THE INFLUENCE OF FOREIGN EXCHANGE AVAILABILITY ON THE EFFICIENCY IN SETTLING INTERNATIONAL BUSINESS AT COMMERCIAL BANKS IN KENYA

BY:

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DECLARATION

This research project is my original work and has not been presented to any other University or College for academic purposes.

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DEDICATION

I dedicate to my family and friends.

ABSTRACT

Kenya involves much in international business with china, India, Japan and other countries. Kenya's International business sector is the main business area which contributes more than 15% of the country's economy. This sector is a key market's for many currencies that differs from importing and exporting country. Kenya and this brings in the issue of foreign exchange availability due to changes in exchange rate and inflation. The country operates within a market of unstable exchange rates which is affected and set by the demand waves and supply forces of the Kenyan shillings. The local currency is always week against the major currencies every trading period since they are used in settling the international business in Kenya. The study aimed to determine the influence of foreign exchange availability on settle ling of international business. The research used primary and secondary data from the commercial banks and the CBK. Banks FOREX data was analyzed together with the Exchange rates (KshsVs USD) obtained from Central Bureau of Statistics for the period January 2011 to December 2015. The study adopted consisted inflation index, GDP and FDIs which drives the international business and trading. Multiple regression was adopted to investigate the relationship between FOREX availability and foreign exchange rates, inflation, FDIs and GDP for the period 2011-2015. The findings of this study established that there was significant relationship between exchange rate and FOREX availability in Kenya. The Pearson correlation was 0.775. From the study, inflation of the local currency affected FOREX availability in most of the financial outlets which facilitate the money transfers to the business. The research recommends for the regulator to boost FOREX in order to promote and maintain sound, profitable and timely International business with Kenya. The central and county governments should create a use friendly investment environment to attract international business. However, CBK should maintain monetary regulation, policies which will increase the rate of import and export diversification. However, the increase of FOREX supply in the international market which will reduce the operational cost and maximize of profits. With regard to further research, studies can be on other factors affecting international business in Kenya within a longer period of time.

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ABBREVIATIONS AND ACRONYMS

ANOVA	: Analysis of Variance
CBK	: Central Bank of Kenya
EAC	: East African Community
EPZ	: Export Processing Zone
EU	: European Union
FDI	: Foreign Direct Investment
GDP	: Gross Domestic Product
IFE	**:** International Fisher Effect
IS-LM	**:** Investment Savings **-** Liquidity Preference Money supply Model
KNBS	**:** Kenya National Bureau of Statistics
PPP	**:** Purchasing Power Parity
UNCTAD	**:** United Nations Conference on Trade and Development

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CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Kenya participates fully in international trade, including through its importation of machinery, drinks and petroleum. Main exports include horticultural products, fabrics and minerals which are exported to foreign countries hence maintain the imports and export industry in Kenya (Oduori, 2012). In this study, the researcher will be keen to understand how fluctuations in foreign exchange availability affect settling of imports and exports dues in Kenya. Change in international trade is clarified as a global financial trade framework in which costs of monetary forms are dictated by aggressive business parameters. The exchange rate mechanism of currency is affected by market aspects of demand and supply which determine the FOREX and the availability of the currency in the market (Oduori, 2012).

The relationship between a country's foreign exchange availability, export income and financial development is a urgent issue from both expressive and strategy points of view. The FOREX fluctuations and availability behavior occupies a central role in policy evaluation and design (Aron et al., 1997). Any participant in the market, its FOREX availability is core determinant of the level of the state-state trading and international earnings from taxations, port clearance fee. This lead to more competitive and effective business environment (Abor, 2005).

The foreign exchange plays a key role in settling debts both for government and individuals, distribution of business across the globe and promoting small business enterprises who venture in the business**.** The foreign exchange availability level, in respect to equilibrium exchange level, and its dependability has been appeared to vitally impact (Aron et al., 1997). Because of this important role of developing states economies, promoting business policies and contribution to the lower interest rates and exchange currency. The exchange availability maintains the currency equilibrium value (Otieno & Mudaki, 2011).

1.1.1 International Business

Both in developed and developing countries conduct international tradition all together. Goods and services moves from one state to another state in exchange of monitory value. Goods like machinery moves from developed countries in USA, UK and Japan to Africa hence Africa export minerals and agricultural products, this bring about sense of international trade. The result of the business brings about competitive prices, improved goods quality (Ndung`u, 2000).

Trade is the transfer and exchange of finished goods, unfinished goods and services between states and countries which gives countries a growth of economy. This type of business affect the global events by distribution of resources hence affect availability of labor, financial capital and political stability. Availability of labor has enabled reduction of prices of the goods and the services hence pay less for goods. International trading gives buyers and sellers opportunities to market their goods and services which are in excess. All items in worldwide business both imports and accounted are represented in nation's current record in a critical position of installments (Ndung`u, 2000).

International trading gives the buyer or the seller access to more resources like capital gain and technology advancement which makes more efficient and effective to produce more quality goods and service. Many countries have different types of international business where good are exported to many different countries. However, any states involving in international business has specialization in certain goods and services which are produced at very high quality. Example are medical drugs from South Africa, India and UK, machinery from China and Japan, the enables the countries to produce fully according to the global demand of the goods.

1.1.2 Foreign Exchange Availability

For the last three years the Kenya banking industry has being affected by, CBK regulation and inflation hence many banks reduced profitability and Chase bank and Imperial Bank are under receivership. The presence of the FOREX in the Kenyan banking sector has made yielding and also obliging universal business and innovativeness in the business. The industry is dominate by international incorporated banks which have enough FOREX to pay major global transaction involving the government projects like the standard gauge railway and road constructions. The foreign exchange services are mostly available for the large enter princes and not small scale business holders (Lee 2010).

The central bank of Kenya has controlled the FOREX interests given to the banks on the amount given to it as foreign exchange which made the FOREX market easy to trade hence improving efficiency in the international business. This subjected the main banks into crises where they were in short term finding more investors and stakeholders to invest and provide deposits to the banks. This resulted to very high expansion and growth of micro-finance banks and other small financial institution. They provided FOREX at negotiable rates which forced the bigger banks to rewrite their structure in fear of competitive business environment. According to Ndungu,(2000), commercial banks have benefited by the current business between Kenya and china where millions of cash is transferred into china banks in exchange of goods and services. However, the financial institution are in long run FOREX rates negotiations which makes banks to operate in a very high competitive market. Some banks like Equity bank, Co-Operative Bank and Family bank specialized in small and medium enterprises hence operate in customer care principals in providing the FOREX since a few foreign exchange is demanded. This enables the banks to provide FOREX at any given time an application is made through and fully negotiate for the exchange rate with the brokers, (Oduori, 2012).

FOREX in local banksexperiencing due time settling of imports and exports business. This has resulted to constant business efficiency rate change hence influencing the international business in the economy. Foreign exchange availability change shifts the spread given by the financial institution to their clients and investors. This means that the banks have been revising the FOREX availability given to their customer'sdue to unstable business in the money market. Out of the competition, financial institutions have been presenting diverse spreads in view of their approach technique to meet their objectives and targets, (Oduori, 2012)

1.1.3 Influence of Foreign Exchange Availability on the Efficiency in Settling International Business

The foreign exchange accessibility is a noticeable determinant of international trade as to imports and export profit era. The FOREX argument has received much attention in the context of very high and dynamic international business market due to foreign exchange unavailability in most of the business participants. FOREX has remained the cash cow of many financial institution and economist in the third world states who survive fully in import like South Sudan. The states which have being affected by internal economic instability, political instability, product prices, which connects local and international markets and also promotes the efficient, effectiveness in the market.

A low foreign exchange accessibility level brings down the receipts that exporters get in this manner diminishing export income. Then again, a high exchange accessibility level raises receipts that exporters get in this way enhancing export profit. A change in the FOREX impacts specifically either positively or negatively on export earnings or effect adversely on exporters and pattern financial development by discouraging firms from innovative investment and business (Kiptui, 2007).

The availability of FOREX movements are not fully anticipated, an increase in availability fluctuations may lead risk-averse brokers international trading activities. The CBK has developed strategies to maintain the stable price levels and this includes the foreign exchange availability. In order to win the price movements, the regulator (CBK) maximizes the money policy and open market operations and statutory requirements stipulated by law (CBK, 2014). During mind 2016, the exchange rate per US dollar was 104 Ksh from 85.32 Ksh, 87.8 Ksh per dollar, Ksh 90.3 per dollar and Kshs 101.2 per dollar respectively over the years 2011, 2012, 2013, 2014 and 2015 (CBK, 2015). Foreign exchange unavailability leads to unsettling of international business which is a potential gain or loss occasioned by movements in the goods and services.

1.1.4 Commercial Banks in Kenya

Banking Sector in Kenya is regulated by Central Bank of Kenya as the regulator of all financial institution operating in Kenya. Banks are also licensed and follow guidelines which enable fair business operation to the public like control of interest rates bill 2016. Banking sector in Kenya plays a key role in facilitating funds savings, credit provision and fund transfers. Bank regulators which are CBK and KBA have 44 banks in which two are under liquidation. Out of the 44 banks, 31 Kenyan banks in which 3 are public and 28 are private hence 13 are international banks. The foreign owned financial institutions include 9 locally incorporated foreign banks and 4 branches of foreign consolidated banks.

The period of the study (2011-2015), commercial banks are in the pressure to raise more capital and deposits by the CBK due to a lot of entry into the business. The banks are supposed to raise a deposit of 5 billion by end 2017 which will lead to many mergers if the regulation will be acted upon. However, the interest rate bill 2016 which forced banks to reduce interest rate to 14.0 % is projected to affect the profitability of the banks. The institutions have come up with many mechanisms to reduce operational cost and increase profitability.

1.2 Problem of the Study

The existing literature demonstrates that substantial foreign exchange accessibility variances make extreme macroeconomic disequilibria on settling global business and the revision of this outer adjust requires both trade administration degrading and administration approaches. The instability which may negatively affect imports and fare settling of bills. According to Anderton and Skudelny (2001) the economic logic undermines the negative link between FOREX availability and settling business prompts to the aversion of imports and export firms from taking part in exchange and this prompts to loss of states creating in overflow.

The effect of FOREX availability on settling international business affects the EU countries is negative; Imports and export business therefore increase as FOREX availability hence settling business fluctuations decrease and they decrease as FOREX exchange availability fluctuations increase. International business in Kenya has increased due to the vision 2030.The level of the dollar to Kenya shilling exchange availability continues to be determined by forces of demand and supply in the imports and exports. (Njunge, 2012)

Questions have emerged in the approach field and in general society area as a rule rotating around the conceivable esteem control of Kenyan shilling against other real coinage on the planet, (Malcolm et al., 2000).The decrease in value of local currency during the period of study (2011-2015) ranged from Ksh 83.32 on 2011 and 104 Ksh on June 2016.

Ozturk (2006) comes up with a comprehensive account of the empirical surveys dedicated to the impact of foreign exchange availability fluctuations. The study concluded that negative relationship between exchange rate and international business settling. Njunge, (2012) aimed on the forex exchange availability and business profitability between 2005 -2011 and comprised of all stakeholders in the business. In his conclusion, there the study established that there was significant relationship between the dependent and independent variables. However the study commended on further research involving financial institutions especially banks in their contribution towards the development of international business. The current study intends to address the working research question, what is the influence of foreign exchange availability on efficiency of settling international business in Kenya?

1.3 Research Objective

This study aimed to determine the influence of foreign exchange availability on the efficiency in settling international business at Kenyan commercial banks.

1.4 Value of the Study

The study will be of great importance to Treasury managers with knowledge on FOREX availability on its efficiency in settling international trade debts in the region. The key business stakeholders like investors and financial institutions may consider using the research results in global business strategic planning and implementation foreign exchange policies in such organizations.

All business stakeholders will benefit from the results especially the potential investors who are willing to manage their business payments operations hence promote the efficiency of FOREX availability on financial performance of banks.

The information obtained will be use full to CBK and government to have a clear picture on the effect of FOREX in international business. This will enable the regulator to come up with user friendly policy to control the forex in the commercial banks who change high transaction fees when settling international business.

The study will provide updated information to the current available literature that will be used by students and other scholars in conducting more research in areas of FOREX management. The study will give more suggestion on further research which can be done in future.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter covers contributions from other scholars where empirical studies, general literature review, theoretical framework and conclusions from other literature have been reviewed.

2.2 Theoretical foundation of the study

Different theories that have been used to availability of foreign exchange. The theories are International fish effect theory,.

2.2.1 International Fisher Effect Theory

Irving Fisher, (1930), developed the theory which focuses on interest rates to explain foreign exchange rates with time more than the change in purchasing ability. The theory states that FOREX rates are mostly determined by the interest rates changes on major foreign currencies. The rates across states are equivalent to the business opportunities within the money markets, capital gains and the cash flows. States with significant interest rates experience very high changes in inflation index which makes the local currency unstable over the major international currencies. The theory gives guidelines on how to maintain increasing rates with a given trading period.

According to Madura, (2010), the theory gives an overview of the foreign monetary forms with moderately high financing rate prompts to high inflation rate. The theory also predicts the current and future inflation and currency movement on settling the global debts. Short run and long-run the interaction between the rates gives significant changes in the forward markets, spot markets which are very active in the money markets. (Bodnar, & Gentry1993).

2.2.2 Purchasing Power Parity

Gustav Cassel in 1920s who was an economist advocated for Purchasing Power Parity (PPP) theory. The theory tries to relate the FOREX rates in major trading zones in the world and the purchasing power of goods and services. It holds that movement of rates between states affects the trading in terms of high cost of buying, taxation and levies. The rates affects mostly the state which is importing while benefits the exporting state. The ration of exchanged goods its equivalent to the balancing point of the two countries. (Cumby&Obstfeld (1981).According to the PPP, relative change in purchasing and selling level in a state will result in reduction of FOREX rates as compared to other states hence maintaining prices of similar goods across the trading zone.

The theory follows the law of single price which explains the normal and abnomal markets, same trading activities at almost the same prices of the same currency. It gives a relationship between individual goods and corporate product which are very competitive in the market. According to PPP the change in FOREX rates is direct proportional to the states product price levels, production and distribution channels cost. However, the theory assumes that all goods and services are the same, exchangeable, no movement cost, and availability of information and government regulations. The assumption undermines the law of one price, monetary models and exchange rate index determination.

2.2.3 Foreign Exchange Exposure Theory

Multinational companies involve in the trade with am of increasing profitability and product power. This foreign exchange theory gives opinions on change of which affect all firms doing global business in reduction of net sales hence dominate in their local currency business. Many academic and business research fails to associate the theory with modern business world since it fails to show a significant impact on FOREX rates and stock performance of the companies. The theory is overtaken by financial theory and compares the exchange rates shifts on their effect of profitability, growth of assets values, reductions in company liabilities which determines the net worthy value of the companies,(Dufey, 2005).

2.2.4 Interest Rate Parity Theory

The theory relates the interest rates of more than two states is equal to the shifts of states FOREX movement, (Huang, 2009). It proves the interest rates shifts of the states I equal to the forward FOREX rate and sport rate. This rates apply either on the spot or in another given time of the trading when the rate will be applied. The participants of the business may lose or gain depending on the current rate of the currency. The interest theory compares FOREX and interest rates, spot trading and forward business, (Roll & Yan, 2000). Countries with FOREX float a considered in the economic empowerment and controls inflation in the developing countries, that’s why international business are settled using US Dollars, (Huang, 2009).

2.3 Determinants of Foreign Exchange Availability

Availability of foreign exchange can be determined by market size, availability of FOREX reserves,and Central Government expenditure on economic and social activity, Trade Openness and exchange rates.

2.3.1 Market Size

The larger the market size of the host country, the more it is in foreign exchange inflows. An economy with a large market size is supposed to attract more amount of international business as it provides more opportunities of sales and hence more profits to the global companies hence resulting to more inflow of foreign exchange in the host country.

2.3.2 Availability of Foreign Exchange Reserves

This is considered as another determinant of FOREX availability. The more the reserves by the central bank of Kenya the higher will be the amount of FOREX contracts that can be taken up by the host country. A positive relationship between FOREX inflows and the availability of Foreign exchange reserves is expected.

2.3.3 Foreign Direct Investment

Foreign direct investment is the control and management of company in foreign state. The company investing in FDIs can fully buy an operational company or expand its operations to the said company. This give income in taxes to the target country, employ it citizen and contribute to the growth of the economy. Foreign direct Investments affects the imports and exports positively and sometimes negatively. The UNCTAD research of 2002 established the levels of global earnings are affected by the levels of the FDIs. The number of states considered in the research proved that FDIs determines the transformation of the imports and exports within the countries. Example of China which has recorded high number of FDIs which has helped them increase the technology of production. The goods and services are highly demanded all over the world since are of high quality and reliable, (Fugazza, 2004).

2.2.4 Inflation

Inflation **is** generally a decrease in purchasing power of a state in given time. This is as result of poor management of resources by the government, corruption and very risk business. Inflation affect a state negatively more so in provision of basic needs to its citizens. Countries involving in global business are full affected by the inflation since the exchange rate of major currencies increases and other decreases hence the market becomes very expensive to operate. Many countries produced less than 30% of its needs hence import the difference of 70 % from countries which have suppler in the commodity, (Ndungu,2000)

2.2.5 Exchange rate

The appreciation and depreciation of the exchange rates between the entities will have an impact on the inflow and outflow of foreign investment. Relationship between the exchange rate and the inflow of Forex is expected to have a negative sign and positive for outflows. The exchange rate in the current study is defined as the ratio of the domestic currency to US $ at time t. Since dollar is considered as the standard exchange value, exchange rate is taken in terms of U.S. dollars in spite of the real effective.

2.4 Empirical Review

Scholars and researchers have carried out studies on the effect of foreign exchange rate availability and rate on settling international business. Some of them have concluded that the relationship between FOREX rates and international business is negative while other is positive.

2.4.1 International Review

Batten &Belongia (1984) did a research US on decrease of exports income from the agricultural sector. The study objective was the effect of FOREX rates on the international business. They concluded that they exist negative relationship between the exchange rates and the export income. Fabiosa (2002), concentrated on the impact of FOREX rates on export of pork and swine. A model of exchange rate level and import/ exports equation, the study concluded that the level of FOREX rate is positive relationship with the export income with more pork products exported when the local market is decreasing.

Arize at el (2004) did a study on ltin American states and established the effect of effect of exchange rate volatility. The findings depict that an increments in changes of the exchange rate results to a significant negative impact on export demand in the imports and exports in the long run and short-run. Bhattarai and Armah (2005) explained the impact of weakening and inflation of the local currency with the effect on the international business. The end results gives the recommendation om how to focuses on a weakening currency in the trading. Other studies were conducted by Todani and Munyama (2005) and come with the same results on the influence of FOREX in international Business.

Cameron et al., (2005) did a study on the influence of exchange rate variability on Uganda tropical freshwater fish exports. From the study, the income from the export were inversely proportional to the FOREX rates hence negative relationship. This showed that the fish export did not depend on the current FOREX rates in the fish market.

2.4.2 Local review

Ndungu et al., (2001) investigated the FOREX rate shift in the developing countries. The study targeted the East Africa countries who are actively involving in the global business in export and imports. He established a negative relationship between the FOREX rates and the exports income in members' countries. He suggested of further studies on the individual countries specifically South Sudan and Somalia.

Were et al (2002) investigated the key aspect of the Kenya export income performance with consideration of all factors of production and non-price factors including inflation, FOREX and government regulations. The study focused on the Horticultural exports ans sampled all the agricultural firms in Kenya. The study established that Forex Rate has a positive effect on agricultural export income performance and recommended for a very stable rate which can be used by the CBK regulate the business.

Otieno&Mudaki (2011) investigated the factors which determine the FOREX rates in the international business. The study involved all commercial banks which actively involved in global business transaction. The study established that FOREX rates have a negative effect on the international business by late payments of goods hence recommended that an Independent authority to be established to take care of the challenges faced by the individuals and companies involved in the business.

Mwangi et al., (2014) did a study on the impact of FOREX rates and the exports of French beans in Kenya. In the research, he sampled the companies which specialize with French beans export in Kenya. The used was primary data and secondary data was extracted from the KNBS websites. The study conclude that French beans export earning are affected by the FOREX rate hence made a recommendation that companies to have the same bargaining power in oerder to have good prices on the products.

2.5 Summary of Literature Review

This section presents empirical studies done by other scholars and academician in different parts of the global on the effect of FOREX rates on export income and import expense. Most of them gave same opinions and conclusions while others gave different conclusions and opinions. Scholars like Ndungu's (2001), Kiptui (2008) and Mwangi et al., (2014) established negative results on the relationship between FOREX rates and export earnings, others such as Fabiosa (2002), Otieno and Mudaki (2011) and Bristy (2013) gave a negative aspect of the relationship between export earnings and foreign exchange which gave a different opinion. Many studies concentrated on the developed countries, according to the Africa economic report, 2010 where many states with floating FOREX have negative performance on the export sector since Africa imports more than 70 % goods used within the country. This is proved by Somalia and South Sudan cases where the country continuously recorded decline in its export business due to political instability.

Other studies on FOREX availability focused on effects on international business which affects the timely payments of goods and services which are imported and exported to other countries where production is very low, (Alemayehu, 1999). According to Otieno and Mudaki (2011), regulation policy in the international trading has being the key pillar of controlling the FOREX availability. Many countries have come up with monetary policies which regulate the trading in the global market. The regulations includes maximum number of foreign currency a bank should have I store to transfer in the market. However the policies have promoted the effectiveness and efficiency of international incomes. This study will answer many questions raising from FOREX availability in Kenya and in the region since many countries are fully tranding with China and Japan

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology that was used in this study. The chapter is sub-divided into the following sub-sections: research design, population, data collection and data analysis.

3.2 Research design

Research design is a far reaching arrangement that includes highlighting all applicable techniques that was used in the collection and presentation of information. This study adopted descriptive research design in order to investigate influence of foreign exchange availability on efficiency of settling internal business. The research design is in accordance with the research and and study questions. Specifically, this design helps to understand the influence of foreign exchange availability on settling international business (Otieno & Mudaki, 2011).

3.3 Population

Target population in statistic is the collection of populace who are targeted in a given study. Population of the whole gatherings or individual, events or objects having basic attributes about which the analyst wishes to make generalize, global statistic show the probability that what is valid for the sample, is likewise valid or the populace from which is drawn. At the point when the objective populace is comparable the researcher has more certainty for making generalization. The target populace for this study constituted all the 42 commercial banks.

3.4 Sample design

Sampling design is an unbiased method of selecting sample members from the entire proposed populace as illustrative of the study. The entire population for this study was involved. In this way reaching conclusion on the influence of foreign exchange availability on settling international trade

3.5 Data collection

Data collection is portrayed as line facts that are yet to be set up to be tried and true information with the ultimate objective of plan making. The scientist utilized auxiliary information as the source of information. Time series data for foreign exchange rate, Inflation, imports, exports and GDP of Kenya between 2010 and 2015 was collected from Central Bank of Kenya and individual banks websites.

3.6 Data Analysis

The data gathered was processed, analyzed, interpreted and presented in such a way, to the point that was clear, exact and unambiguous. This information was quantified and coded utilizing clear measurements. The Statistical package for social sciences (SPSS16) was used to describe the collected data, sort and sift through and analyze it. Measures of central tendency was used in data analysis together with tests of significance

The data was expressed in the form of an equation:-

$Y=\alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \varepsilon$

Where: Y= Log of Total international business earnings

α= Constant

$\beta_1, \beta_2 \& \beta_3$ = Constants

x_1 = FOREX rate per 30 days of trading. (Kshs Vs the dollar)

x_2 = Inflation per Month

x_3 = FDIs per month as a ratio of national GDP

ε = Error term

The study used the Analysis of variance (ANOVA) to determine Coefficient of determination (R^2) and Correlation coefficient (R). F statistic was tested in order to establish the level of relationships between the variables.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter analyses findings from secondary data. Descriptive statistics and model results are presented. This chapter also presents the findings of the study by providing interpretation and summary of the findings.

4.2. Research Findings

The research finding from the interview guide which targeted all the 43 commercial banks operating and licensed by CBK. The responses turnout was 38 banks which presented 88.37% of the population. The target departments were FOREX and Treasury departments, Operation Department and Credit department.

4.2.1 Position held in Bank

From the research 38 staff worked at FOREX and Treasury departments which presented 65.79%, this proofs that International business depends mostly the foreign exchange employee. Operation Department presented by 8 staff at 21.05% of the population and five staff presenting 13.16% worked in Credit department. This shows that bank operation and credit managers are really involved in international trade.

Table 4. 1 Position held in Bank

Department	Response Rate	Percentage
FOREX/Treasury	25	65.79%
Operation	8	21.05%
Credit	5	13.16%
Total	**38**	**100%**

Source: Research Findings

4.2.2 Working experience

From the study the many employees have 1-5 Years of experience in FOREX department presenting 42.12%, less than one year experience was two presenting 5.26%, 6-10 years of experience was 12 presenting 31.58% and more than ten years of experience was eight presenting 21.04%

Table 4.2 Working Experience

Number of Years	Response Rate	Percentage
Less Than One Year	2	5.26%
1-5 Years	16	42.12%
6-10 Years	12	31.58%
More than 10 Years	8	21.04%

Source: Research Findings

4.2.3 FOREX availability

From the research response, response of very high was 22 presenting 57.89%, high was 7 presenting 18.42%, moderate was 5 presenting 13.16%, Low was 4 presenting 10.53 %. This shows that there is very high rate of FOREX availability in our Bank to settle international business.

Table 4.3 FOREX Availability

Rate	Response Rate	Percentage
Very High	22	57.89 %
High	7	18.42 %
Moderate	5	13.16 %
Low	4	10.53 %
Very Low	0	0.00%
Total	**38**	**100.00%**

Source: Research Findings

4.2.4 Bank contribution to International Trade Growth

The response rate was very high in which 35 staff presenting 92.11% supported that banks promote the International Business. However, 3 of responds presenting 7.89 % rejected the statement. The bank promote international trade by the following ways: - as trade finance, project finance, payroll, foreign exchange transactions and trading, lock boxes for collecting payments and general corporate finance.

Table 4 4 Bank Contribution to International Trade

Option	Response Rate	Percentage
Yes	35	92.11%
No	3	7.89%
Total	**38**	**100.00%**

Source: Research Findings

4.2.5 Effect of FOREX Availability to International Trade

Increase in volume of International Trade: The response rate shows that 18 response rated very high presenting 47.37 %, 7 responses rated High presenting 18.42%, 8 Responses rated Average presenting 21.05 %, 5 Responses rated Low presenting 13.16 % and zero response rated Very Low presenting 0.00% This proofs that FOREX availability increases the volume of International Trade.

Table 4.5 Increase in Volume of International Trade

Indicator	Response Rate	Percentage
Very High	18	47.37 %
High	7	18.42 %
Average	8	21.05 %
Low	5	13.16 %
Very Low	0	0.00%
Total	**38**	**100.00%**

Source: Research Findings

Number of Participants in the Market: The response rate shows that 3 response rated very high presenting 7.90%, 26 responses rated High presenting 68.42 %, 6 Responses rated Average presenting 15.78%, 3 Responses rated Low presenting 7.90 % and zero response rated Very Low presenting 0.00% This proofs that FOREX availability increases the Number of participants in the market.

Table 4.6 Number of Participants in the Market

Indicator	Response Rate	Percentage
Very High	3	7.90 %
High	26	68.42 %
Average	6	15.78 %
Low	3	7.90 %
Very Low	0	0.00%
Total	**38**	**100.00 %**

Source: Research Findings

Interest Rates : The response rate shows that 14 response rated very high presenting 36.84 %, 12 responses rated High presenting 34.58 %, 9 Responses rated Average presenting 23.69 %, 2 Responses rated Low presenting 5.26 % and one response rated Very Low presenting 2.64 % This proofs that FOREX availability increases the Interest Rates.

Table 4.7 Interest Rates

Indicator	Response Rate	Percentage
Very High	14	36.84 %
High	12	31.58 %
Average	9	23.69 %
Low	2	5.26 %
Very Low	1	2.64 %
Total	**38**	**100.00%**

Source: Research Findings

Direct Foreign Investment: The response rate shows that 13 response rated very high presenting 34.21%, 16 responses rated High presenting 42.10%, 8 Responses rated Average presenting 21.05 %, 1 Responses rated Low presenting 2.64 % and zero response rated Very Low presenting 0.00% This proofs that FOREX availability increases the Direct Foreign Investment.

Table 4. 8 Direct Foreign Investment

Indicator	Response Rate	Percentage
Very High	13	34.21%
High	16	42.10%
Average	8	21.05%
Low	1	2.64%
Very Low	0	0.00%
Total	**38**	**100.00%**

Changes in Macroeconomic Environment: The response rate shows that 8 response rated very high presenting 21.05%, 15responses rated High presenting 39.47%, 13 Responses rated Average presenting 34.22 %, 2 Responses rated Low presenting 5.26 % and zero response rated Very Low presenting 0.00% This proofs that FOREX availability increases the changes in Macroeconomic environment.

Table 4.9 Changes in Macroeconomic Environment

Indicator	Response Rate	Percentage
Very High	8	21.05%
High	15	39.47%
Average	13	34.22%
Low	2	5.26%
Very Low	0	0
Total	**38**	**100.00%**

Source: Research Findings

Inflation: The response rate shows that 12 response rated very high presenting 31.58%, 12 responses rated High presenting 31.58%, 8 Responses rated Average presenting 21.05 %, 5 Responses rated Low presenting 13.16 % and one response rated Very Low presenting 2.64%. This proofs that FOREX availability increases the Inflation rate.

Table 4.10 Inflation

Indicator	Response Rate	Percentage
Very High	12	31.58%
High	12	31.58%
Average	8	21.05%
Low	5	13.16%
Very Low	1	2.64%
Total	**38**	**100.00%**

Source: Research Findings

Government Regulations: The response rate shows that zero response rated very high presenting 0.00 %, 16 responses rated High presenting 42.10%, 14 Responses rated Average presenting 36.84%, 8 Responses rated Low presenting 21.05 % and zero response rated Very Low presenting 0.00% This proofs that FOREX availability increases the Government regulations.

Table 4.11 Government Regulation

Indicator	Response Rate	Percentage
Very High	0	0.00%
High	16	42.10%
Average	14	36.85%
Low	8	21.05%
Very Low	0	0.00%
Total	**38**	**100.00%**

Source: Research Findings

Gross Domestic Product Growth: The response rate shows that 12 response rated very high presenting 37.58 %, 14 responses rated High presenting 36.84%, 4 Responses rated Average presenting 10.54%, 6 Responses rated Low presenting 15.78% and 2 response rated Very Low presenting 5.26% This proofs that FOREX availability increases the Gross Domestic Product.

Table 4.12 GDP Growth

Indicator	Response Rate	Percentage
Very High	12	31.58%
High	14	36.84%
Average	4	10.54%
Low	6	15.78%
Very Low	2	5.26%
Total	**38**	**100.00%**

Source: Research Findings

4.3 Correlation and Regression Analysis

4.3.1 Correlation Coefficients

Correlation coefficients were used to analyze the effects of exchange rate, inflation and foreign direct investment as a percentage of GDP on the availability of FOREX in settling international business in Kenya. As a key assumption of the regression model, this study sought to set up if there was relationship between independent variable and the independent variables. Pearson connection was utilized to correlate the relationships between's independent variables and the horticultural export earnings.

Table 4.13 Pearson Correlation

Pearson Correlation	Availability of Forex	Monthly Inflation Rate	Monthly Exchange Rate	Monthly Foreign Direct Investment as percentage of GDP
Availability of FOREX	1.000	.729	-.192	.762
Monthly Inflation Rate	.729	1.00	.272	.792
Monthly Exchange Rate	-.272	.272	1.00	.015
Monthly Foreign Direct Investment as a percentage of GDP	.762	.792	.015	1.00

Source; Research Findings

From Table 4.13, all the independent variables are correlated to the dependent variable. From the table, the exchange rate had a correlation coefficient of 72.9% with FOREX availability. The correlation coefficient between inflation and FOREX availability was negative 27.2 % while foreign direct investment as a percentage of GDP had a correlation coefficient of 76.2 % to FOREX availability.

4.3.2 Goodness of Fit Statistics

Table 4.3 indicates the strength of the relationship between horticultural export earnings and the independent variables; the exchange rate, inflation and foreign direct investment as a percentage of GDP. The results from this model show a standard deviation of 70.1 % and an adjusted R square of 68.5% which indicates that the model is very reliable.

Table 4.14 Goodness of Fit Statistics

Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1	.897a	.767	.775	.0534

Source: Research Findings

Adjusted R squared is the adjusted coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variables. From the findings in table 4.14 above, the value of the Adjusted R square was 0.775, an Indication that 77.5% of the variations in FOREX availability in Kenya are caused by changes in exchange rates, inflation and foreign direct investment at 95% confidence interval. Other factors not stated in the model account for 22.5% of the variations in FOREX availability in Kenya. R is the correlation coefficient which in this case was 89.7%. This showed that there was a strong positive relationship between the study variables: the exchange rate, inflation and foreign direct investment as a percentage of GDP.

4.3.3 Analysis of Variance

Table 4.15 Analysis of Variance

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	.213	3	.071	43.839	.000a
Residual	.091	56	.002		
Total	.303	59			

Source: Research Findings

From the analysis of variance in table 4.15, the F Test of 43.839 indicates that the regressions explanatory power on the overall significance was strong. The significance value of 0.00 obtained implies that the regression model was significant in predicting the relationship between FOREX availability and the predictor variables as it was less than α = 0.05. This significance level means that the chances are almost zero that the results of the regression model were due to random exogenous events instead of the true relationship existing in the model.

4.3.4 Regression Model

Regression model analysis shows the relationship between the dependent variable (FOREX availability) and independent variables (exchange rate, inflation and foreign direct investment) on commercial banks in Kenya. The regression model was expressed as below:

$$Y=\alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Table 4.16 Regression Coefficients

	Unstandardized Coefficients		**Standardized Coefficients**	**T**	**Sig**
	B	Std. Error	Beta		
(Constant	9.250	.735		10.268	.000
Monthly Exchange Rate (MER)	1.207	.347	.482	3.480	.001
Monthly Inflation Index (MII)	-.089	.022	-.369	-4.039	.000
Monthly Foreign Direct Investment as a percentage of GDP (MFDI)	.186	.056	.451	3.321	.001

Source: Research Findings

Table 4.16 interprets the standardized regression coefficients (Beta). In estimating the contribution of each of the independent variables to the study it was established that all the independent variables had a significant contribution to the variance of the dependent variable at a significance level of 0.05. The regression equation after estimation was given as

$Y= 7.250 + 0.482X_1 - 0.369\ X_2 + 0.451\ X_3 + \varepsilon$

From the regression equation above, it was established that holding the exchange rate (X1), inflation (X2) and foreign direct investment (X3)to a constant zero, FOREX availability would be 7.250

4.4 Interpretation of the Findings

From the study, there is a relationship between FOREX availability and Kenyan international business settlement. Table 4.13 shows the results of the correlations from which the exchange rate had a correlation coefficient of 77.5% to FOREX availability; inflation had a negative coefficient of correlation of 36.9% while foreign direct investment as a percentage of GDP had a correlation coefficient of 45.1%. In summary therefore and based on these determinants values off FOREX rates, inflation, FDIs will lead to effective availability of foreign exchange.

Correlation coefficient matrix reveals strong relationships between FOREX availability and the exchange rates and FDIs while the relationship between inflation and international business (Imports and export earnings) are negative. The other determinant **as** explained by the adjusted R squared for the study was 77.5% which means that the independent variables (the exchange rate, inflation and FDIs) contribute to 77.5 % of

FOREX availability in Kenya at 95% confidence level. This also means that other factors not stated in the model account for 22.5% of the FOREX availability in Kenya.

The study findings on the beta coefficients, the exchange rate is the greatest predictor of FOREX availability (0.482, t= 3.480, sig. 0.001), then FDIs at (0.451, t= 3.321, sig. 0.001) and inflation at (-0.369, t = -4.039, sig. 0.001). The FOREX rate is key aspect of FOREX availability among financial institution in Kenya. However, a percentage increase of Exchange rate will lead to 0.482 increase in FOREX availability and a significant coefficient of less than 0.05.

Foreign direct investment is a significant determinant of Kenya's FOREX availability, the findings of this study indicate that a unit increase FDIs results to a 0.451 unit increase in FOREX availability in Kenya. This could be from foreign direct investments which decrease the cost of FOREX trading thereby impacting positively on the returns from International Business. Inflation had a negative relationship with export earnings in that a unit increase in inflation leads to 0.369 unit decrease in Forex Availability in Kenya.

This therefore leads to the loss in purchasing power of the Kenya shilling and therefore deflates the earnings achieved from sale of Kenya's International Business products. In general, the findings were statistically significant since the significance values of the coefficients were found to be close to 0.000 and less than 0.05. This is an indication that the error rate on making conclusions using the model derived from the study results and commendation from these findings reflect the true picture of the effects of these independent variables on dependent variable.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECCOMENDATIONS

5.1 Introduction

This chapter provides the summary of the findings, the conclusions and recommendations of the study based on the objectives of the study. The chapter finally presents the suggestions for further studies.

5.2 Summary

The main objective of this study was to establish the effect of FOREX exchange availability on settlement of international business in Kenya. The research methodology involved the use of secondary data collected from Kenya national bureau of statistics and the central bank of Kenya. The descriptive statistics helped the study to describe the relevant aspects and detailed relevant information about the variables. The study result shows that there is a positive relationship between the FOREX availability and international business Kenya. The implication of these findings is that an increase in FOREX availability affects international business settlement in Kenya.

The regression model results of exchange rate, inflation and FDIs have zero values then the space allocation will be 7.250. The results proved that a percentage increase of exchange rate results to 0.482 percentage increase in FOREX availability, a percentage increase in inflation results into decrease o6 0.369 and percentage increase of FDIs results to 0.452 percentage increase of FOREX availability in financial institutions in Kenya.

The results were also established by Otieno and Mudaki (2011) and Bristy (2013) who concluded that the relationship between FOREX availability and foreign exchange rate, inflation and GDP are positive

5.3 Conclusion

This study examined the effects of FOREX availability on settlement of international business in Kenya using monthly time series data from 2011-2015. In this study, the dependent variable was FOREX availability while foreign exchange rate, inflation and foreign direct investment as a percentage of GDP. The variables were found to be statistically significant determinants of Kenya's FOREX availability and International business settlement. Export performance of successful economies has been contributed by forex supply which effects on developing countries and this includes Kenya.

Weak and poor institutional and macroeconomic have kept on dragging the execution of the worldwide business in Kenya subsequently adversely influencing send out profit from this sector. In this study a conclusion was drawn that the exchange rate is a major determinant of the FOREX among financial institutions. This was consistent with the findings of Were et al (2002) whose study on Kenya's export performance revealed that the exchange rate had a profound effect on Kenya'sinternational business performance.

5.4 Policy Recommendations

In the 21st century, Kenya should have been transformed into an industrialized countries with a middle income economy and it should be able to provide quality life to all of its citizens. There is need for the government to encourage imports, exports in particular in order to boost the international earnings. The government needs to develop economic zones in partnership with private developers and this will definitely lead to export diversification and hence maximize international business**.**

There is need for the government to guarantee political solidness and national business security of fear, guarantee a steady and favorable macroeconomic dependability to energize and pull in more financial specialists. Macroeconomic solidness in Kenya is vital to the achievement of the nation's improvement.

The government needs to come up with structures to promote the global market performance which will in effect lead to job opportunities. Creation of employment opportunities which leads more quality production and decrease in cost of production hence ready market of the goods and services. Kenya should move away from coffee and tea productions whose prices are ever fluctuating in the global market.

There is need for the government to develop and implement policies that lead to FOREX availability and also widen the country's international business base. There is also need to boost International business sector through incentives and subsidies that will lead to lower cost of production. The EAC common market protocol allows for free movement of capital and labor, goods and services and this contributes positively to member

5.5 Limitations of the Study

This study was limited to the extent that not all the factors affecting FOREX mainly due to limitations of data since it concentrated between 2011- 2015. A longer duration of the study would have captured periods of various economic, longer time focus hence it would have given a broader results of the study.

The time taken to carry out this study was in not sufficient a short. With more time of like 10 years, detailed tests could be conducted to determine whether the better results will be derived with more variables included in the research model.

The respondents were not willing to give information in fare that it may used by the competitors. However other claimed that is against the company policy to disclose any information about the bank.

5.6 Recommendations for Further Research

The researcher recommends for a study on the effect of other determinants of FOREX availability and international business performance and competitiveness.

Another study can be conducted over a longer period of time for example ten years to try and see the behavior of Kenya's international business and foreign exchange rate fluctuations over such a longer period.

This study was carried out on the International business in Kenya; further research could be carried out on other economic sectors within the country and even the broader county levels to establish the effect of foreign exchange rate, inflation and GDP on business within the country.

This study focused on foreign exchange rate, inflation and foreign direct investment as a percentage of GDP. This study may include more variables that international business and FOREX availability in Kenya such as domestic transport infrastructure and the macroeconomic environment as these could influence the results obtained from such a similar study.

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APPENDIX I: LETTER OF INTRODUCTION

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
MBA PROGRAMME

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Nairobi, Kenya

DATE 29/6/2016

TO WHOM IT MAY CONCERN

The bearer of this letter KIEMA MARTIN KYANDA

Registration No. D61/72773/2014

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.

PATRICK NYABUTO
MBA ADMINISTRATOR
SCHOOL OF BUSINESS

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
28 JUN 2016
P.O. Box 30197 - 00100, NAIROBI

APPENDIX II: QUESTIONNAIRE

Dear Respondents,

Please do not write your name anywhere in this questionnaire, the information you give will be treated with utmost confidentiality and will only be used for academic purposes. It may also be used for the improvement of the overall international trade in Kenya. I will greatly appreciate your co-operation by filling the questionnaire very honestly and to the best of your knowledge. Kindly, answer all the questions. Tick the option (s) in the brackets or briefly fill the blank lines.

PART ONE: Background Information

1. Which Commercial Bank do you work for?

   ………………………………………………………………………………………

2. What position do you hold in this bank?

   ………………………………………………………………………………………

3. How long have you been working for this bank?

   Less than 1 year ☐

   1-5 years ☐

   6-10 years ☐

   More than 10 years ☐

PART TWO: Foreign Exchange and International Trade.

4. To what extend is FOREX available in settling International Trade?

   Very High ☐

   High ☐

   Moderate ☐

Low ☐

Very Low ☐

5. Do you think your bank has contributed to the effective growth international trade market in Kenya?

Yes ( )   No ( )

If yes, how do they contribute to the growth International market in Kenya?

…………………………………………………………………………………………

6. (a).In your opinion, tick below the indicators of FOREX availability in settling international market in Kenya

Indicator	Very High	High	Middle	Low	Very Low
1.Increase in volume of international trading					
2.Number of participants in the market					
3.Interest rates					
4.Direct Foreign Investment					
5.Changes in macroeconomic environment					
6.Inflation					
7.Goverment Regulations					
8.GDP Growth					