

**FOREIGN DIRECT INVESTMENT AND NET EXPORT AS CORRELATES
TO FOREIGN EXCHANGE RATES**

UGANDA (1990 - 2014)

BY

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DECLARATION

I Mungan Gabriel, declare that this dissertation is my original work and to the best of my knowledge, it has not been presented elsewhere in any university or institution of learning for approval.

Signed



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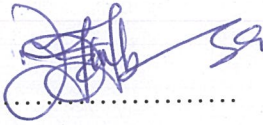
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APPROVAL

I, the undersigned certify that I have read and hereby recommend for acceptance by Kampala International University a dissertation titled, foreign direct investment, net export as correlates to foreign exchange rates Uganda (1990 - 2014).

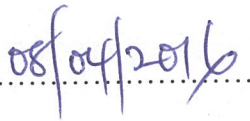
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DEDICATION

I dedicate this piece of work to my lovely parents; Mr. Pulukol Marino and Mrs. Aboka Angellina and lovely classmates in the college of economic and management, my lecturers especially my supervisor Mr. Mwebesa Edson.

ACKNOWLEDGEMENT

I extend a vote of thanks to a number of people who unreservedly, contributed towards the accomplishment of this research work. I also would like to acknowledge the assistance and role played by the following personalities to the successful completion of this study.

I cannot say exactly how grateful I am to my supervisor, Mr. Mwebesa Edson, his guidance in this study was beyond measure. Thank you also for providing me with professional advice, encouragement and your time that has spurred me to success.

I also thank all my brothers; Longól Simon Peter and sisters including; Lochoro Grace and friends including; Christine, Maurine and all my family members and friends we have been happily together throughout the course of study.

May the Almighty God Bless you abundantly.

ABSTRACT

The study set to examine the relationship between FDI, net exports and foreign exchange rates in Uganda between 1990 – 2014 and it was carried out on the three research objectives which included to: establish the relationship between FDI and foreign exchange rates in Uganda, establish the relationship between Net exports and foreign exchange rates in Uganda and to show the effect of FDI and Net exports on foreign exchange rates in Uganda.

The study adopted a qualitative descriptive correlational research design involving both quantitative and qualitative approaches in data collection. A time series analysis was adopted and the use of quantitative techniques to analyze secondary data scientifically to critically conclude the research objectives, secondary data was collected from World Bank reports, bank of Uganda international monetary fund data sheets and United Nation Commission on Trade and Development data sheet among others.

On the trend of foreign exchange rate, the researcher found a general increase in foreign exchange rate of Uganda between the periods of 1990 to 2006. The only slight decrease in the value of Ugandan export rate was witnessed between 2006 to 2007, then a slight decrease between 2009 – 2010 and after a general increase between a period of 2010 to 2014.

Under the trend of foreign direct investment, the researcher got a slight decrease in Foreign Direct investment in the period between 2011 to 2012, and a total decrease between 2012 to 2013 and a general increase between 2013 to 2014. The increase in FDI rate could have been attributed to the peaceful political climate, and reduction in inflation among others.

The researcher went ahead to determine the mean values of the variables whereby it was found out that Foreign Exchange Rate had a mean of 413.552, Net Exports had a mean of 16.692 while FDI had a mean of 62.86, as shown in the table in the mean column.

On the relationship between Net exports and foreign exchange rates in Uganda there researcher found out that Net export is strongly related to foreign exchange rate, most of the points are close to the fitted trend. This relationship is as a result of high flow of Net export level which leads to low rate of foreign exchange.

The researcher used Pearson's correlation coefficient to establish the strength of relationship between net export and foreign exchange rate in Uganda whereby a very strong relationship between the foreign exchange and Net export ($r = 0.9263$) was seen and there is also a very strong foreign exchange and FDI ($r = 0.8655$) the strength of relationship between FDI, net export and foreign exchange rate is determined by the coefficients of determination which the figure above shows that there is a very strong relation between the DV and the IVs. Under regression analysis of FDI, Net export and foreign exchange rate in Uganda, the researcher used P-Value test analysis.

The researcher recommended that in order to encourage foreign exchange rate, policymakers should encourage FDI and exchange rate to make Uganda a serious contender for Foreign direct exchange and net export, the country needs to be modernly equipped with well-functioning infrastructure and effective vocational and skill training institutions suited to investors' generic human resource needs. With regard to country development policy, investing in productive infrastructure is considered to be an instrument to improve the foreign exchange rate of the country.

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CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter introduces the introduction, background of the study, statement of the problem, Purpose of the Study, research Objectives, and research Questions, research hypothesis, scope of the Study, significance of the Study, definition of Key Terms and conceptual framework

1.1 Background to the Study

1.1.1 Historical Review

According to Feenstra (2005), Foreign exchange is that money denominated in the currency of another nation or group of nations. Foreign exchange rates back to ancient times, when traders first began exchanging coins from different countries. However, the foreign exchange itself is the newest of the financial markets. In the last hundred years, the foreign exchange rate has undergone some dramatic transformations. The Bretton Woods Agreement, set up in 1944, remained intact until the early 1970s.

Nowadays, trading volume has increased rapidly over time, especially after exchange rates were allowed to float freely in 2000. The foreign exchange market has quickly established itself as the financial market. Before the year 1998, the foreign exchange market was only available to larger entities trading currencies for commercial and investment purposes through banks, now online currency trading platforms and the internet allow smaller financial institutions and retail investors access a similar level of liquidity as the major foreign exchange banks, by offering a gateway to the primary (Interbank) market.

Every day, foreign exchange rate market exchanges more than \$1.7 trillion in dozens of different currencies. With the current growth rate the market is projected to grow to more than \$1.9 trillion per day since the year 2006. With such volume, one can assume that the exchange rate market is extremely volatile, changing at a moment's notice, depending on conditions within that country. (Panizza 2004)

1.1.1 Theoretical Perspective

A number of theories have been advanced and in this study two theories have been adopted to better explain the manner in which the study variables interact. In this case the theory of exchange rates on imperfect capital markets and then the neoclassical theory have been explored. According to the theory of exchange rates on imperfect capital markets, it is argued that, the existence of uncertainty in currency exchange rates are key factors accounting for FDI; in that, an increase in real exchange rate stimulates FDI made by some multinational corporations from developed countries (Anyanwu, 1998); while an appreciation of the foreign currency leads to a reduction in FDI made by these companies (Bowles, 2004). However, this theory has not managed to explain simultaneous FDI between countries whose currencies are different even though it is argued that such FDI's are made in different times, but contradictions to these claims are imminent (Ragazzi, 1973).

In regard to the neoclassical theory, it is assumed that, markets are perfectly competitive as a result leading to gains from international trade due to international specialization. This theory states that scarcity of labour and its cost which is relatively high in developed countries, has made many companies in those countries to transfer production facilities to countries that are less developed and labour-intensive where labour is relatively cheap (Ragazzi, 1973). Consequently, this has led to a unidirectional flow of capital, that is, from countries which are developed to the capital-scarce ones. However, criticism has been directed to this theory where it has been argued that, the theory is incapable of explaining FDI and that it lacks realism. This is mainly because neoclassical theory has not been sufficiently used to succinctly explain FDI in the transition and developing countries where perfect competitive market does not exist, and the development of the basic market tools and institutions is yet to be done (Bowles, 2004). However, the assumption of this theory that capital flows from developed countries to the countries that are capital-scarce has played a significant role in facilitating an understanding of the FDI incentives that are present in transition and developing economies.

Both of the theories highlight that FDI is inevitable and that its implication in regard to either net exports or foreign exchange rates is not a straight line more so, when explaining its implication on developing countries. There is evidence that FDI not only comes from, but goes to high-income

capital rich countries that have led to what they are referring to off-shoring. However, what is important in this study is how FDI and net exports have affected the level of foreign exchange rates in Uganda. Such theories provide different predictions for the response of FDI and net exports to foreign exchange rate levels.

1.1.3 Conceptual Perspective

Following Sheffrin (2003) referred to foreign exchange rate as the rate at which one currency was exchanged for another. It is also regarded as the value of one country's currency in terms of another currency. The exchange rate is an important trade related instrument in that it directly affects the prices of exports or else FDI activities. In simple terms an appreciation of the exchange rate increases the prices of Ugandan exports, damaging competitiveness and decreases the price of imports, a depreciation of the exchange rate has the opposite effect. According to the Uganda Export Promotion Board, (2000), the exporter faces two kinds of foreign exchange risks. The first is the risk of depreciation of the foreign currency in which an exporter has invoiced the export contract. If the currency depreciates the exporter would receive less money in the home currency. The second is the risk of appreciation of the foreign currency in which the exporter holds a due. This would affect the exporter's product making it more expensive abroad.

As per the researcher, Foreign Exchange Rate was used as the price of a nation's currency in terms of another currency.

According to Panizza Feitner. (2004), foreign direct investment (FDI) referred to as an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy in an enterprise resident in an economy other than that of the foreign direct investor (FDI enterprise or affiliate enterprise or foreign affiliate). And so, over the last two or three decades, FDI across the world has tremendously as an important component of international investments constituting a significant percentage of GDP for many countries worldwide (Christiansen, 2003).

In my view it is seen that the increasing significance of FDI is attributable to the fact that it plays an essential part in facilitating both economic and social development since the direct investment made by foreign investors (FDI inflows) or made by home country to foreign countries (FDI outflows) have been making crucial contribution to the respective countries' economic

development as an important source of funding for economic development projects in such countries.

As there happen to be a high value of FDI inflows compared to the value of FDI outflows, then this implies that there was a surplus of foreign currency as well as increased inflow of capital goods and production inputs which are essential drivers of a country's economic development plans (Pongsiri, 2004).

In this study, the researcher used Foreign Direct Investment as the investment that is made by a company in a foreign country different from the financier's home country.

Gregory, (2011) argues that net export is value of a country's total exports minus the value of its total imports. It is used to calculate a country's aggregate expenditures, or GDP, in an open economy. In other words, net exports is the amount by which foreign spending on a home country's goods and services exceeds the home country's spending on foreign goods and services. In an economy the major determinant of net production among others is considered to be the growth in export, as it is a role player in foreign export earning which facilitates foreign currency available, which in turns positively affects the production potential in an economy as it facilitates the import of capital goods. Moreover competitions in export cause economies of scale & accelerate of technological advancement (Ramos, 2001).

In a manner that the extent to which net exports have affected foreign exchange rates as of a great significance in this study, it is seen that for instance Americans purchased billions of dollars of products that are imported from other countries. Wine, food, clothes, household items, and automobiles are just the start of the items they buy from other countries. It is the import and export of products that allow us to have more options. According to this the researcher sees net exports as the difference between the amount of products that are exported, or shipped out of the country, and the amount imported, or shipped into the country.

According to the above explanations, the researcher used Net Exports as the difference between the amount of products that are exported, or shipped out of the country, and the amount imported, or shipped into the country. It is calculated as $\text{Net Exports} = \text{Exports} - \text{Imports}$.

The researcher argues that growth in foreign direct investment (FDI) is perhaps the clearest sign of globalization according to the past decade whereby the average annual growth rate of FDI has been 23 percent since 1996 which is twice as much as that of trade. Most international investments take place within the OECD area. However, during the 2000s, and until the Asian financial crisis in 1997, the share of FDI hosted by countries in the developing world increased. Measured as a share of host country GDP, FDI flows to developing countries are typically greater than those to the developed world. (Kyvic Norhads 2002)

1.1.4 Contextual Perspective

Uganda received high rates of exchange rate during the 1990s, reducing negative trends from 56 percent in 1992 to 34 percent in 2000. Household survey data for 2003 indicates a reversal of this progress, however, with headcount trend rising to 38 percent before decreasing to 31 percent in 2005/6 and inequality increasing to 0.43 from the 2000 level of 0.40. Exchange rate has averaged 7.9 percent over the last five years, and increase in 2007/08 is estimated to be 8.9 percent. As economic growth is high, exchange rate has risen only by an average 4.3 percent over the last 5 years.

In 2008 Uganda saw the consolidation of macroeconomic stability and a gradual recovery of economic activity, with estimates putting exchange rate growth at 5.2%, up from 4.3% in the last 5 years. This recovery in economic activity has benefited from a fiscal and monetary policy stance focused on containing inflationary pressures, while ensuring debt and exchange rate stability.

Projections for the AEO report indicate exchange rate growth at 5.2% in 2008, on the back of exchange rate and public investment, bringing exchange rate growth closer to Uganda's underlying growth potential of 7%. Medium-term forecasts indicate a consolidation of these trends, with exchange rate growth reaching 6.6% in 2009 and 7% in 2010, and improvement of the current account balance and a mildly expansionary fiscal policy.

Uganda is among the developing economies in the East African region. The country's population is estimated to be approximately 34,918,915 (CIA, 2015). Uganda has had an impressive record of attracting foreign investments, with the recent oil discovery in the Albertine region heightening investor interest. The country has further attracted investors with over 4,000 projects licensed since the investment body was set up in 1991 (The New Vision Newspaper, 10th May, 2010). Uganda's accumulated planned investment within this period is \$12b. However, despite the attractive

investment prospects in the country, and the East African Community (EAC) region as a whole, the implication of FDI on net export and foreign exchange rates is understated yet there is significant implication of any international investment dealings on the net export and currency values. It is in this context that this study is being conducted to ascertain the relationship between FDI, net exports and foreign exchange rates in particular in Ugandan economy between 1990 – 2014.

1.2 Statement of the Problem

Foreign exchange rates is so much vital as it is known as an engine for mobilizing international resources, promoting international trade, improvement on standards of living, growth of industries and profitability. Foreign exchange rates in Uganda has been affected by high levels of unemployment and sluggish economic growth, marketing trends, taxes among others. However, these problems have indicated an economic financial constraints, and a bad trend towards the flow of foreign exchange rate. Despite the above and attractive investment prospects, depreciation of the Ugandan shilling has continued to jeopardize the benefits associated with FDI. Besides, the net export figures of Ugandan export activities seem to be too low as imports outweigh thus, affecting the price of the Ugandan shillings.

It is upon the above background that the researcher has decided to carry out a study / research on foreign direct investment, net export as correlates to foreign exchange rates in Uganda.

1.3 Purpose of the Study

The purpose of the study was to examine the relationship between FDI, net exports and foreign exchange rates in Uganda. The study was intended at searching for the direction of causality between Foreign Direct Investment inflows (FDI), net exports and foreign exchange rates for the case of Uganda.

1.4 Research Objectives

- i. To establish the relationship between FDI and foreign exchange rates in Uganda
- ii. To establish the relationship between Net exports and foreign exchange rates in Uganda
- iii. To show the effect of FDI and Net exports on foreign exchange rates in Uganda

1.5 Research Questions

- i. What is the relationship between FDI and Foreign Exchange rates in Uganda
- ii. What is the relationship between Net exports and Foreign exchange rates in Uganda
- iii. What is the effect of FDI, Net exports on Foreign exchange rates in Uganda

1.6 Research Hypothesis

The hypotheses to be tested in this study include;

- i. Ho₁: FDI has no significant relationship with foreign exchange rates.
Ha₁: FDI has significant relationship with foreign exchange rates.
- ii. Ho₂: Net exports has no significant relationship with foreign exchange rates
Ha₂: Net exports has significant relationship with foreign exchange rates.
- iii. Ho₃: FDI and Net exports has no significant relationship with foreign exchange rates
Ha₃: FDI and Net exports has significant relationship with foreign exchange rates

1.7 Scope of the Study

1.7.1 Subject Scope / Content scope

The study was limited to three study variables namely foreign direct investment and net exports as the independent and foreign exchange rates as the dependent. The main focus was to establish the nature of relationship between the study variables.

1.7.2 Geographical Scope

The study was carried out in some foreign exchange rates records in libraries and online sources in Kampala, Uganda. Uganda is situated in East African region, with an estimated population of 34918915(CIA, 2015). It borders Southern Sudan to the north, Kenya to the East, Tanzania to the South-East, Rwanda to the South-West and the Democratic republic of Congo to the West.

1.7.3 Time Scope

The study focused on the periods between 1990 – 2014, specifically, this time scope was selected simply because it accounts for the establishment of Uganda' investment institution and so, the period is reasonable to offer comprehensive trends as far as the subject matter of this study is concerned.

1.7.4 Theoretical Scope

The study was guided with two theories to better explain the manner in which the study variables interact. In this case the theory of exchange rates on imperfect capital markets and then the neoclassical theory were explored.

1.8 Significance of the Study

First of all, the study findings were useful to policy makers including financial institutions and investment and exportation entities in examining the dynamic factors that shape the competitiveness of economic activities in the global business. In this regards the study contributed to the knowledge of Foreign Direct Investment inflows (FDI), net exports and foreign exchange rates.

Secondly, the study findings will be resources to private companies as it will avail updated information regarding international investment implications and how private firms in Uganda can prioritize their businesses to gain a competitive advantage. In other words, it shall bring to light the practice of Ugandan firms, as to whether they give due attention to FDI, net export activities and foreign exchange risks, if not, the study will offer suggestions to help salvage themselves from the increasing foreign exchange exposure as the effects are becoming a global phenomenon.

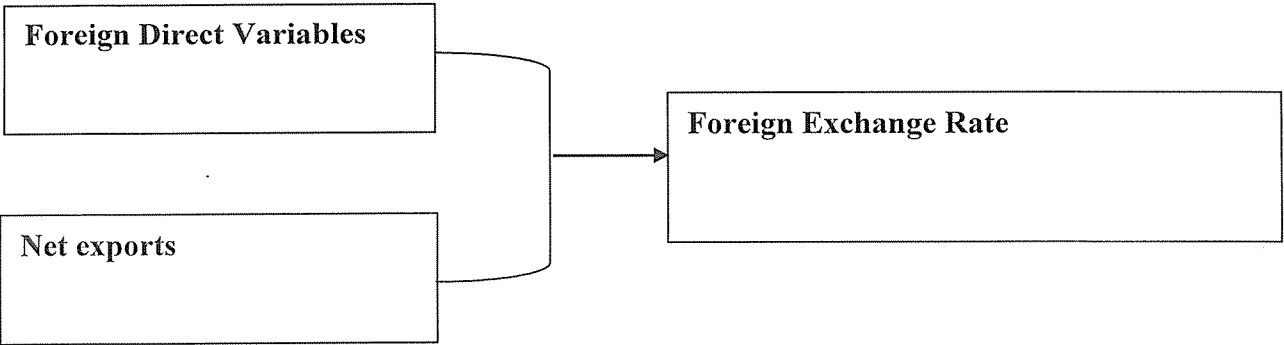
To the scholars this study will avail updated information regarding FDI, net export and foreign exchange rates and its associated risk among others. This will help in carrying out further studies basing on the generated information.

1.9 Conceptual Framework

The figure below shows that foreign direct investment and net export are related to foreign exchange rate. Any task done between foreign direct exchange and net exports can be done and

tasked by foreign exchange rate so the existence of foreign exchange rate is determined by both FDI and Net exports. In other words, FDI and net export positively influence exchange level rates.

Fig 1: Conceptual frame work of foreign direct investment and net export as correlates to foreign exchange rate.



Source: Researcher 2016

The study was carried out basing on the interrelations between the variables in the research problem. The above diagram explores the connection between the foreign direct investment and net export which positively or negatively translates into the state of foreign exchange rate.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter contained literature in line with the objectives of the study. The information was obtained from journals, books, novels, authors and internet, correspondence reports and newspapers.

2.1 Theoretical Review

Theory of exchange rates on imperfect capital markets and the neoclassical theory provide conflicting predictions about the effects of FDI and Net export on foreign exchange rate. According to Kokko (1996), spillovers occur when the entrance or presence of Multinational Enterprises (MNEs) affiliates leads to productivity or efficiency benefits in the host country's local firms and the MNEs are not able to internalize the full value of these benefits. Similarly, negative externalities exist when the entrance or operations of FDI lead to productivity or efficiency loss among domestic firms and foreign affiliates do not have to compensate domestic firms for their loss (Mutenyo, 2008). For that matter, FDI in presence of pre-existing trade, price, financial and other distortions hurt resource allocation and slow growth.

2.2 Review of Related Literature

2.2. 1 The relationship between FDI and Foreign Exchange rates

Given the significant roles of FDI in developing economies there have been several studies that tried to determine the factors that influence FDI inflows into these economies. One of such factors that recently have been a source of debate is exchange rate and its volatility. The existing literature has been split on this issue, with some studies finding a positive effect of exchange rate volatility on FDI, and others finding a negative effect. A positive effect can be justified with the view that FDI is export substituting. Increases in exchange rate volatility between the headquarters and the host country induce a multinational to serve the host country via a local production facility rather than exports, thereby insulating against currency risk (Foad 2005).

Foreign Direct Investment (FDI) is an international flow of capital that provides a parent company or multinational organization with control over foreign affiliates. By 2005, inflows of FDI around the world rose to \$916 billion, with more than half of these flows received by businesses within developing countries. One of the many influences on FDI activity is the behavior of exchange rates. Exchange rates, defined as the domestic currency price of a foreign currency, matter both in terms of their levels and their volatility. Exchange rates can influence both the total amount of foreign direct investment that takes place and the allocation of this investment spending across a range of countries. He, Dong and Wenlang Zhang (2010)

When a currency depreciates, meaning that its value declines relative to the value of another currency, this exchange rate movement has two potential implications for FDI. First, it reduces that country's wages and production costs relative to those of its foreign counterparts. All else equal, the country experiencing real currency depreciation has enhanced locational advantage or attractiveness as a location for receiving productive capacity investments. By this relative wage channel, the exchange rate depreciation improves the overall rate of return to foreigners contemplating an overseas investment project in this country. (Tang Selvanathan 2008)

The exchange rate level effects on FDI through this channel rely, on a number of basic considerations. First, the exchange rate movement needs to be associated with a change in the relative production costs across countries, and thus should not be accompanied by an offsetting increase in the wages and production costs in the destination market for investment capital. Second, the importance of the relative wage channel may be diminished if the exchange rate movements are anticipated. Anticipated exchange rate moves may be reflected in a higher cost of financing the investment project, since interest rate parity conditions equalize risk-adjusted expected rates of returns across countries. By this argument, stronger FDI implications from exchange rate movements arise when these are unanticipated and not otherwise reflected in the expected costs of project finance for the FDI. (Thirlwall Anthony 2009)

Some experts on FDI implications of exchange rate changes dismiss the empirical relevance of the interest-parity type of caveat. Instead, it is argued that there are imperfect capital market considerations, leading the rate of return on investment projects to depend on the structure of capital markets across countries. For example, Froot and Stein (1991) argue that capital markets are imperfect and lenders do not have perfect information about the results of their overseas

investments. In this scenario, multinational companies, which borrow or raise capital internationally to pay for their overseas projects, will need to provide their lenders some extra compensation to cover the relatively high costs of monitoring their investments abroad. Multinationals would prefer to finance these projects out of internal capital if this were an option, since internal capital is increasing in the parent company's wealth. (Froot and Stein 1991)

Consider what occurs when exchange rates move. A depreciation of the destination market currency raises the relative wealth of source country agents and can raise multinational acquisitions of certain destination market assets. To the extent that source country agents hold more of their wealth in own currency-denominated form, a depreciation of the destination currency increases the relative wealth position of source country investors, lowering their relative cost of capital. This allows the investors to bid more aggressively for assets abroad. Empirical support for this channel is provided by Klein and Rosengren (1994), who show that the importance of this relative wealth channel exceeded the importance of the relative wage channel in explaining FDI inflows to the United States during the period from 1979 through 1991. (Klein and Rosengren 1994).

Justification for a negative impact of exchange rate volatility on FDI can be found in the irreversibility literature pioneered by Dixit and Pindyck (1994). A direct investment in a country with a high degree of exchange rate volatility will have a more risky stream of profits. As long as this investment is partially irreversible, there is some positive value to holding off on this investment to acquire more information. Given that there are a finite number of potential direct investments, countries with a high degree of currency risk will lose out on FDI to countries with more stable currencies (Foad 2005).

As expositied above, the exchange rate effects on FDI are viewed as exogenous, unanticipated, and independent shocks to economic activity. Of course, to the extent that exchange rates are best described as a random walk, this is a reasonable treatment. Otherwise, it is inappropriate to take such an extreme partial equilibrium view of the world. Accounting for the co-movements between exchange rates and monetary, demand, and productivity realizations of countries is important. (Patrik Gustavsson 2002)

As Goldberg and Kolstad (1995) show, the correlations can modify the anticipated effects on expected profits, and the full presumption of profits as decreasing in exchange rate variability.

Empirically, exchange rate volatility tends to increase the *share* of a country's productive capacity that is located abroad. Analysis of two-way bilateral foreign direct investment flows between the United States, Canada, Japan, and the United Kingdom showed that exchange rate volatility tended to stimulate the share of investment activity located on foreign soil. For these countries and the time period explored, exchange rate volatility did not have statistically different effects on investment shares when distinguished between periods where real or monetary shocks dominated exchange rate activity.

2.2.2 Relationship between Net Exports and Foreign Exchange Rates

In recent years, there has been a special interest in the link between exchange rates and interest rates in both advanced and developing countries. This is understandable, given the important role these variables play in determining developments in the nominal and real sides of the economy, including the behaviour of domestic inflation, real output, exports and imports. Among emerging market economies, this interest is further spurred by the fact that many of them have recently introduced changes in their monetary and exchange rate policies, moving to inflation targeting frameworks which operate officially under flexible exchange rate regimes. (Akyuz, Yilmaz 2001)

An important relationship exists between net exports and the real exchange rate within a country. When the real exchange rate is high, the relative price of goods at home is higher than the relative price of goods abroad. In this case, import is likely because foreign goods are cheaper, in real terms, than domestic goods. Thus, when the real exchange rate is high, net exports decrease as imports rise. Alternatively, when the real exchange rate is low, net exports increase as exports rise. This relationship helps to show the effects of changes in the real exchange rate. ADB (2009)

The relationship between exchange rates and interest rates plays a key role in both empirical and theoretical modeling. Regarding empirical methods, identified vector auto regressions (IVAR) have recently allowed for simultaneous interaction between exchange rates and interest rates in an attempt to credibly identify monetary and risk premium shocks. (Dees, Sean. 2001)

Policy-makers have always been attentive to the effects of exchange rate misalignments, not the least because the international monetary Fund precludes competitive devaluations.³ The issue gained greater prominence in the economic debate from the 1990s onwards, when sustained deviations of exchange rates from their equilibrium values were suspected, rightly or wrongly, to

be at the origin of global current account imbalances. From a macroeconomic point of view, exchange changes can have strong effects on the economy, as they may affect the structure of output and investment, lead to inefficient allocation of domestic absorption and external trade, influence labour market and prices, and alter external accounts. Hence, exchange rate shifts affect international trade both in direct and indirect ways. The indirect links are hard to isolate macroeconomically, complex to describe, and empirically hard to test, as they have second, third or fourth round effects. This is why exchange rates are often treated in models as external (exogenous) variables. (The Economist 2007)

In the presence of imported inputs, the contraction in the supply of exports is smaller, as acknowledged by Clark himself, because when an exporter imports inputs from a country whose currency depreciates, there is some offsetting effect on declining export revenues in the form of lower input costs. One may also take into account the possibility of firms hedging effectively against short term fluctuations, and the likelihood of larger firms evolving in a multi-currency environment, in which the effect of fluctuations in one or the other direction on total profitability cancel out. The extent to which firms can allocate their output between the domestic and international market (and among international markets) also matters, as well as the risk aversion of firms towards price uncertainty. These factors led suggested that the link between greater exchange rate volatility and reduced trade flows was less robust than had initially appeared. On the other hand, the notion that exchange rate volatility affected could not be entirely dismissed and may be relevant in some cases. For example, while many exporters can diversify their currency risk by mixing local and foreign currency invoicing (depending on their market power), exporters still faces a risk: when a firm invoices in foreign currency, it faces a price risk. When it invoices in the domestic currency, it faces a quantity risk (the quantity demanded is uncertain because the price facing the buyer is itself uncertain). Therefore, not only revenues become uncertain, but production costs as well (Baron, 2006).

The effect of increased volatility of exchange rates on net export depends heavily on the level of risk aversion of traders. (Dellas and Zilberfarb, 2003). Risk-neutral traders are unlikely to be affected by exchange rate uncertainty but risk adverse ones will, albeit in different degrees. Paradoxically, for very risk-adverse traders, exporting more could be a response to increased volatility, in order to compensate for the expected fall in revenue per exported unit. As viewed by

De Grauwe (1988), while exporters are universally made unhappy by the volatility of exchange rates, some may decide that they will be better off exporting more. In this particular case, he stresses that the dominance of income effects over substitution effects results in a positive relationship between exchange rate fluctuations and net export.

The existence of a positive relationship between exchange rate volatility and exports was later confirmed by Broll and Eckwert (1999), but only for firms that are able to react flexibly to changes in exchange rates and re-allocate their products among markets accordingly. Such action is likely to optimize the gains from trade in an environment of increased volatility but would only work if the firms in question have large domestic markets at their disposal, allowing them to rely on the domestic market in any case. As indicated by the authors, "the export strategy is like an option because the domestic market is certain whatever the realized exchange rate turns out to be. The domestic price is the strike price of the real export option. However, a more volatile exchange rate also implies a higher risk of exposure for international firms - with this effect working in the opposite direction. The authors conclude that the net effect of exchange rate uncertainty on production and exports in their model would depend on the degree of relative risk aversion of the firm.

The assumption that exchange rates affect net export because firms cannot adjust production and factor inputs according to exchange rate fluctuations has also been relaxed by several authors. Gros, (1987) and De Grauwe (1992) have worked with a wider spectrum of cases than those described by Clark. If firms can adjust factors of production upwards and downwards according to world prices, they are indeed likely to sell more when international prices in foreign currency are high (with a limit set by the production capacity of the flexible factor) and less when such prices are low. However, this will depend on risk aversion towards profit uncertainty, with risk adverse firms less likely to export more as exchange rate volatility creates a higher profit variance, with less risk adverse firms ready to sell more even in a context of profit uncertainty

2.2.3 Effect of Foreign Direct Investment (FDI) and Net Exports on Foreign Exchange Rates

Part of the Federal debt is owned by foreigners. Federal Debt is what a country's sovereign owes. Federal and Local Government Corporate Debt is the total debt, and the total net debt of a country

is what it owes minus what the others owe its residents. When one exports, net debt tends to get reduced, though net exports (exports-imports of goods and services) are just part of the exchange: Current account balance include net exports, but also service charge of the net debt, plus remittances of foreign workers who send money home. (Weiss John 2005)

The basic balance adds the current account or net exports and net debt service charge, the portfolio flow, and the Foreign Direct Investment (in the late 1990 many foreigners bought US high tech, so bought dollars). If the basic balance is positive, somebody's bringing in more money than others are getting out of the country. So to sum up: when foreigners buy US Federal Debt, they buy Dollars, and USD is up. But when the Federal debt or any other debt is redeemed to a foreigner, or when the coupon is payed, the US is paying the foreigners, so the Dollar is down *ceteris paribus*. (Frankel, Jeffrey A. and David Romer 1999)

A traditional view expects that exchange rate depreciation improves exports. For example, Junz and Rhomberg (1973) and Wilson and Takacs (1979), employing data from a fixed exchange rate period, and Bahmani-Oskooee and Kara (2003), using data from a flexible exchange rate period, provide evidence that depreciation improves exports for developed countries. In an interesting paper, Abeyasinghe and Yeok (1998) find that exchange rate appreciation does not adversely affect exports for Singapore because exports possess high import content. They argue that exchange rate risk provides another channel the exchange rate to affect exports in Singapore. That is, exchange rate risk adversely affects exports, although exchange rate depreciation does not affect exports.

The probable effects of exchange rate risk received considerable attention, since the collapse of fixed exchange rates in the early 1970s. Little consensus regarding its effect on exports, however, exists. Ethier (1973) argues that exchange risk could lower exports due to profit risk. De Grauwe (1988) suggests that exporters might increase volume to offset potential losses. Broll and Eckwert (1999) note that the price of an option to export increases with risk and sometimes a core-periphery economists of the 1940s and 1950s.

Pozo (1992) uncovers a negative effect of exchange rate risk on UK real exports to the US. Chowdhury (1993), Arize (1995, 1997), Weliwita et al. (1999), Arize et al. (2000), Arize et al. (2003) and Fang and Thompson (2004) find negative effects of exchange risk on US, G7, LDC, and NIC exports. Contrary evidence exists, however. Asseery and Peel (1991) find positive

relationships for multilateral exports, except for the UK. Kroner and Lastrapes (1993) uncover positive effects of conditional variance on exports of France, Germany, and Japan, but negative effects for the UK and US. McKenzie and Brooks (1997) discover positive risk relationship for Germany and the US. And Klaassen (2004) finds no effect on monthly bilateral US exports to the other G7 countries.

Tingvall and Ljungwall (2002) use a multi-country, meta-analysis and conclude that exports have contributed to the growth of many countries' economy for instance in China more than in other countries. Shan and Sun (2008) examine data over 1987 and 1996 using an augmented growth equation and results show bidirectional Granger causality between exports and real industrial output in China.

Similarly, Lui (2002) finds bidirectional causality between trade, FDI, and economic growth. Others like Jin, Lee, and Kim (2008) argue that the role of exports and foreign investment in China's growth has been changing, they were more important from mid-1980s to early 1990s. However, from the 1990s to 2003, Jin et al find that knowledge and innovation variables have become more important. While, Tseng (2010) examines the relative importance of exports and domestic demand to economic growth using the Geweke (1982) methodology for China between 1978 and 2002. He concludes that there are bidirectional causality between external demand (measured by exports), domestic demand (measured by consumption and investment) and economic growth.

The evidence for FDI-growth relationship is similarly mixed. Some have found causality running from FDI to economic growth. For example, Dees (2001) found positive effects of FDI on growth for the 1984-1995 time period. Similarly, Tang, Selvanathan (2008) found that FDI complemented domestic investment and promoted growth in China between 1978 and 2003. While other studies point to the reverse causality of economic growth attracting FDI into China. For example, Mah (2010) finds that for the 1983-2001 FDI did not cause growth, but that China's growth attracted FDI to the country. Similarly, Zhao and Du (2007) find that FDI was attracted to China due to high growth instead of the other way round.

Causality or not, the fact is that exports and FDI account for a large share of China's GDP, while domestic consumption especially household consumption has been falling over the years. A

sudden drop in exports and/or FDI will have a large negative impact on China's GDP and thus growth rate. In this paper, two measures were proposed that seek to measure this dependence of China on exports and FDI. As mentioned before, conventional measures of external demand are biased, our proposed measures will seek to correct this bias and provide a more accurate estimate. In the next section, full discussion took place in detail to the problems with conventional measures of external demand that lead to either an underestimation or overestimation of their importance to GDP growth.

The most important critique of the export- and FDI- led growth hypothesis is the argument that any correlation between FDI/Exports and GDP growth might be due to reverse causality. Countries which are growing at a rapid rate, by definition, produce more good and services and thus export more. Similarly, countries with a high rate of GDP growth attract more FDI seeking high returns. Another important critique of the export-led growth that has gained much traction in the today's global environment is that export-led growth strategy suffers from fallacy of composition – all developing countries cannot simultaneously pursue export-led growth strategy unless there is a comparable increase in demand from developed countries. Furthermore, the financial and sovereign debt crises in the US and the EU have highlighted risks associated with high exposure to the volatility to the world markets. These arguments have especially been emphasized in the case of China, a large economy which does not have the constraint of a small domestic market, like most other economies. (Giles, Judith and Cara L. Williams2000)

2.3 Research Gaps

Research on net export, foreign direct investment and net export has been done in some few years back for instance between the period of 1970 to 2007, researchers have been carrying out research on the stated variables. This imply that researchers, students and others mostly in Uganda gain much in researching on such topic or variables. Since 2007, it is seen that researcher have lost morale of doing a study on net export, foreign direct investment and net export implying that there is little knowledge and time for some of the researchers to carry out a study on such mentioned topic.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter explains and describes how the research was carried out. It focuses on the research design, data collection instruments, sources of data, validity and reliability of data, data processing and analysis, limitations of the study and ethical consideration

3.1 Research Design

The study adopted a qualitative descriptive correlational research design involving both quantitative and qualitative approaches in data collection. A time series analysis was adopted and the use of quantitative techniques to analyze secondary data scientifically to critically conclude the research objectives, secondary data was collected from World Bank reports, bank of Uganda international monetary fund data sheets and United Nation Commission on Trade and Development data sheet among others. Also inferences were drawn by fitting the regression model and testing for its significance using the correlation of the two variables and test for significance using P- Value test.

3.2 Data Collection Instruments

The Record sheet was used to enter the yearly data on foreign direct Investment, net export and foreign exchange rate in Uganda for 24 years that is from 1990 to 2014

3.3 Sources of Data

Secondary data was attained from data sets on the foreign direct Investment and net export and foreign exchange rates in Uganda for 24 years that is to say from 1990 to 2014. Data was attained from published and unpublished sources such as journals, World Bank report and bank of Uganda reports and United Nation Commission on Trade and Development (UNCTAD) data sheet among others.

3.4 Validity and Reliability of Data

To establish the validity of the instruments, Consultation was made on areas that are of great importance and how to ask the respondents in the way that right information can be got from them.

To establish the reliability of the instruments, the data was analyzed and fed accordingly. After data collection the researcher conducted a check of the information so as to identify the correlation in the information given.

3.5 Data Processing and Analysis

Once the researcher had obtained the necessary data, the researchers analyzed and interpreted it in relation to the objectives of the study using and United Nation Commission on Trade and Development (UNCTAD) sheet

Micro soft excel, word, STATA package was used to derive descriptive statistics and accompanying line relevant for the study prior to the estimation of the regression line, descriptive analysis was also conducted to describe the behaviors of the individual variable over the duration of the study by plotting each variable against time, this included testing for significant correlation and stationarity between the FDI, net export and foreign exchange rate.

i. H_{01} : FDI has no significant relationship with foreign exchange rates.

H_{a1} : FDI has significant relationship with foreign exchange rates.

ii. H_{02} : Net exports has no significant relationship with foreign exchange rates

H_{a2} : Net exports has significant relationship with foreign exchange rates.

iii. H_{03} : FDI and Net exports has no significant relationship with foreign exchange rates

H_{a3} : FDI and Net exports has significant relationship with foreign exchange rates

Pearson correlation coefficient was used to test the null hypothesis on correlation (H_{01} , H_{02} , and H_{03}): There no significant relationship with foreign exchange rates, no significant relationship between net exports and foreign exchange rates, and there is no significant relationship between FDI, Net export with foreign exchange rate; at 0.05 level of significance.

Regression was used to establish this relationship between FDI, Net export and foreign exchange rate.

Data analysis took into consideration time series analysis to test for trend using the P-Modal

3.6 Limitations of the Study

In the processes of carrying out the research these problems were encountered

There was difficulty to collect data since the rates of exchange and Net export levels may not be acquired with ease. The scattered nature of the information may not be attained and compiled with ease.

Scheduling challenges affected the researcher since secondary data was hard to attain. The researcher found it challenging to make appropriate schedules which were convenient for both researcher and his respondents. Here, the researcher to hired research assistants in order to attend to multiple schedules at the same time.

Despite all the above anticipated challenges, the researcher made efforts to adequately address them so as not to compromise the findings of the study in any way, so that the outcome reflects the majority view of the entire population.

3.7 Ethical Consideration

The researcher ensured honesty in data handling for example in a bid to attain information (FDI, net export and foreign exchange rates) information retrieved from right sources was left unchanged.

The researcher recognized the contributory authors especially those authors from whom literature, related studies and theories were generated.

Data analysis estimation through secondary data processing was documented to enable the production of accurate information.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

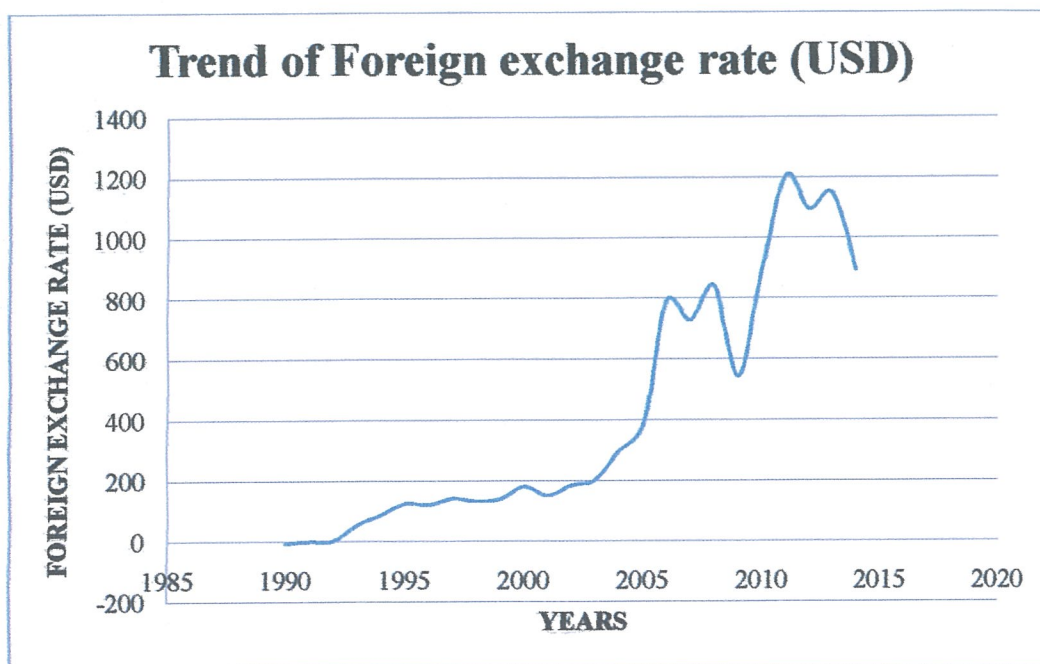
4.0 Introduction

Data was presented using figure, graphs based on the research objectives and the corresponding research questions, testing the hypothesis and for implication of the findings. (i) to establish the relationship between FDI and Foreign Exchange rates in Uganda, (ii) to establish the relationship between Net exports and Foreign exchange rates in Uganda and (iii) to show the effect of FDI, Net exports on Foreign exchange rates in Uganda.

4.1 Level of the Foreign Exchange Rate in Uganda from 1990 to 2014

The study was interested to show the level of trend of foreign exchange rate in Uganda in the stated period of time. Under this, the researcher used line graph as can be seen below.

Figure 2: Trend of the Foreign Exchange Rate in Uganda from 1990 To 2014



Source: Developed from UNCTAD data sheet (1990 – 2014).

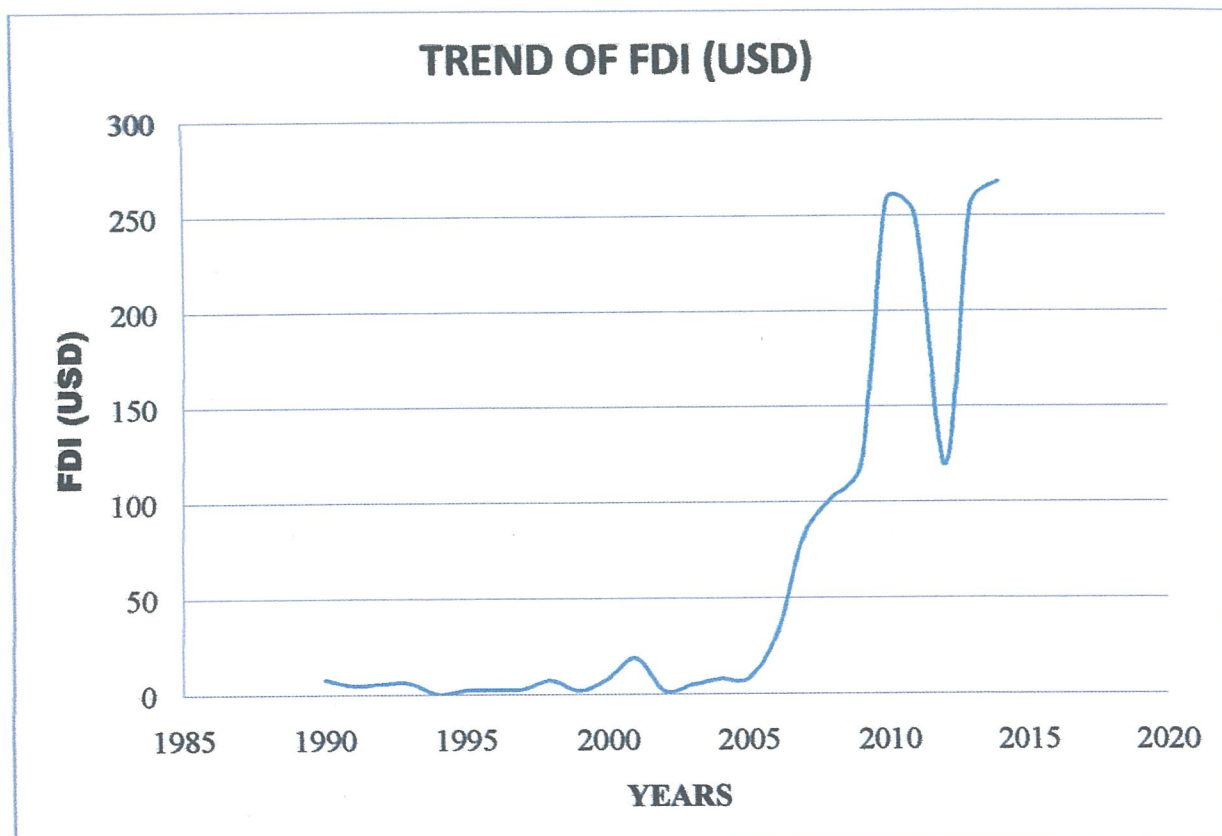
There is a general increase in foreign exchange rate of Uganda between the periods of 1990 to 2006. The only slight decrease in the value of Ugandan export rate was witnessed between 2006 to 2007, then a slight decrease between 2009 – 2010 and after a general increase between a period of 2010 to 2014. This could have been attributed to a peaceful political atmosphere, increase in exports and reduction in imports.

The reduction in the foreign exchange rate is as a result of high level of imports, low levels of exports high inflation rates in the economy among other macro and micro economic destabilizes in the economy of Uganda.

4.2 The Level of the FDI Rate in Uganda (1990 To 2014)

The study was interested to show the level of trend of FDI rate in Uganda in the stated period of time. Under this, the researcher used line graph as can be seen below.

Figure 3: Trend of Foreign Direct Investment (FDI) (1990 – 2014)



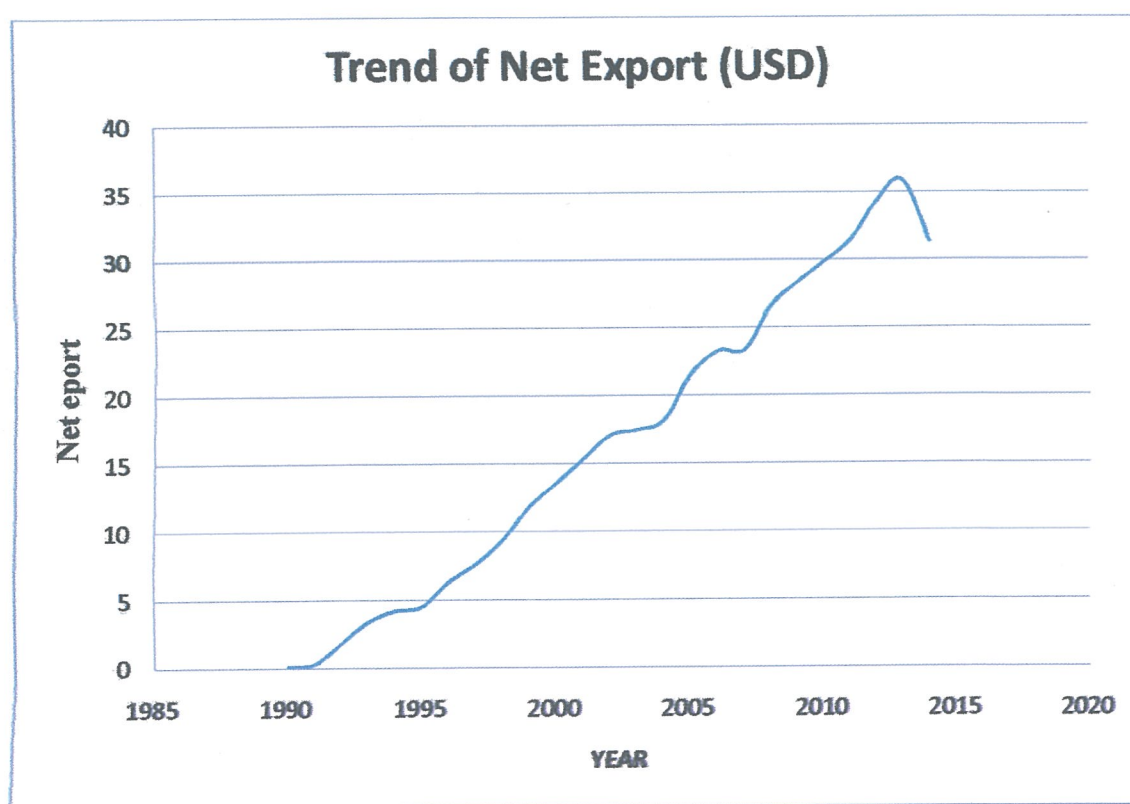
Source: Developed from UNCTAD data sheet (1990 – 2014).

The figure above portrays the trend of FDI rate indicating a slight constant trend between 1990 - 2005 and a general Increase in the FDI rate between 2006 to 2011. There was a slight decrease in Foreign Direct investment in the period between 2011 to 2012, and a total decrease between 2012 to 2013 and a general increase between 2013 to 2014. The increase in FDI rate could have been attributed to the peaceful political climate, and reduction in inflation among others. The reduction from could be attributed to high levels of inflation and low production capacities.

4.3 Level of the Net Export in Uganda from 1990 To 2014

The study was interested to show the level of trend of Net export rate in Uganda in the stated period of time. Under this, the researcher used line graph as can be seen below.

Figure 4: Trend of the Net Export in Uganda from 1990 to 2014



Source: Developed from UNCTAD data sheet (1990 – 2014).

There is a general increase in exchange rate of Uganda between the periods of 1990 to 2013 and a slight decrease in the value of Ugandan export rate was witnessed between 2012 to 2014. This

could have been attributed to a peaceful political atmosphere, increase in exports and reduction in imports.

The reduction in the net export rate is as a result of high level of imports, low levels of exports high inflation rates in the economy among other macro and micro economic destabilizes in the economy of Uganda.

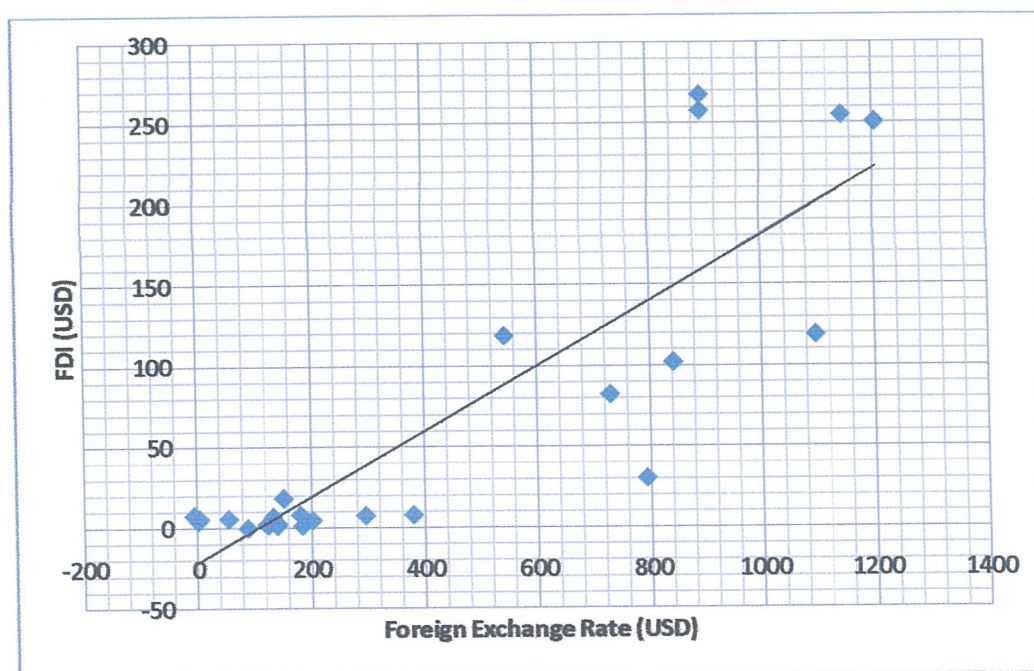
4.4. The Relationship between FDI and Foreign Exchange Rates in Uganda

The first objective was to establish the relationship between FDI and Foreign Exchange rates in Uganda, the researcher used scatter plot graph, correlation analysis, regression analysis and non-parametric test to establish this relationship as can be observed.

A scatter plot of FDI against Foreign Exchange rates in Uganda

To show the relationship between FDI and Foreign Exchange rates, the researcher used a scatter plot as can be seen below.

Figure 5: A scatter plot of FDI and Foreign Exchange Rates in Uganda



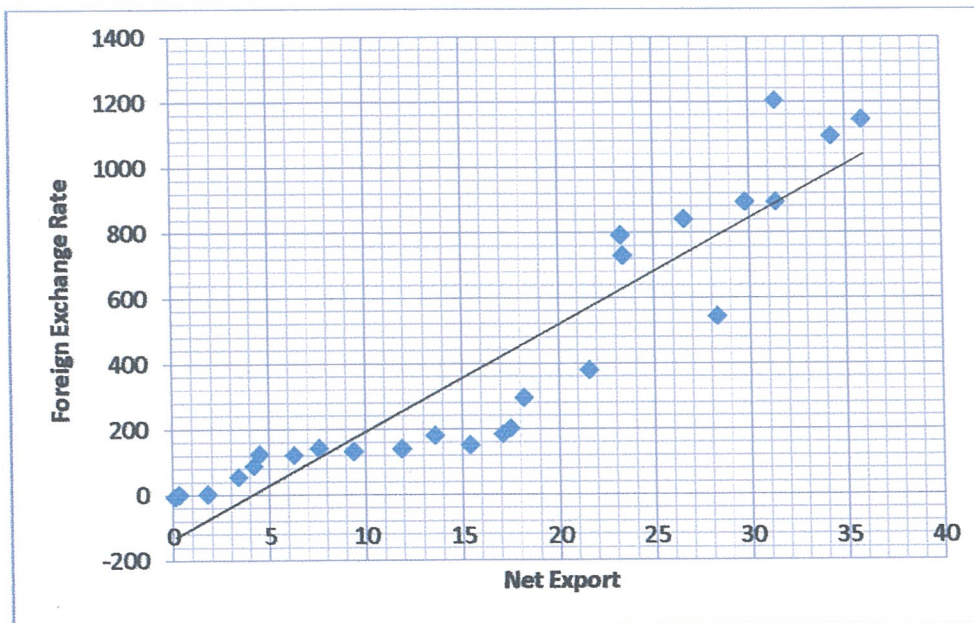
Source: Developed from UNCTAD data sheet (1990 – 2014).

The scatter graph shows the strong relationship between foreign direct investment (FDI) and foreign exchange rate. This is because the most of the points are close to the fitted trend. This relationship is as a result of high flow of FDI rate depreciation which leads to low rate of foreign exchange as a result of low purchasing power.

4.5 The Relationship between Net Exports and Foreign Exchange Rates in Uganda

The second objective was to establish the relationship between Net exports and foreign exchange rates in Uganda, the researcher also used scatter plot graph, correlation analysis and regression analysis to establish this relationship as can be observed.

Figure 6: A Scatter Plot of Exports and Foreign Exchange Rates in Uganda



Source: Developed from UNCTAD data sheet (1990 – 2014).

Net export is strongly related to foreign exchange rate, most of the points are close to the fitted trend. This relationship is as a result of high flow of Net export level which leads to low rate of foreign exchange.

Table 1: The Mean Values of the Variables.

. mean ForeignExchangeRate NetExport FDI				
Mean estimation	Number of obs			= 25
	Mean	Std. Err.	[95% Conf. Interval]	
ForeignExc-e	413.552	80.79195	246.8056	580.2984
NetExport	16.692	2.29397	11.95748	21.42652
FDI	62.86	18.89577	23.86106	101.8589

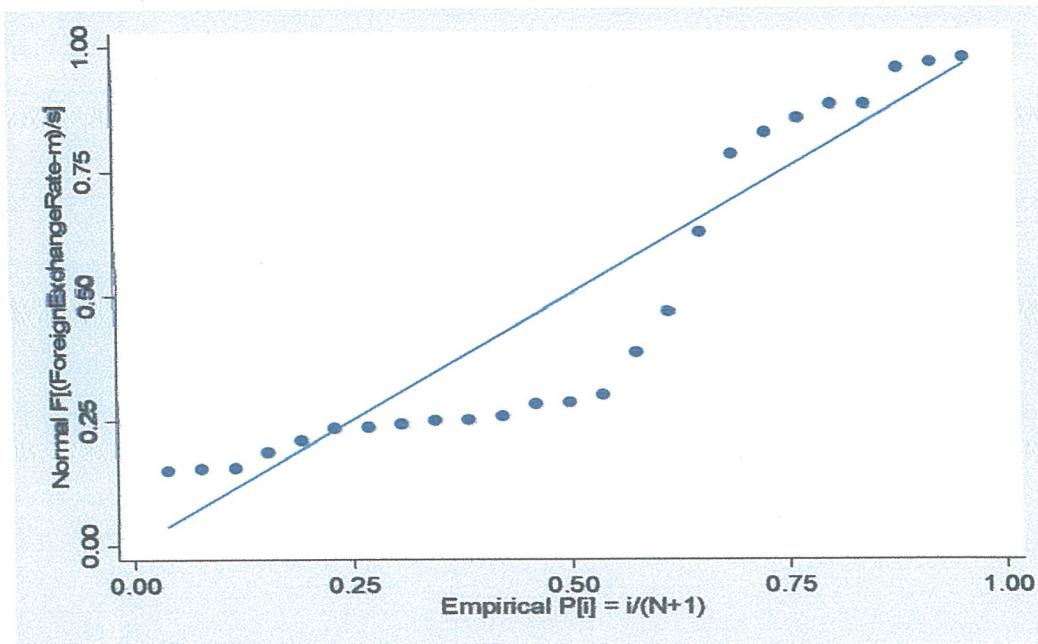
Source: Developed from UNCTAD data sheet (1990 – 2014).

The table above gives the mean values of the variables for the years 1990 to 2014. Foreign Exchange Rate had a mean of 413.552, Net Exports had a mean of 16.692 while FDI had a mean of 62.86, as shown in the table in the mean column. This shows the average levels of Foreign Exchange Rate, Net Exports and FDI in Uganda for the years 1990 – 2014.

4.6 Normality Test

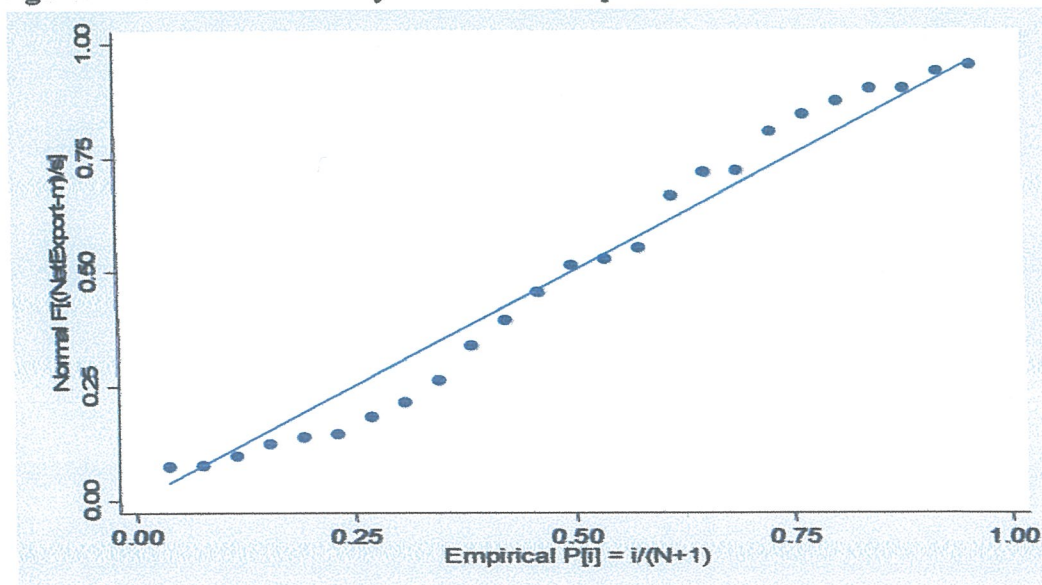
The normality test is normally carried out to test whether the data for the variables is normally distributed. So before any data analysis is done, the normality test should be carried first, and if the data is not normal then it should be transformed in order to normalize it. It is then the nonparametric tests can be carried out to analysis.

Figure 7: Normal Probability Plot for Foreign Exchange Rate



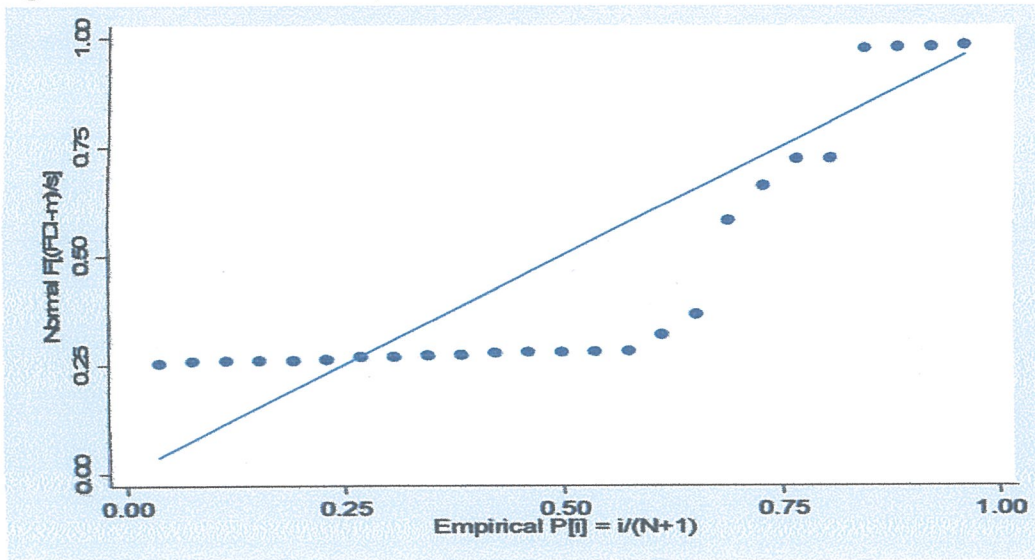
The graph above shows the data point are close to the normal probability plot, indicating the data for Foreign Exchange Rate is Normal.

Figure 8: Normal Probability Plot for Net Exports



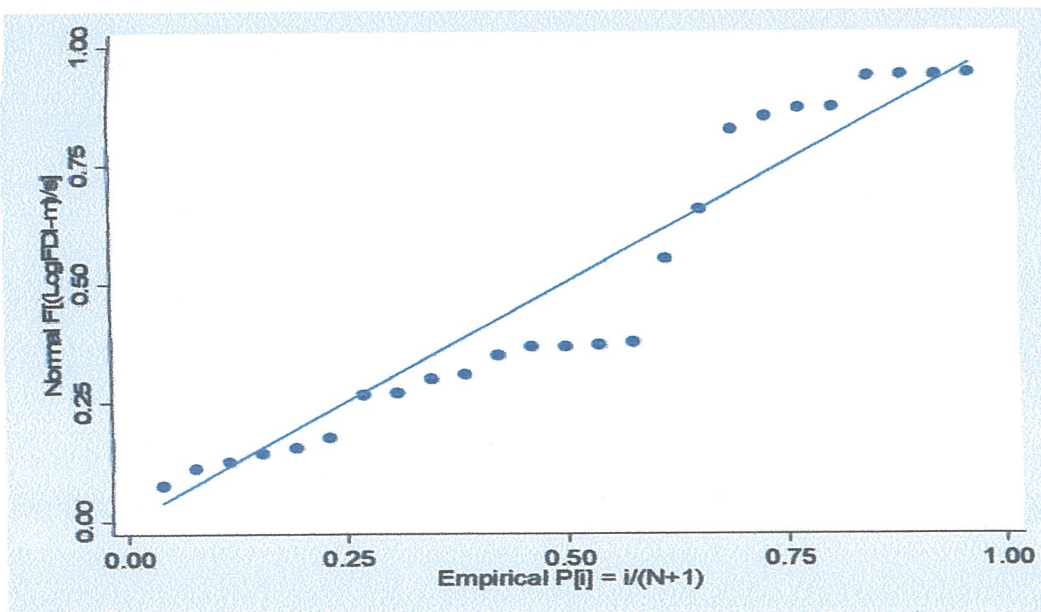
Also for Net Exports, most of the data points are very close to the normal probability plot, which indicates that the data for Net Exports is normal.

Figure 9: Normal Probability Plot for FDI



In the above graph, most of the data points are far from the normal probability plot, which indicates that the data for FDI is not normal. To normalize the data, it has to be transformed and below is the normality probability plot for the transformed data.

Fig10: Normal Probability plot for Log (FDI)



The plot for the transformed data shows that the data points are close to the normal probability plot, indicating that the transformed data is now normally distributed.

4.7 Correlations analysis Of Net Export and Foreign Exchange Rate in Uganda.

The researcher used Pearson's correlation coefficient to establish the strength of relationship between net export and foreign exchange rate in Uganda.

Table 2: Correlation of FDI, Net Export and Foreign Exchange rate in Uganda

The researcher used Pearson's correlation coefficient to establish the strength of relationship between net export and foreign exchange rate in Uganda.

Correlations

		Foreign Exchange Rate	Net Exports	Log(FDI)
Foreign Exchange Rate	Pearson Correlation	1	.926 ^{**}	.896 ^{**}
	Sig. (2-tailed)		.000	.000
	Sum of Squares and Cross-products	3916403.402	1.030E5	7.029E3
	Covariance	163183.475	4291.717	292.875
	N	25	25	25
Net Exports	Pearson Correlation	.926 ^{**}	1	.849 ^{**}
	Sig. (2-tailed)	.000		.000
	Sum of Squares and Cross-products	103001.200	3157.378	189.208
	Covariance	4291.717	131.557	7.884
	N	25	25	25
Log(FDI)	Pearson Correlation	.896 ^{**}	.849 ^{**}	1
	Sig. (2-tailed)	.000	.000	
	Sum of Squares and Cross-products	7028.990	189.208	15.713
	Covariance	292.875	7.884	.655
	N	25	25	25

^{**}. Correlation is significant at the 0.01 level (2-tailed).

Source: Developed from UNCTAD data sheet (1990 – 2014).

Testing the Hypothesis

For H0₁:

The Correlation value between Net Exports and Foreign Exchange Rate of R=0.926 and its significance of (0.000), shows that there is a significant relationship between Net Exports and Foreign Exchange Rate, which is very strong. Therefore we reject the null hypothesis (H0₁).

For H0₂:

The correlation value between FDI and Foreign Exchange Rate of R=0.896 and its significance of (0.000), shows that there is a significant relationship between FDI and Foreign Exchange Rate, which is very strong. Therefore, we reject the null hypothesis (H0₂).

4.8 Regression analysis of FDI, Net Export and Foreign Exchange Rate in Uganda.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.949 ^a	.901	.892	132.89373

a. Predictors: (Constant), Log(FDI), Net Exports

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3527867.065	2	1763933.532	99.879	.000 ^a
	Residual	388536.337	22	17660.743		
	Total	3916403.402	24			

a. Predictors: (Constant), Log(FDI), Net Exports

b. Dependent Variable: Foreign Exchange Rate

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-163.978	48.781		-3.362	.003
	Net Exports	20.889	4.482	.593	4.660	.000
	Log(FDI)	195.805	63.538	.392	3.082	.005

a. Dependent Variable: Foreign Exchange Rate

Source: Developed from UNCTAD data sheet (1990 – 2014).

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \mu$$

Where; Y- Foreign Exchange Rate

x₂- Net Exports

x₂- Log Foreign Direct Investment

β_0 -Intercept

β_1 -Coefficient of Net Exports

β_2 -Coefficient of Foreign Direct Investment

μ - Error term

$$\text{Foreign Exchange Rate} = -163.9782 + 20.88867 \text{ Net Exports} + 193.8046 \text{ FDI}$$

$\beta_0 = -163.9782$ is the mean value of Y (Foreign Exchange Rate), when the X variables (Net exports, FDI) are equal to zero.

$\beta_1 = 20.88867$, shows that a unit change in Net Exports causes a variation of 20.88867 in Foreign Exchange Rate when FDI is held constant.

$\beta_2 = 193.8046$, shows that a unit change in FDI causes a variation of 193.8046 in Foreign Exchange Rate when Net Exports is held constant.

$R = 0.949$, there is a very strong relationship between Net Exports, FDI with Foreign Exchange Rate.

Testing for the significance of β_1 and β_2 using t-test.

$$\text{Foreign Exchange Rate} = -163.9782 + 20.88867 \text{ Net Exports} + 193.8046 \text{ FDI}$$

$$t = -3.382 \quad 4.660 \quad 3.082$$

$$R = 0.949, \quad R^2 = 0.901, \quad \text{Adj } R = 0.892$$

$$F = 99.879 \quad \text{Sig} = 0.000$$

For β_1 :

$$t_{\text{computed}} = 4.660, \quad t(0.025, 22) = 2.074$$

Since $t_{\text{computed}} = 4.660 > t(0.025, 22) = 2.074$, we reject the null hypothesis. This shows that the coefficient of Net Exports ($\beta_1 = 20.88867$), is significant in the model.

For β_2 :

$$t_{\text{computed}} = 3.082, \quad t(0.025, 22) = 2.074$$

Since $t_{\text{computed}}=3.233 > t(0.025, 22)=2.074$, we reject the null hypothesis. This shows that the coefficient of FDI($\beta_2= 193.8046$), is significant in the model.

For the overall significance (H_{03})

Using $F\text{-value}= 99.879$ and its $\text{Significance}= 0.000$, the large $F\text{-value}$ with a zero level of significance shows that there is a significant relationship between the independent variables (Net Exports ,FDI) and the Dependent variable (Foreign Exchange Rate).

The $R\text{-square}$ of 0.904, indicates that 90% of the variations in Foreign Exchange Rate can be explained by the variations in Net Exports and FDI.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter is devoted to the discussion of the findings relating to the interaction between FDI Net export and foreign exchange rate in Uganda.

5.1 Discussion

In most of the previous studies, the relationship between FDI, Net export and foreign exchange rate had been studied presuming relationship running from FDI to foreign direct exchange. The results obtained in this research which are based on P- model showed that most of the parameters that were entered in the model indicated a positive link from Net export, FDI to foreign exchange rate. The results therefore indicate that in Uganda, FDI and Net export has been an important factor in the country's foreign exchange rate. The results thus confirm and are indeed consistent with most of the previous evidence cited in the literature (e.g. Akyuz, Yilmaz 2001, Dees, S., 2001 Giles, Judith and Cara L. Williams 2000), He, Dong and Wenlang Zhang 2010 and also in accordance with the endogenous growth hypothesis. In general, according to the revelations of this study, Uganda's foreign exchange rate is significantly dependent on the two and its interaction with local factors like labor and capital. This suggests that the country would benefit more from adopting policies that attract Net export and FDI flows into the economy.

Klemperer F. et al (2003). Suggest that FDI and net export inflows are more beneficial and create fewer problems if they are long-term, and in the form of direct investment, induced by foreign exchange rate prospects of the economy and invested in physical assets. As opposed to short-term portfolio investment, long-term FDI and net export has positive spillover effect on the economy. Short term investments are often associated with increase in consumption in the financial systems. Thus, it is important for Uganda to improve the quality of FDI and net export that it attracts.

Jin, Furong, Keun Lee, and Yee-Kyoung Kim (2008), theory also suggests that uncertain capital flows and a more volatile profile of FDI inflows are foreign exchange retarding. Accordingly, a

key policy option is to maintain a steady stream of foreign capital flows and to minimize the fluctuations in these inflows.

Today, the new wave of globalization sweeping through the world has intensified the competition for FDI and net export among developing countries. Thus, if Uganda aims at favorably competing with other countries, concerted efforts are needed to attract significant FDI and net export flows and improve prospects for sustained foreign exchange and development. This means that policy makers in the different sectors of the economy (e.g. manufacturing, tourism, telecommunications and agriculture and others) should work together in designing and formulating pertinent strategies to attract stable investment flows in order to benefit from long term FDI inflows. It has been observed from highly developed economies that foreign exchange enhancing policies coupled with sound macroeconomic policies foster a healthy rate of returns to investment and hence attract foreign direct investment and sometimes net export.

It is therefore the considered view of the researcher that in order to maximize the benefit of net export and FDI further, the Uganda Investment Authority (UIA) should be supported in its efforts geared at promoting and marketing investment opportunities as sources of foreign exchange rate and attract FDI and net export.

Although some previous studies (e.g. Melitz, Marc 2003, Rodrik, Dani 2009, Shan Jordan et al 2008 e.t.c) have shown that African countries have been among the lowest beneficiaries of export and foreign direct investment, using Uganda as a case study, the results highlight the economic importance of FDI and provide new evidences for the case of African economies. The results therefore contradict the views of the core-periphery economists of the 1940s and 1950s mentioned in the literature. These authors such as Rosenstein (1943) and Hirschman (1958) argued that FDI and net export exerted a deleterious effect on development in less advanced countries.

5.2 Summary of the findings

Most of the variables posited the expected signs except individual coefficients of exports and domestic capital and other factors. The interaction term for Net export, FDI and foreign exchange rate is positive and statistically significant at one percent level. This suggests that although the magnitude of the separate factors like investment is smaller compared with other major inputs, the overall impact of Net export, FDI on foreign exchange rate is much higher. For example, it is

interesting to observe that the coefficient of the interactive term of FDI and export is positive and significant at 1 percent level. Since a positive sign on the coefficient of an explanatory variable shows an increase in efficiency in the model, FDI inflows along with exports would therefore increase on foreign exchange rate. This is an important finding, especially for a developing country like Uganda with a big proportion of exports.

In conclusion, the basic objective of this study was to ascertain the relationship between FDI net export and foreign exchange rate. Despite the data limitations, the model performed rather well and the study confirmed earlier results from the conducted studies that found FDI, net export to be positively correlated with foreign exchange rate.

5.3 Policy implications

The aim of this research was to examine the relationship between FDI, net exports and foreign exchange rates in Uganda. According to the findings, the results demonstrated that FDI, investment in telecommunication (as a proxy for infrastructural development) and domestic labour had a statistically positive effect on economic growth. These results suggest that in order to boost Uganda's foreign exchange export rate, there is need to improve on these variables.

Specifically, in order to encourage foreign exchange rate, policymakers should encourage FDI and exchange rate to make Uganda a serious contender for Foreign direct exchange and net export, the country needs to be modernly equipped with well-functioning infrastructure and effective vocational and skill training institutions suited to investors' generic human resource needs. With regard to country development policy, investing in productive infrastructure is considered to be an instrument to improve the foreign exchange rate of the country. The rationale for investment in improvements in infrastructure and in vocational educational to attract foreign firms is strengthened by the likelihood that they will have to improve the business environment for indigenous firms as well. Since Multi-national corporations are often attracted to developing nations by the abundance of their little income, higher level of human capital is a good indicator of the availability of skilled workers, which, along with less income, can significantly boost the locational advantage of a host country. Adopting these policies may be difficult in the short run, but these policies would yield long-run benefits of foreign exchange that would far outweigh any short-run costs.

5.4 Areas for further Research

The study focused on foreign direct investment and net export as correlates to foreign exchange rates Uganda (1990 - 2014). It would be useful to explore whether other types of capital inflows-equity and foreign loans also have differential growth effects across sectors, and whether they too show both direct and indirect impact on foreign exchange rate.

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APPENDICES

Appendix I: Record sheet

FDI, Net export and foreign exchange rate inflows by Uganda 1990 – 2014 in millions of dollars

YEAR	Foreign exchange rate (USD)	Net Export (USD)	FDI (USD)
1990	- 5.9	0.1	7.7
1991	1.0	0.3	4.6
1992	3.0	1.8	5.5
1993	54.6	3.4	5.8
1994	88.2	4.2	0.0
1995	124.5	4.5	2.0
1996	121.5	6.3	2.2
1997	141.5	7.6	2.6
1998	132.6	9.4	7.1
1999	140.2	11.9	1.7
2000	180.8	13.6	8.1
2001	151.5	15.4	18.5
2002	184.6	17.1	1.5
2003	202.2	17.5	4.7
2004	295.4	18.2	7.7
2005	379.8	21.6	8.0
2006	792.3	23.3	30.6
2007	728.9	23.4	82.3
2008	841.6	26.6	102.3
2009	543.9	28.3	118.7
2010	894.3	29.8	257.6
2011	1205.4	31.4	250.5
2012	1096.0	34.3	119.1
2013	1146.6	35.9	255.0
2014	894.3	31.4	267.7

Source: UNCTAD, FDI, Net export and foreign exchange rate

Appendix II: Curriculum Vitae

BIO DATA

First Name: Gabriel
Surname: Mungan
Sex: Male
Date of birth: 11/12/1987
Marital status: Single
Nationality: Ugandan
Contact: +256779286432
E-mail: gmungan900@gmail.com

PERSONAL PROFILE

I am holding a Diploma in computer science Kampala international university and currently pursuing a bachelors degree in economics and applied statistics at Kampala international university. I am a hard working person who looks at the achievement of the organization goals by net-working with people, interested in research, I'm also a person with experience in Communications skills thus able to create relationships quickly with any group of people and sharing ideas with fellow workmates and above all, able to work under minimum supervision.

EDUCATION BACKGROUND

Year	Institution	Awards
2013 to date	Kampala International University.	Bachelors of Economics and Applied Statistics.
2010-2012	Kampala International University.	Diploma in computer science
2008-2009	St.Paul's College Mbale	Uganda Advanced Certificate of Education (U.A.C.E)
2003-2006	St.Paul's College Mbale	Uganda Certificate of Education (U.C.E)
1996-2002	St. Mary primary school, Namalu.	Primary Leaving Examination (P.L.E)

WORKING EXPERIENCE:

25th -30th July 2013 Responsibilities:	Volunteer UWEZO National Assessment for Lomuchurus Village Loasam Parish Assessing learning outcomes for the children
2010 Responsibilities:	Volunteer UWEZO National Assessment for Loboloin Village Loreng parish Assessing learning outcomes for the children

TRAININGS ATTENDED

TIME	ACTIVITY
10th -14th August 2015	Training in Risk assessment and Security Management for Human Rights Defenders in Northern Uganda at AcholiBer Country Hotel; Gulu. This has given me more insight on who a Human Right Defender is, and how to manage my security both at personal and organizational levels.
1st June -30th July 2015	Internship training at the ministry of Energy and Mineral Development, where I worked as a statistician at the Planning and Policy Analysis Unit.

Skills developed

1. Conversant with computer.
2. Good communication skills thus building sound relationships with people
3. Able to work for long hours with minimum supervision
4. Flexible to changes both socially and environmentally
5. Effective at mobilizing others

LEADERSHIP RESPONSIBILITIES

2014-2015	Publicity Secretary Immaculate of Mary Catholic Community, Kampala International University.
Responsibilities	- Organizing and making announcements for the chaplaincy - Organizing and coordinating executive meetings and other activities - Helping in planning for the chaplaincy.
2013-2014	Sports minister Karamoja Student's Development Association- Kampala International University chapter.
Responsibilities:	- Coordinating the sports activities of the association. - Lobbing for the team of the team of the association.
2008-2009	Information Prefect St. Paul's College Mbale
Responsibilities:	- Organizing assemblies - Coordinating the staff and the students body

LANGUAGES EFFICIENCY

Language	Speaking and fluency	Written
English	Very good	Very good
Ngakarimojong	Very good	Very good

Interests and Hobbies:

- Reading literature.
- Playing; football, volleyball.
- Socializing and outing with friends.

DECLARATION

I Mungan Gabriel declare that the information contained in the CV is true about me and in case of any doubt please don't hesitate to contact.

Referees;

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Chaplain, Imachulet heart of Mary catholic chaplaincy,
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APPENDIX IV: Research Time Frame

NO	ACTIVITY	Time Months
1	Variable formulation	October - November 2015
2	Chapter one formulation and design	Early December 2015
3	Literature & Methodology	Late December 2015
4	Data collection	January 2016
5	Data analysis	February 2016
6	Report writing and submission	March 2016

OFFICE OF THE HEAD OF DEPARTMENT
ECONOMICS AND STATISTICS

1st March, 2016

The Director
Bank of Uganda
P.O. BOX 7120,
Kampala Uganda.

Dear Sir/Madam,

SUBJECT: PERMISSION TO CONDUCT A RESEARCH STUDY IN YOUR ORGANIZATION

With reference to the above subject, this is to certify that Mr. MUNGAN GABRIEL-REG. NO. BEAS/21552/131/DU is a bonafide student of Kampala International University pursuing a Bachelors Degree of Economics and Applied Statistics.

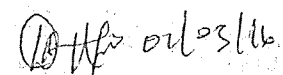
He is currently conducting a field research entitled "Foreign Direct Investment, Net Exports, as correlates of Foreign Exchange rates (Uganda 1990-2014).

This area has been identified as a valuable source of information pertaining to his research project. The purpose of this letter therefore is to request you to avail him with the pertinent information as regards to his study.

Any data shared with him will be used for academic purposes only and shall be kept with utmost confidentiality.

Any assistance rendered to him will be highly appreciated.

Yours truly,



Dr. Nafiu Lukman Abiodun
Head of Department - Economics and Statistics
Mobile: 0751 858321 Email: lanafiu@kiu.ac.ug