI in Kenya. This relationship has been determined in the study that one affects the other whereby an increase in exchange rates increases FDI. In instances whereby the exchange rates are higher than the remittances, it can be explained as that period whereby they serve as a means of attracting FDI as the periods after show an increase in FDI whereby the exchange rates are almost on the same level with FDI.

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The remittances in the ten year trend analysis were seen to be reactive to changes in the KES/USD exchange rates. In 2011, there was an upsurge in foreign exchange rates that led to an upsurge in remittances while a drop in exchange rates resulted in a drop in remittances. The Pearson correlation co-efficient of 0.635 showed a strong positive association. An increase in one variable is likely to increase the other. R being 0.926 and R^2 being 0.858 reveals a strong relationship between FDI and the KES/USD exchange rates with GDP and inflation rates being control variables.

5.3 Recommendations for Policy

Exchange rates are determined by more than the demand and supply of currencies. While the demand and supply of currencies determine exchange rates to a certain extent, this is not enough to ensure that the currency of a country is stable enough to attract investors. A stable currency is an incentive for investors. CBK is vested with the mandate of regulating foreign exchange and issuing guidelines that ensure compliance of all players in the foreign exchange market in Kenya. It is imperative that as the regulator, it ensures the stability of the Kenyan shilling is maintained.

Governments in making key decisions and announcements also play a role in the determination of exchange rates as investors look upon these announcements and policies as a means of forecasting future trends. Government appointments are also important as investors peg performance of key sectors with those appointed to head them. Government announcements and decisions should therefore be used to encourage stability of the currency in a bid to attract investors. There is need to ensure

announcements and policies will impact favorably on the strength of the Kenyan economy.

The state of the country also determines the exchange rates and ultimately the remittances. The trend analysis shows that in 2007/2008 during the elections and the resulting violence that followed, the remittances and the exchange rates were low. It is imperative that an atmosphere conducive for trading be maintained in the country. There is need for a stable and conducive atmosphere that will encourage investors and thus increase remittances to Kenya.

5.4 Limitations of the study

This study limited the data to the period 2004-2013 with data being collected quarterly and focused only on exchange rates as a determinant of FDI. The analysis was therefore not done outside the duration or on other determinants of FDI.

The data used was based on exchange rates and remittances available on KNBS as well as CBK, any data not recorded by these two bodies was not considered for the purpose of this study. While inflation was used as a control variable, no emphasis was placed on it as a variable that could have an impact of FDI remittances.

5.5 Suggestions for Further Research

The study focused on exchange rates as a determinant of FDI in Kenya, more research needs to be carried out on the other determinants of FDI with each factor being studied individually to determine the impact it has on FDI and its remittances.

There is need to undertake a search on the determinants of exchange rates so as to determine to what extent they can be used to influence investments in the country.

Due to the fact that the study did not focus on any industry or sector; more research may be carried out with more emphasis on a single sector; the study may be limited to a specific sector to determine if different results may be observed.

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APPENDICES

APPENDIX 1: LETTER OF INTRODUCTION

Dear Sir/Madam,

RE: RESEARCH INFORMATION.

I am a MBA (finance) student at the Department of Finance and Accounting, University of Nairobi. As part of the course, am undertaking a research project that seeks to establish the relationship exchange rates and Foreign Direct Investment in Kenya.

I therefore request for access to all the relevant information concerning this research. The information is solely for academic purposes.

Yours faithfully,

Teresia K. Gitau