

**EFFECT OF FOREIGN EXCHANGE EXPOSURES ON REVENUE PERFORMANCE  
OF EXPORT COMPANIES IN ELDORET TOWN, KENYA**

**BY**

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ABSTRACT

Globally, there have been dramatic swings in foreign exchange exposures since 2013 as evidenced by Sterling Pound appreciation in 2015 and the value of the dollar soared between 2015 and 2016. Between 2014 and 2013, the nominal foreign exchange exposures of Sterling Pound rose by 17%, with an associated loss in UK export price competitiveness with an appreciation of the real foreign exchange exposures of 23%. In Africa, the South African rand depreciated sharply against the U.S. dollar in the last four months of 2016 by 42 percent between September and December after a steady decline earlier in the year; whereas in Kenya, the real effective foreign exchange exposures have been depreciating since 2013. Economic theory suggests that changes in the foreign exchange exposures can produce a shift in revenue performance, directly in the case of exporting and importing companies, many studies have generally found fair value earnings, resulting from recognizing unrealized holding gains and losses, and are more volatile than those computed under historical cost accounting by over 30%. Scholars argue that because this increased volatility is not reflective of the underlying economic volatility of banks operations, inefficient capital allocation decisions by investors will result, thus raising banks cost of capital. This has significant impacts for export firms. To address this the study conducted this research whose purpose was to assess the effect of foreign exchange exposures on firm's revenue performance of export in Kenya. The study employed a correlational research design. The target population comprised of 7 Export firms in Eldoret with a total of 87 permanent employees working for this firms. The sample size consisted of 70 respondents. The study employed the use of simple random sampling to select the respondents to participate in the study based on their availability and their willingness to participate in the study. The research utilized survey questionnaires for primary data collection. The questionnaires were issued to the finance staff of the selected firms. Validity was tested through expert opinion while reliability employ the test re-test method to ascertain questionnaire consistency. To supplement the primary data, secondary data through documentary reviews were also be sought from income statements. In analyzing data, both qualitative and quantitative data was collected. Quantitative data was analyzed using both descriptive and inferential. Descriptive included frequencies, percentages and means while the inferential included the use of the use of regression. The study findings indicated that there was a significant relationship between unrealized foreign exchange gain or loss and revenue performance of export firm ( $p=0.043$ ). Therefore the hypotheses There is no significant relationship between influence of unrealized foreign exchange gain or loss influence and revenue performance of Export companies is rejected. The study findings indicated that there was a significant relationship between foreign exchanges on import costs and revenue performance of export firm ( $p=0.153$ ). Therefore the hypotheses. There is no significant relationship between influence foreign exchanges on import costs and revenue performance of Export companies is accepted. The study findings indicated that there was a significant relationship between foreign exchanges on export costs and revenue performance of export firm ( $p=0.000$ ). Therefore the hypotheses. There is no significant relationship between influence foreign exchanges on export costs and revenue performance of Export companies is rejected. The study concluded that foreign exchanges on import costs had the greatest effect on revenue performance of the export firms. The study recommended the management of risks associated with foreign exchange exposure including training employees and hedging among other practices

CHAPTER ONE

INTRODUCTION

**1.1 Background of the Study**

Economic theory suggests that changes in the foreign exchange exposures can produce a shift in stock prices, directly in the case of multinational firms, exporting and importing companies, firms which import part of their inputs and indirectly for other companies. Foreign exchange exposures movements affect both the prices of imported finished goods and the costs of imported inputs, thus influencing indirectly those companies that compete with such firms (Grambovas and McLeay, 2016). Foreign exchange exposures may affect a firm through a variety of business operation models: a firm may produce at home for export sales as well as domestic sales, a firm may produce with imported as well as domestic components, a firm may produce the same product or a different product at plants abroad. The model of the firm must be broad enough to capture all of these channels. The firm described below is a multinational firm (producing and selling at home and abroad) that uses both foreign and domestic components.

Foreign exchange exposures refer to the degree to which currency changes are reflected in the destination currency prices of traded goods. It is synonymous to the currency pass which denotes the percentage changes in local currency import prices resulting from a one-percent change in the foreign exchange exposures, that is, the change in domestic prices that can be attributed to a prior change in the nominal foreign exchange exposures. A market-based foreign exchange exposure will change whenever the values of either of the two component currencies change (Hirshliefer, 2014).

A currency will tend to become more valuable whenever demand for it is greater than the available supply. It will become less valuable whenever demand is less than available supply, this does not mean people no longer want money, it just means they prefer holding their wealth in some other form, possibly another currency. Increased demand for a currency can be due to either an increased transaction demand for money or an increased speculative demand for money. The transaction demand is highly correlated to a country's level of business activity, gross domestic product (GDP), and employment levels. The more the people that are unemployed, the less the public will spend on goods and services (Hirshliefer, 2014).

Central banks typically have little difficulty adjusting the available money supply to accommodate changes in the demand for money due to business transactions. Speculative demand is much harder for central banks to accommodate, which they influence by adjusting interest rates. A speculator may buy a currency if the return (that is the interest rate) is high enough. In general, the higher a country's interest rates, the greater will be the demand for that currency. It has been argued that such speculation can undermine real economic growth, since large currency speculators may deliberately create downward pressure on a currency by shorting in order to force that central bank to buy their own currency to keep it stable (Miller, 2015).

Financial models are important in describing homogeneous processes, especially rare or catastrophic events are of interest, although there are limits for what can be said in such cases. Information is scarce, and it may take a very long time to evaluate whether decisions based on the models were correct. Measuring the total exposure to risk of a financial entity, models should reflect various kinds of dependencies. Such dependencies occur between consecutive periods of time and between various types of activities (Miller, 2015). Financial Models

incorporating dynamic control mechanisms can explain some of the dependencies over time. A theoretical description of the foreign exchange exposures/ relative price relationship, and corporate valuation theory provides a model that implies a rich description of the corporate and economic characteristics which determines strategic management financial models. These descriptors may be used to explain differences in the responses to foreign exchange exposures changes of different companies, product lines, or industries with respect to their financial models (Miller, 2015).

In Europe and America there have been dramatic swings in foreign exchange exposures during recent years: sterling appreciated sharply in 2015-82 and the value of the dollar soared between 2015 and 2016. Such temporary foreign exchange exposures overvaluations may cause long-lasting or even permanent damage to industrial competitiveness. There are several reasons why a transitory appreciation of the foreign exchange exposures could lead to a fall in both the demand for and supply of domestically produced goods, which would not be completely reversed even if the foreign exchange exposures returned to its previous level. Research has suggested that a period of undervaluation was necessary to restore the status quo ante. Between 2014 and 2013, the nominal foreign exchange exposures of sterling rose by 17%, with an associated loss in UK export price competitiveness (that is, an appreciation of the real foreign exchange exposures) of 23%. Around 50% of this real appreciation of sterling could be attributed to North Sea oil. The remainder resulted from the combination of restrictive monetary policies and adverse supply-side developments. Economic theory suggests that as the revenue from oil declines, UK price competitiveness must improve to maintain current account balance. Bean's own research suggests, however, that small foreign exchange exposures movements will not be enough to

achieve this. The sterling appreciation and loss of competitiveness between 2015-82 has had permanent effects on the ability of British producers to compete with foreign rivals, and a corresponding period of sterling undervaluation may be necessary (Miller, 2015).

Understanding the quantitative effects of the global financial crisis, a financial model that incorporates the interconnectedness within and between economies and the linkages between real and financial effects needs to be specified along with the varying foreign exchange exposures levels. Therefore, a dynamic, inter-temporal general equilibrium financial model that fully integrates the financial and real sectors of the economy is used to unravel and understand the mechanisms at work. The financial model incorporates wealth effects, expectations and financial markets for bonds, equities and foreign exchange as well as trade and financial flows. It is a suitable tool to analyze the impact of the crisis and policy responses on global trade and financial flows (Miller, 2015).

In Africa, cases of foreign exchange exposures depreciation have had a very extensive effect making countries panic at their financial states, which further translates to individual organizations as well as the individual shareholders in the organizations. A perfect case is the one that took place in South Africa. The South African rand depreciated sharply against the U.S. dollar in the last four months of 2016 by 42 percent between September and December after a steady decline earlier in the year. The unexpected depreciation in the final months of 2016 led to widespread public concern, and the South African Reserve Bank was faced with the prospect of a significant increase in inflation. Some policymakers also voiced their beliefs that the marked acceleration in the rate of depreciation was not justified by economic fundamentals and may have been caused by speculators taking short positions against the rand (Levy, 2015).

Kenya has maintained a floating foreign exchange exposure in 2017 (Government of Kenya, 2017). The Central Bank allows the shillings value to be determined by the inter-bank market but intervenes in the event of extreme volatility. Since its flotation the shillings value has varied considerably, reflecting external and internal pressures. The real effective foreign exchange exposures have been depreciating since 2013, when the International Monetary Fund (IMF) suspended its Enhanced Structural Adjustment Facility (Government of Kenya, 2014). Within three months of the suspension, foreign investors repatriated more than \$250 million, and the shilling depreciated 20% against the U.S. dollar.

But in recent years pressure on the shilling has eased because of larger foreign exchange receipts from tea, horticulture, and tourism, as well as weaker corporate demand for foreign exchange. In 2015 the shillings depreciation against the U.S. dollar slowed to 8.4%, and in 2016 to 4.1%. To achieve stable prices, the government needs to strengthen export promotion efforts and attract long-term capital flows into the economy. Many observers aver that the shilling foreign exchange exposures is artificially high because of speculative short-term flows attracted by high interest rates (Central Bank of Kenya, 2015). Exporters in particular complain about the drop-in export receipts caused by an overvalued shilling (Central Bank of Kenya, 2015). The Central Banks response is that its job is not to influence the direction of the foreign exchange exposures, but to maintain stable conditions in the market (Levy, 2015).

Monetary and fiscal policies deployed to offset the decline in activity and keep the financial sector afloat are majorly attributed by financial models that are in favor with the current foreign exchange exposures at hand. The downturn in activity is also causing unemployment to rise sharply and, with it, a political response to protect domestic industries through various

combinations of domestic subsidies and border protection, although, so far, the effect in aggregate has been small.

Although authorities scramble to inject liquidity into their financial models the risk premium on corporate bonds and large projects were shelved, the corporate sector virtually stopped borrowing, trade credit was hard to get and, with falling demand, particularly for investment goods and manufacturing durables like cars, trade volumes collapsed. Since then, risk premium has returned to more normal levels that are favorable to foreign exchange exposures variation, although remain elevated. Most of the countries nowadays employ financial modeling in their abstract representation of financial decision-making situation.

## **1.2 Statement of the Problem**

Foreign exchange exposures movement in Kenya has been variable with periods of rapid depreciation of the domestic currency Kenya Shilling, which adversely affect the Kenyan economy. Even though studies have been conducted on the foreign exchange exposures regimes and the implications for macroeconomic management as well as managing foreign exchange risk, very little has been done on the study of the firm exposure to exchange risk in Kenya. It is in this context that this research evaluated the effects that variations in the foreign exchange exposures has in the financial management models of the selected agricultural companies.

Many studies have generally found fair value earnings, resulting from recognizing unrealized holding gains and losses, and are more volatile than those computed under historical cost accounting. There are only a few studies done in Kenya on the foreign exchange risk; Chepkairor (2017) did a study on an assessment of the impact of foreign exchange fluctuations on projects partly funded through foreign currency denominated loans, Kurgat (2014) conducted an



empirical study of spot market efficiency on Kenya's foreign exchange bureaus, Cherutoi (2016) did a study on extent of commercial banks' exposure to foreign exchange risk and Chiira (2015) conducted a survey of foreign exchange risk management practices by oil companies in Kenya.

### **1.3 General Objective of the Study**

The general objective of the study was to assess the effect of foreign exchange exposures on company's revenue performance of export in Kenya.

#### **1.3.1 Objectives of the Study**

- i. To determine the influence of unrealized foreign exchange gain or loss has on revenue performance of Export companies in Eldoret town, Kenya.
- ii. To establish how foreign exchange rate on import costs influence revenue performance of Export companies in Eldoret town, Kenya.
- iii. To assess the effect of foreign exchange rate on export sales on the performance of Export companies in Eldoret town, Kenya.

### **1.4 Hypotheses**

**Ho1:** The influence of unrealized foreign exchange gain or loss influence on performance of Export companies in Eldoret town, Kenya.

**Ho2:** How does foreign exchanges on import costs influence performance of Export companies in Eldoret town, Kenya.

**Ho3:** The effect of foreign exchange on export sales on the performance of Export companies in Eldoret town, Kenya.

### **1.5 Justification of the study**

The findings of the study will be of significance to the following groups:

Export Firms in the country will benefit because of the study because there will be a clear knowledge of the effects of foreign exchange exposures on their exports and how it will affect their revenue performance. This will help them monitor foreign exchange exposures and act appropriately to ensure maximum returns. It will help the firms put in place models that can appropriately deal with the foreign exchange exposures while reducing variations associated with such fluctuations.

The government will be able to understand some of the challenges faced by firms in the export industry with an aim of developing policy that will help manage the fluctuations of the foreign exchange exposures including how to curb inflations. This will be beneficial to the economic development of the country.

The findings from the study will also be of great importance in researchers in the same area because they will have the relevant information build on. This will make their research process more comprehensive as this study will have findings from which they can base their study on. It will also enable ease of drawing conclusions as pertaining to studies done in similar areas. The study will also shed light in this area of study enabling understanding of the issues involved.

### **1.6 Scope of the Study**

The study focused on the foreign exchange exposures and seek to assess their effects on the performance of export. The study sought to answer the following research objectives; To determine the influence of unrealized foreign exchange gain or loss influence on performance of Export Firms in Eldoret town, to find out how foreign exchanges on import costs influence performance of Export Firms in Eldoret town, Kenya and to assess the effect of foreign exchange on export sales on the performance of Export Firm in Eldoret town, Kenya.

This study was conducted in the month of August 2019. It targeted the management as well as the employees from the finance department of the company. Primary and Secondary data were utilized.

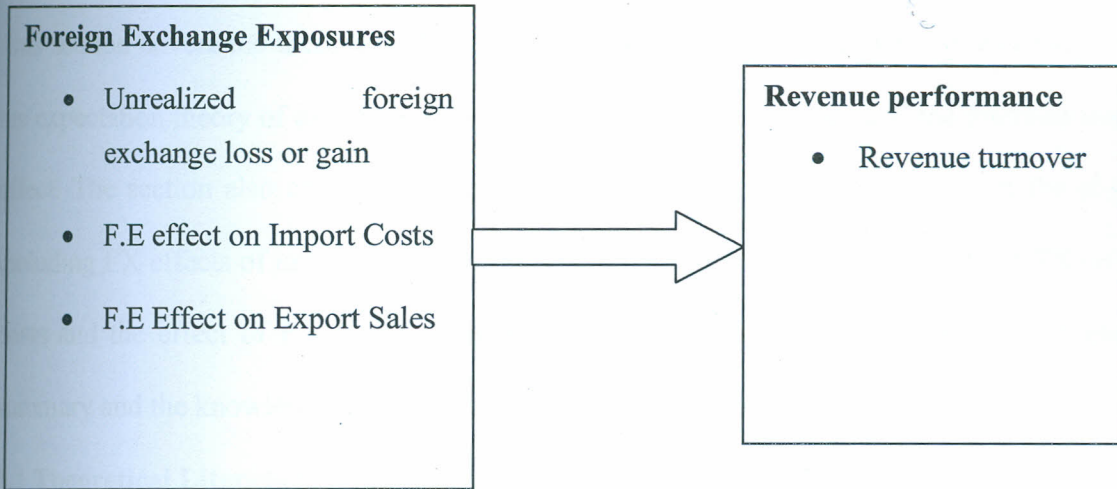
The study will only focus on export firms affected by foreign exchange exposures and which this study could apply to. This is delimitation instigated by the fact that export firms can be used as a case and the findings used to generalize to the other companies. Instead of carrying out studies in all other firms as the variables under study influence the other firms in a similar manner. The findings from this case can suffice to cover for the other organizations and the conclusions can also apply to other organizations in the export business all over the country.

### **1.7 Conceptual Framework**

Fluctuations in the foreign exchange exposures of the shilling against other currencies like the dollar or the sterling pound, or the countries to which the company's products are exported can affect the investment patterns of the organization in that the earnings from exports will tend to vary. Also, the shareholders may be affected in that due to the reduced varying earnings, the dividend outlay of the company will also vary leading to low or high dividends to the shareholders in the long run. The financing decisions of the organization depend on the earnings of the organization which will be affected by the foreign exchange exposures hence the areas the organization intends to finance also will be affected largely. The organizational financial controls also tend to be affected by foreign exchange exposures as it will not be clear where the organization directs its funds hence the effect on financial controls.

**Independent variable**

**Dependent variable**



**Figure 1.1: Foreign Exchange Exposure and Revenue Performance Relationship**

Adopted from: Luostarinen, G. (2011)

## **CHAPTER TWO**

### **LITERATURE REVIEW**

This section covers the theoretical literature review including the purchasing power parity theory, the expectation theory of exchange rate, the interest rate parity theory and the international fisher effect. The section also covers the empirical review which discusses studies on the objectives including FX effects of unrealized gains on revenue performance, the influence of FX on import costs and the effect of FX on export sales. The section finally reviews the critic of literature, summary and the knowledge gap.

#### **2.1 Theoretical Literature Review**

##### **2.1.1 Purchasing Power Parity**

The purchasing power parity theory originated with the School of Salamanca in the 16th century and was developed in its modern form by Gustav Cassel in 1916 revised by Cheung, Yin-Wong (2013), in *The Present Situation of the Foreign Trade*. The concept is based on the law of one price, where in the absence of transaction costs and official trade barriers, identical goods will have the same price in different markets when the prices are expressed in the same currency. Another interpretation is that the difference in the rate of change in prices at home and abroad the difference in the inflation rates is equal to the percentage depreciation or appreciation of the exchange rate (Marrison, 2014).

Deviations from parity imply differences in purchasing power of a basket of goods across countries, which means that for the purposes of many international comparisons, countries' GDPs or other national income statistics need to be PPP-adjusted and converted into common units. The best-known purchasing power adjustment is the Geary–Khamis dollar. The real exchange rate is then equal to the nominal exchange rate, adjusted for differences in price levels.

If purchasing power parity held exactly, then the real exchange rate would always equal one. However, in practice the real exchange rates exhibit both short run and long run deviations from this value, for example due to reasons illuminated in the Balassa–Samuelson theorem (Madura, 2015).

The purchasing power parity exchange rate serves two main functions. PPP exchange rates can be useful for making comparisons between countries because they stay constant from day to day or week to week and only change modestly, if at all, from year to year. Second, over a period of years, exchange rates do tend to move in the general direction of the PPP exchange rate and there is some value to knowing in which direction the exchange rate is more likely to shift over the long run (Marx, & Karl 2014).

The PPP exchange-rate calculation is controversial because of the difficulties of finding comparable baskets of goods to compare purchasing power across countries. Estimation of purchasing power parity is complicated by the fact that countries do not simply differ in a uniform price level; rather, the difference in food prices may be greater than the difference in housing prices, while also less than the difference in entertainment prices. People in different countries typically consume different baskets of goods. It is necessary to compare the cost of baskets of goods and services using a price index. This is a difficult task because purchasing patterns and even the goods available to purchase differ across countries (Lam, 2013)..

The theory is deemed relevant for the study because its exchange rates help costing but exclude profits. So, it is reckoned as more efficient methodology than the use of market exchange rates. For example, suppose that two countries produce the same physical amounts of goods as each other in each of two different years. Since market exchange rates fluctuate substantially, when the GDP of one country measured in its own currency is converted to the other country's

currency using market exchange rates, one country might be inferred to have higher real GDP than the other country in one year but lower in the other; both inferences would fail to reflect the reality of their relative levels of production. But if one country's GDP is converted into the other country's currency using PPP exchange rates instead of observed market exchange rates, the false inference will not occur. Essentially GDP PPP controls for the different costs of living and price levels, usually relative to the United States Dollar, thus enabling a more accurate depiction of a given nation's level of production. The theory explains how foreign exchange exposure impact the revenue performance of export performance by affecting only cost but not performance.

### **2.1.2. Expectation theory of exchange rate**

Theory of Change emerged from the field of program theory and program evaluation in the mid-1990s and revised by Collins & Clark (2013) as a new way of analyzing the theories motivating programs and initiatives working for social and political change. Theory of Change emerged in the 1990s at the Aspen Institute Roundtable on Community Change to model and evaluates comprehensive community initiatives. Notable methodologists, such as Huey Chen, Peter Rossi, Michael Quinn Patton, Heléne Clark, and Carol Weiss, had been thinking about how to apply program theories to evaluation since 1980. The Roundtable's early work focused on working through the challenges of evaluating complex community initiatives. This work culminated in a 1995 publication, 'New Approaches to Evaluating Comprehensive Community Initiatives'. In that book, Carol Weiss, a member of the Roundtable's steering committee on evaluation, hypothesized that a key reason complex programs are so difficult to evaluate is that the assumptions that inspire them are poorly articulated. She argued that stakeholders of complex community initiatives typically are unclear about how the change process will unfold and therefore place little attention on the early and mid-term changes needed to reach a longer-term

goal. Theory of Change is focused not just on generating knowledge about whether a program is effective, but also on explaining what methods it uses to be effective (Stein & Valters 2017). Theory of Change as a concept has strong roots in many disciplines, including environmental and organizational psychology, but has also increasingly been connected to sociology and political science (Stachowiak 2014).

Weiss popularized the term “Theory of Change” to describe the set of assumptions that explain both the mini-steps that lead to the long-term goal of interest and the connections between program activities and outcomes that occur at each step of the way. She challenged designers of complex community-based initiatives to be specific about the theories of change guiding their work and suggested that doing so would improve their overall evaluation plans and would strengthen their ability to claim credit for outcomes that were predicted in their theory. She called for the use of an approach that, at first glance, seems like common sense: lay out the sequence of outcomes that are expected to occur as the result of an intervention, and plan an evaluation strategy around tracking whether these expected outcomes are produced. Her stature in the field, and the apparent promise of this idea, motivated several foundations to support the use of this technique later termed the Theory of Change approach in the evaluations of community change initiatives. In the years that followed, several evaluations were developed around this approach, fueling more interest in the field about its value and potential application (Austin & Bartunek 2015).

The theory is relevant to the study since it is an economic concept whereby people make choices based on their rational outlook, available information and past experiences. The theory suggests that the current expectations in an economy are equivalent to what people think the future state



of the economy will become. This contrasts with the idea that government policy influences people's decisions. The rational expectations theory is often used to explain expected rates of inflation. For example, if inflation rates within an economy were higher than expected in the past, people consider this along with other indicators to assume that inflation may further increase in the future. The theory explains how the current performance in export companies is equivalent to their future state of the performance.

### **2.1.3 Foreign Exchange Exposures**

Foreign exchange exposures refer to the degree to which currency changes are reflected in the destination currency prices of traded goods. It is synonymous to the currency pass which denotes the percentage changes in local currency import prices resulting from a one-percent change in the foreign exchange exposures, that is, the change in domestic prices that can be attributed to a prior change in the nominal foreign exchange exposures. A market-based foreign exchange exposure will change whenever the values of either of the two component currencies change (Hirshliefer, 2014).

A currency will tend to become more valuable whenever demand for it is greater than the available supply. It will become less valuable whenever demand is less than available supply, this does not mean people no longer want money, it just means they prefer holding their wealth in some other form, possibly another currency. Increased demand for a currency can be due to either an increased transaction demand for money or an increased speculative demand for money. The transaction demand is highly correlated to a country's level of business activity, gross domestic product (GDP), and employment levels. The more the people that are unemployed, the less the public will spend on goods and services (Hirshliefer, 2014).

#### **2.1.4 Revenue Performance**

Revenue performance for export companies refers incomes gained from these activities. High incomes are as a result of more gains in exports and vice versa. Companies that sell their goods and services internationally and get paid in a foreign currency, foreign exchange risk is the likelihood that a change in exchange rates will result in the company receiving a lower amount of their currencies than originally anticipated. For companies that import and pay foreign suppliers in foreign currency, it is the likelihood that a change in exchange rates will mean the company has to pay more than planned. This form of foreign exchange exposure, which impacts the cash flow of the company, is commonly referred to as transaction exposure (Carl, 2014).

Other forms of exposure also exist, such as accounting exposure and economic exposure. Accounting exposure applies when assets and liabilities denominated in a foreign currency need to be converted into own currency for accounting purposes. The conversion normally results in foreign exchange gains or losses. This is of concern to companies that have foreign subsidiaries but can also impact companies that export and import. Economic exposure relates to the overall impact that exchange rate fluctuations can have on a company's value. Companies that only sell domestically can also face economic exposure when, for example, the own dollar strengthens and improves the competitive position of foreign producers (Hagelin, & Pramborg, 2014).

#### **2.1.5 Foreign exchange exposure and revenue performance**

Studies and models have attempted to show a relationship between foreign exchange exposures and revenue performance. Economic theory suggests that as the revenue from exports and imports must improve to maintain current account balance. Bean's own research suggests, however, that small foreign exchange exposures movements will not be enough to achieve this. The sterling appreciation and loss of competitiveness in 2015 has had permanent effects on the

ability of British producers to compete with foreign rivals, and a corresponding period of sterling undervaluation may be necessary (Miller, 2015).

Understanding the quantitative effects of the global financial crisis, a financial model that incorporates the interconnectedness within and between economies and the linkages between real and financial effects needs to be specified along with the varying foreign exchange exposures levels. Therefore, a dynamic, inter-temporal general equilibrium financial model that fully integrates the financial and real sectors of the economy is used to unravel and understand the mechanisms at work. The financial model incorporates wealth effects, expectations and financial markets for bonds, equities and foreign exchange as well as trade and financial flows. It is a suitable tool to analyze the impact of the crisis and policy responses on global trade and financial flows (Miller, 2015).

## **2.2 Empirical Review**

### **2.2.1 FX Effect of Unrealized Gain or Loss**

Companies that sell their goods and services internationally and get paid in a foreign currency, foreign exchange risk is the likelihood that a change in exchange rates will result in the company receiving a lower amount of their currencies than originally anticipated. For companies that import and pay foreign suppliers in foreign currency, it is the likelihood that a change in exchange rates will mean the company has to pay more than planned. This form of foreign exchange exposure, which impacts the cash flow of the company, is commonly referred to as transaction exposure (Carl, 2014).

Other forms of exposure also exist, such as accounting exposure and economic exposure. Accounting exposure applies when assets and liabilities denominated in a foreign currency need to be converted into own currency for accounting purposes. The conversion normally results in foreign exchange gains or losses. This is of concern to companies that have foreign subsidiaries but can also impact companies that export and import. Economic exposure relates to the overall impact that exchange rate fluctuations can have on a company's value. Companies that only sell domestically can also face economic exposure when, for example, the own dollar strengthens and improves the competitive position of foreign producers (Hagelin, & Pramborg, 2014).

For some companies, managing foreign exchange risk may seem too complex, costly or time-consuming. Others may not know about hedging instruments and techniques or believe that hedging is a speculative activity. Yet companies that choose not to manage foreign exchange risk may be assuming that exchange rates will remain at their present levels or move in a direction that will be favorable to the company. Numerous studies have found that managing this risk can successfully reduce your company's foreign exchange exposure (Giddy, 2013).

A study done by Liu (2013) on 'Foreign Exchange Hedging and Profit-Making Strategy using Leveraged Spot Contracts'. The study was guided by the objective: to develop a model for using the leveraged spot market (contract) for both speculative and hedging purposes (Liu 2013).

The study involved primarily quantitative data analysis and mathematic modeling. The methodology of the study was designed to: illustrate how the leveraged spot market can be utilized both as a speculating as well as a hedging tool; derive insights into how real world data will affect the optimal number of contracts that a trader should trade (or invest) at any given time; present a simulation model for speculation using leveraged spot contracts; demonstrate how a trader can hedge an open position in the leveraged spot market with a simultaneous position in the forward market to generate profit; and explain how a hedger can hedge an existing business transaction exposure using the leveraged spot. Secondary data consisted of real-world data on interest rates for Australia, the United States (US), and Japan, and historical spot rates of the Australian dollar, the US dollar, and the Japanese yen (Liu 2013).

The study found out that the income received from speculating in the leveraged spot market can be divided into two conceptually distinct parts: the first relates to the positive, risk-free income differential between the borrowings and investing currencies; the second is dependent on favorable currency movements and is the risky portion of the speculative activity. However, the possibility of obtaining risk-free interest income lowers the riskiness of speculating in the foreign exchange market relative to an unleveraged spot market transaction. The study further found out that forward contract can be used to eliminate the risk involved with an open leveraged spot position. Indeed, if covered interest parity holds, and interest rates, for example, in Japan and the United States do not change over the term of the contract, using the forward contract to hedge the speculation will eliminate any profit. However, if interest rates do change favorably, this

procedure can yield significant profits. The study examines how the leveraged spot market can serve as a hedging instrument to eliminate, or mitigate, transaction exposure and found out that under certain circumstances, hedging with the leveraged spot market can yield superior results compared to traditional hedging mechanisms including forward contracts and money market instruments (Levich, Hayt, & Ripston, 2014).

Another study Quian, (2015) entitle, "Foreign currency position and corporate risk management: squaring, hedging, and market timing" was done with an aim of investigating what determines firms' foreign currency spot net asset positions, derivatives hedging and synthetic hedging positions. The study used a unique set of data containing complete foreign currency spot and derivatives positions of Korean exporting firms.

The study found out that firms' foreign currency cash positions and net working capital positions are significantly positively correlated with the exchange-rate return, consistent with the FX market timing hypothesis. It also found out that a firm's foreign currency debt position is significantly positively correlated with the interest rate differential between the local currency and foreign currency, consistent with the credit market timing hypothesis (Kaplan, Steven & Luigi, Zingales 2013).

The study concluded that main drivers of a firm's foreign currency spot net asset position is its credit market timing, whereas the FX beta poorly forecasts a firm's selection of its currency spot positions. Also, firms are still timing the markets even when they are conducting derivatives hedging and synthetic hedging (Quian, 2015).

Studies by Firms, Liu (2013) and study (Quian,2015) on effects of unrealized FX gain or loss on Revenue performance of Firms created a gap on how foreign exchange aging and market timing being unrealized loss or gain affect the revenue performance of a firm.

### **2.2.2 Influence of FX on Import Cost**

The relationship between exchange rates and import prices is important to understand the nature of import flows as well as the behavior of consumer prices. For example, a weaker currency is usually considered to be a key mechanism for increasing the international competitiveness of country's producers. However, economists have generally found that prices of imported goods

do not usually respond with one-to-one to changes in the exchange rate. For example, between February 2016 and July 2014 in US, the dollar fell by almost 35 percent against a broad index of foreign currencies, while U.S. Department of Labor (DOL), Bureau of Labor Statistics (BLS) price index for all imports excluding petroleum rose by 20 percent, and the price index for imported consumer goods rose by only 6 percent.<sup>1</sup> The lack of a strong historical relationship between the dollar and import prices is often cited as a factor affecting broad measures of core inflation (Carl, 2014).

A study conducted by Hellerstein (2014) aimed at estimating a structural econometric model that makes it possible to compute manufacturers' and retailers' pass-through of a nominal exchange-rate change, firms' marginal costs. The study entitled, "Who Bears the Cost of a Change in the Exchange Rate? The Case of Imported Beer".

The study found out that some strategic interaction between import-competing domestic manufacturers and foreign manufacturers following a depreciation: these domestic manufacturers increase their profits by lowering prices to take market share from foreign manufacturers. Domestic manufacturers' profits increase by 1.7 percent following a 10-percent depreciation, mainly from increases in market share rather than from increases in markups. The domestic brands with increased profits are the light or super premium brands that compete most directly with imported beers. The study also found out that following the depreciation, foreign manufacturers suffer the most among the domestic actors, as their total profits decline by 22.12 percent. Domestic manufacturers benefit by the most as their total profits increase by 1.71 percent. Consumer surplus decreases by 8.18 percent following the depreciation and the retailer's total profits decline by 5.04 percent (Hellerstein, 2014).

The study concluded that foreign manufacturers generally bear more of the cost (or reap more of the benefit) of a change in the nominal exchange rate than do domestic consumers, domestic manufacturers, or the domestic retailer. The results of the study also suggest some strategic interaction between import-competing domestic manufacturers and foreign manufacturers following a depreciation (Koester, 2013).

Domestic manufacturers with brands that are close substitutes for foreign brands increase their profits by lowering prices to take market share from foreign manufacturers. These results support

a story in which the impact of exchange-rate fluctuations on the domestic economy (and on domestic consumers in particular) is dampened by strategic interactions between domestic and foreign firms in the traded-goods sector as well as between these firms and the domestic firm in the non-traded goods sector. It may not be profit maximizing for foreign manufacturers to fully pass-through a depreciation in a market where some domestic manufacturers exploit each increase in a foreign brand's price to increase their market share (Kent, & Shapiro, 2015).

The study further concluded that it is the behavior of the nontrade-goods producer, the retailer that causes the vertical pass-through of marginal-cost shocks from domestic or foreign sources to diverge. Foreign manufacturers effectively purchase insurance for exchange-rate volatility from domestic retailers in the form of higher retail markups in exchange for greater variability in those markups. The retailer passes through wholesale-price increases for domestic brands at a higher rate than it does identical wholesale-price increases for foreign brands. The retailer's markups on foreign brands are more than twice the size of its markups on domestic brands: the retailer may regard these higher markups as compensation for their greater fluctuation over time. This result emphasizes how important it is to model manufacturers' interactions with downstream firms to understand their pass-through of exchange-rate fluctuations. The retailer plays an important role in absorbing part of an exchange-rate-induced marginal-cost shock before it reaches consumers (Miller and Modigliani, 2015). Studies by Hellerstein (2014) on influence of FX on import cost on Revenue performance of Firms left a gap on the influence of import cost on revenue performance of a firm

### **2.2.3 Effects of FX on Export Sales on Revenue Performance of Firms**

Foreign currencies are an integral part of doing international business. With globalization an increasing number of goods and services flow from one currency zone to another. Simultaneously the global investment environment is rapidly growing and asserting increasing influence on foreign exchange rates. A larger and faster global economy makes foreign exchange an important issue to a growing number of companies and its significance ever greater to individual companies particularly in open economies (Grambovas & McLeay, 2016).

For company's foreign exchange (FX) can be a source of significant risk and opportunity because of the uncertainty of future exchange rates. Entering into for example a purchase or a

sales contract involving foreign currencies exposes companies to parity fluctuations i.e. the fluctuations in the value of one currency in terms of another. Typically, only the profits from the contract are affected by any gains or losses brought about by the parity shift. Thus, the impact of this exposure can quickly increase as the effect of a parity shift to the value of the contract is leveraged naturally by the profit margin of the company (Grambovas & McLeay, 2016).

A study conducted by Vargas (2013) on 'Exchange Rate Volatility and Trade'. The main purpose of the study was to investigate and analyze the effect of exchange rate volatility between the euro and the Mexican peso on the exports from the first eleven-euro area countries (EA-11) to Mexico. The ten product groups recognized by the Standard International Trade Classification (SITC) are dealt with separately in identifying the influence of the exchange rate volatility between the euro and the Mexican peso on the exports of each of them. Monthly aggregated data for exchange rates and trade between 2014 and 2014 are analyzed using regressions. In addition to the exchange rate volatility, the variables included in the analysis are: the industrial production index (IPI) of the EA-11 countries, the IPI for Mexico, the nominal exchange rate between the peso and the euro, the consumer price index (CPI) in Mexico and the harmonized indices of consumer prices (HICPs) for the EA-11 (Power, 2013).

The results of the study were that the exchange rate volatility has a positive and significant effect on the exports of Machinery and transport equipment from the EA-11 to Mexico. The influence of the variable on the exports for the product group is rather small. In contrast, the exchange rate volatility is not significant for the other nine product groups. It should be recognized that for most of the product groups the effect of the variable is also positive (Hakala, and Wystup, 2014)

The IPI for the EA-11 and for Mexico, the exchange rate and the ratio of the price levels also resulted significant for different product groups and with different significance levels. In addition, the indexes for the IPI of both parties are the variables that generate the larger effects on the value of the exports for most of the product groups. The nominal exchange rate and the price level ratio are the two variables that mostly influence the value for the European exports to Mexico (Vargas, 2013).

On the other hand, some multicollinearity difficulties are also identified among the independent variables. As it has been recognized, the most correlated variables are the IPI for the EA-11



countries and Mexico, the IPI for the European industry and the price level ratio, and the latter variable with the exchange rate (Vargas, 2013).

A study done by Luostarinen (2011) on 'Framework for Evaluating Foreign Exchange Exposure Management Practices of Non-Financial Companies: A managerial approach'. The main objective of the study was to examine the FX exposure management practices of non-financial companies involved in international business and ultimately to evaluate their practices. The data in the study included 86 Finnish non-financial companies that were involved in international business using foreign currencies. Each size category was represented by at least 14 companies. The average annual revenue of the participating companies was 786 M€ with the median being 17 M€.

The results of the study support a progressive model of FX exposure management practice development. Common developmental paths were identified in all components of the outlined FX exposure management framework. Overall the framework was supported by the findings from the survey study. Since existing literature has not provided a conceptual framework for FX exposure management the contribution of this study is in this respect valuable.

The framework offers a conceptual model of reference for managers. A comprehensive framework of reference is important for developing FX exposure management capabilities. The scoring model and the benchmarks based on the survey are specifically intended for managers. By using them a relatively quick assessment of the prevailing FX exposure management practices can be conducted in a company. Furthermore, the results can be compared with results from other companies. The scoring model produces sophistication scores for individual components as well as an overall company score. Their possible applications reach beyond an individual company's interest in self-improvement. Some possible beneficiaries may include investors that can use it in the assessment of company risk in respect to FX exposure and financial service providers in segmenting markets for marketing and product development purposes. Consultancies could as well benefit from categorizing their clients based on the scores or using the evaluation tool in their service creation process. The empirical findings of this study showed that in each component of the FX exposure management framework there were practices with significant correlations with the three explanatory factors (Hirshliefer, 2014).

Studies by Luostarinen (2011) on effects of FX on export sales on Revenue performance of Firms left a gap to be filled on how management practices of non-financial companies' effect revenue performance of a firm.

### **2.3 Critics of Literature**

On effects of unrealized FX gain or loss on Revenue performance of Firms, Liu (2013) and study (Quian,2015) there are studies on Foreign Exchange Hedging and Profit Making Strategy using Leveraged Spot Contracts and Foreign currency position and corporate risk management: squaring, hedging, and market timing” was done with an aim of investigating what determines firms' foreign currency spot net asset positions, derivatives hedging and synthetic hedging positions.

On Influence of FX on import cost on Revenue performance of Firms Hellestein (2014) studied estimating a structural econometric model that makes it possible to compute manufacturers' and retailers' pass-through of a nominal exchange-rate change, firms' marginal costs.

On effects of FX on export sales on Revenue performance of Firms Luostarinen (2011) studied examining the FX exposure management practices of non-financial companies involved in international business and ultimately to evaluate their practices.

### **2.4 Summary**

Firms, Liu (2013) and study (Quian,2015) concentrated on Foreign Exchange Hedging and Profit-Making Strategy using Leveraged Spot Contracts and Foreign currency position and corporate risk management: squaring, hedging, and market timing. Hellerstein (2014) concentrated on estimating a structural econometric model that makes it possible to compute manufacturers and retailers pass-through of a nominal exchange-rate change, firms' marginal costs. Luostarinen (2011) concentrated on examining the FX exposure management practices of non-financial companies involved in international business and ultimately to evaluate their practices.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Research Design

Kothari (2014) views research design as the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. The research design that was adopted in this study is correlational survey design because it enabled the researcher to test correlation between dependent and independent variable.

#### 3.2 Study Area

The study area for this research was Eldoret town. The region is chosen because of its suitability in terms of availability of export firms that use the Eldoret International Airport for products export. Within the north rift and western region, the town has some of the most established export firms. Eldoret is a principal city in western Kenya and the fifth largest in the country also serves as the capital of Uasin Gishu County. Lying south of the Cherangani Hills, the local elevation varies from about 2100 metres at the airport to more than 2700 metres in nearby areas.

#### 3.3 Target population

The target population comprised of 7 Export Firms in Eldoret Town with a total of 87 permanent employees working for these farms as indicated in table 3.1 who are the main targeted respondents in the study.

**Table 3.1 Target Population**

Export Firms in Eldoret Town	Number of Permanent Employees
Kenya Tea Packers Co. Ltd	14
Mace Foods Ltd	12
Hashi Empex Limited	10
Canken Limited	9
ASCC logistics	13
Sian Roses Flower Firm	14
Equator Flower Firm	15
Total	87

Source: Import Export Agents Directory Eldoret (2019)

The firms were targeted as they are heterogenic in that some are highly influenced by foreign exchange exposures due to their predominance in exports while others over-rely on imports for their inputs. Much of their revenues and expenditures are denominated in the foreign currencies, notably the US dollar (\$), Sterling pound (£) Japanese yen (¥), and the euro (€). Indeed, Bodnar and Gentry (2013) proposed that foreign exchange exposures affect some firms differently than others because some of the firms are more export (or import) dependent than others.

### 3.4 Sample Size and Sampling Procedures

According to Newman (2014) he argues that, the main factor considered in determining the sample size is the need to keep it manageable enough.

The study sample frame composed of the 87 permanent employees working in these export firms within Eldoret town. According to Mugenda and Mugenda (2013), when the population is more than 10,000 individuals, 384 of them are recommended as the desired sample size (Mugenda & Mugenda, 2015). Mugenda and Mugenda recommend the formula as shown in equation (iii):

$$nf = n / (1 + n/N)$$

Where according to the above equation (iii) formula:

nf = desired sample size when the population is less than 10,000,

n = desired sample when the population is more than 10,000,

N = estimate of the population size.

Using the above formula sample size is:

$$nf = 384 / (1 + 384/87) = 70.92 = 70 \text{ respondents}$$

The 70 respondents representing the export firms was distributed through ratio sampling as indicated;

**Table 3.2 Sample Size and sampling procedure**

Export Firms in Eldoret	Number of Employees	Ratio Sampling	Sample Size
Kenya Tea Packers Co.	14	14/87 * 70	11
Mace Foods Ltd	12	12/87 * 70	10
Hashi Empex Limited	10	10/87 * 70	8
Canken Limited	9	9/87 * 70	7
ASCC logistics	13	13/87 * 70	11
Sian Roses Flower Firm	14	14/87 * 70	11
Equator Flower Firm	15	15/87 * 70	12
Total	87	87/87 * 70	70

Source: Import Export Agents Directory Eldoret (2018)

The study employed the use of simple random sampling to select the respondents to participate in the study. This means that the different employees representing the selected companies based on their availability and their willingness to participate in the study. The questionnaires were distributed in the main offices of the different companies and requested to participate in the study voluntarily.

### 3.5 Research Instruments

#### 3.5.1 Questionnaires

The research utilized survey questionnaires for primary data collection. The questionnaires were issued to the finance staff of the selected firms. The questionnaire comprised of structured questions. Limited open-ended questions were included to capture the qualitative aspects or explanations for some responses. The questionnaire covered 3 key issues experienced in foreign trade namely unrealized foreign exchange gain or loss, effects of import costs and effects of export sales on performance of export firms. To supplement the primary data, secondary data through documentary reviews were also sought from income statements for a reality check of the primary data collected through the questionnaires. This was gathered from websites which contains secondary data of the various firms.

### **3.5.2 Validity**

Validity is the ability of an instrument to measure a concept under study and to be able to measure it accurately so that any observed differences are true and not the result of random or constant errors. Instrument validity determines whether an instrument accurately measures that which it is supposed to measure (Brink et al 2016).

Face validity was ensured by: pretesting of the data collection tool and scrutiny of the instruments by the research supervisor. Content validity was ensured by doing a thorough literature review study on which the content of the questionnaire was based.

The researcher met the respondents for the first-time during data collection and merely explained the purpose of the study to the respondents. The relationship was strictly formal; therefore, researcher effect was minimal. This is important because if respondents are familiar with the researcher, they may not provide truthful information and results may not be valid.

### **3.5.3 Reliability**

Reliability refers to the extent to which an instrument yields similar results each time it is administered by independent persons under comparable conditions (De Vos et al, 2013). The researcher took much care to ensure that the research procedure is the same at each of the households in the study population. An environment is created where the respondents can honestly complete the questionnaire.

### **3.6 Data collection procedures**

The researcher visited the export firms and issue questionnaires to the targeted respondents. The researcher waited for them to be filled in to ensure a timely high return rate. The researcher informed all the respondents the purpose of research, the expected duration of participation, and the procedure was followed after data collection. The dates for administering the questionnaires were mutually agreed between the researcher and the heads of department concerned. The researcher informed the respondents about the extent of privacy and confidentiality, the value of the research, and guaranteed that the data was to use for no other purposes other than the purpose intended by the University. The respondents had the right to remain anonymous and to decline to respond to certain questions if they so wish. Documentary reviews on audited financial

statements was also sought to check on whether the research statistics and findings are a real accounting problem.

### 3.7 Data Analysis Procedures

In analyzing the responses, the Microsoft Excel Spreadsheet tool was used to clean data and later coded to the Statistical Package for Social Sciences (SPSS) for analysis. In analyzing data, both qualitative and quantitative data was collected. Qualitative data was analyzed through thematic analysis while quantitative data was analyzed using both descriptive and inferential. Descriptives included frequencies, percentages and means while the inferentials used of the Multiple Linear Regression. The data was presented in tables. 7 Regression analysis involves finding the best straight-line relationship to explain how the variation in an outcome (or dependent) variable, Y, depends on the variation in a predictor (or independent or explanatory) variable, X. Once the relationship was estimated it was possible to use the equation:

$$\text{Where: } Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

x = the independent variables -  $X_1 = \text{FX unrealized gains or loss}$

$X_2 = \text{FX on import costs}$

$X_3 = \text{FX on export costs}$

Y = the dependent variable (Revenue Performance)

$\beta$  = the unknown parameters; this may be a scalar or a vector.

e = Error of margin

## CHAPTER FOUR

### DATA ANALYSIS AND INTERPRETATION

#### 4.1 Introduction

This chapter presents the research findings to assess the effect of foreign exchange exposures on firm's revenue performance of export in Kenya. The study was conducted on 7 Export firms in Uasin Gishu County with a total of 87 permanent employees working for this firms. 70 respondents were sampled randomly as described in the previous chapter. 70 respondents filled and returned their questionnaires which make a 100% response rate. The commendable response rate was achieved after the researcher administered the questionnaires personally and made personal visits and telephone follow-up calls to remind the respondents to fill-in and return the questionnaires. Descriptive statistics were used to analyze the data. In the descriptive statistics, relative frequencies were used in some questions.

#### 4.2 Findings

##### 4.2.1 Respondent Company Profile

The study also sought to determine the company's years of operation in Kenya and from the findings, the study found that all the companies had been in operation for over 7 years as shown in table 4.1.

**Table 4.1. Company years of Operation**

<b>Export firms in Uasin Gishu</b>	<b>Year started</b>	<b>Years of operations</b>
Kenya Tea Packers Co. Ltd	1997	18
Mace Foods Ltd	1994	21
Hashi Empex Limited	1998	17
Canken Limited	2003	12
ASCC logistics	1996	19
Sian Roses Flower Firm	2004	11
Equator Flower Firm	2008	7



Findings also shows that the export firms involved in the study have been in operation for more than seven (7) years. This implies that the companies have enough experience thus enabled the researcher to have enough information for analysis. It also implies that this period is enough for the company to make decisions such as hedging on management of FX exposure.

#### **4.2.2 Unrealized Foreign Exchange Gain or Loss on Revenue Performance**

The study sought to determine the department dealing with foreign exchange risk management, whether they had written foreign exchange policy and if they did not have whether they still hedged against foreign exchange risk. The study also investigated on the hedging policy availability, its effectiveness and the most effective hedging techniques which best suited their organizations. The findings are as summarized in tables 4.2.

**Table 4.2 Unrealized Foreign Exchange Gain or Loss on Revenue Performance**

	<b>Frequency</b>	<b>Percent</b>
<b>Department dealing with risk management</b>		
Finance	70	100
	<b>70</b>	<b>100</b>
<b>Presence of written policy on foreign exchange</b>		
<b>Presence of written policy</b>		
Yes	38	54
No	14	20
Don't Know	18	26
	<b>70</b>	<b>100</b>
<b>Hedging policy in the organization</b>		
Hedging fully	17	24
Hedging partially	39	56
Not hedging at all	8	11
Don't know	6	9
	<b>70</b>	<b>100</b>
<b>Hedging by company with no written policy</b>		
Yes	44	63
No	17	25
Don't Know	9	13
	<b>70</b>	<b>100</b>
<b>Hedging partially by company with policy</b>		
30%	15	21
40%	2	3
50%	10	15
60%	43	62
	<b>70</b>	<b>100</b>
<b>Effectiveness of the foreign exchange policy</b>		
Excellent	17	24
Good	28	40
Average	15	21
Below Average	7	10
Poor	3	4
	<b>70</b>	<b>100</b>

From the findings shown in table 4.2 above on the department which deals with risk management in export firms in Uasin Gishu, the study found that majority of the respondent as shown by 100% indicated that finance department was responsible for dealing with risk management in their organization. This shows that finance department is the main department that dealt with risk for export firms.

On whether export firms had a written foreign exchange policy, from the findings shown in table 4.2 above the study found that 54% of the respondent indicated that their companies had written foreign exchange policy, 20% of the respondent indicated that their companies didn't have any written foreign exchange policy whereas 26% of the respondents were not aware of any written policy on foreign exchange. This shows that majority of the export firms had written policy on foreign exchange.

To those companies that had written foreign exchange policy, the study as depicted by table 4.2 revealed that majority of the respondents as shown by 56% of the respondents indicated that their firms were using hedging partially, 24% indicated that their companies were managing foreign exchange exposure by hedging fully, whereas 11% of the respondent indicated that their companies didn't have hedging at all. This information shows that the export firms that have written policy on foreign exchange exposure were using hedging partially while others were fully hedging.

To those 7 export firms that didn't have written policy on foreign exchange the study revealed that they were hedging against foreign exchange risk as shown by 63% of the respondent who indicated yes. 25% indicated that their companies do not hedge against foreign exchange risk.

This shows that not all the companies were hedging against foreign exchange risk as shown in table 4.2.

The study sought to determine the effectiveness of the foreign exchange policy for export firms in Uasin Gishu County. From the findings shown in table 4.2, the study found that 40% of the respondents indicated that the foreign exchange policy was good, 24% of the respondents indicated that the foreign exchange policy was excellent whereas 21% of the respondents indicated that it was average. This shows that foreign exchange policy used by export firms is above average by 85% effectiveness.

**Table 4.3 Hedging Techniques**

		<b>Frequency</b>	<b>Percentage</b>
<b>Internal/Natural Techniques</b>			
Exports	Leads	0	0
	Lags	0	0
	Netting	0	0
	Invoicing foreign exchange	70	100
	currency	0	0
	Negotiating local price on imports	0	0
	Money market e.g. Foreign currency loan	0	0
	None	0	0
<b>Total</b>		<b>70</b>	<b>100</b>
<b>External Techniques</b>			
Exports	Spot	23	33
	Forwards	17	24
	Currency Swaps	7	10
	Currency options	9	13
	Futures	11	16
	None	3	4
<b>Total</b>		<b>70</b>	<b>100</b>
<b>Accounts posted with foreign exchange gains or losses</b>			
	Income statement	47	67
	Owner's Equity	23	33
		<b>70</b>	<b>100</b>

Table 4.3 demonstrates how on the most effective internal/natural hedging techniques that best suit the respondent companies, the study found that invoicing foreign exchange was the most effective in companies with 100%.

On the most effective external hedging techniques, from the findings in the above table 4.3, the study found that spot was effective with 33% of respondents agreeing with the opinion. 24% believed forwards were effective, 10% of respondents were for currency swaps, 13% were for currency options and 16% were of the opinion that futures are effective external hedging technique.

This study sought to measure the degree of knowledge or general information as well as competencies on the part of respondent firms on the use of specific hedging techniques. A summary of responses from firms on knowledge, and competencies of employing internal and external hedging techniques is as summarized in tables 4.3.

On the account posted with foreign exchange gains/losses as shown in table 4.3, the study revealed that majority of the respondents as shown by 67% indicated that their companies used income statement whereas 33% of the respondents indicated that their companies used owners' equity through reserves account to post foreign exchange gains /losses.

From the findings the respondents were from finance department implying that the respondents deemed viable to provide information necessary for the study since the respondents had knowledge and experience on foreign exchange exposure. Foreign exchange exposure management in a company is not a day's work neither a responsibility to be done by anybody. FX management is a work involving knowledgeable employees who can interpret the fluctuation of prices in the market. As indicated further in the study all export firms only engage finance

department implying that the required information and documents such as income statement and balance sheets are always prepared by finance personnel.

The study found out that most of the export companies in Uasin Gishu County do not use written foreign exchange policy and a lesser percentage uses it. This implies that other techniques are favorable for these companies. Written policy could be time consuming since it involves formulation, documentation and consulting all the stakeholders. This policy also will require regular review basing on changes in the market. This cumbersome process therefore not favorable for export firms in Uasin Gishu County. The companies use other hedging mechanisms as also indicated in the findings. However, the companies who uses foreign exchange policy finds it effective by 40% of the respondents. These companies have created a formal policy for the management of foreign exchange exposure which will help them examine accounting and cash flow implications, taking into consideration their risk tolerance and corporate goals. Foreign exchange policies in these companies are tailored to the specific needs of the company, providing a framework for corporate decision making and specific guidelines for implementing FX risk management.

The findings also show that export firms hedge their companies from FX exposure partially. Though majority export firms do not use written policy for hedging, the companies use other techniques, but they use them partially. This implies that at some situations when the rates are favoring them, they employ hedging just to enable them to complete their transaction. The existence of different kinds of market imperfections, such as incomplete financial markets, positive transaction and information costs, probability of financial distress, and agency costs and restrictions on free trade make foreign exchange management an appropriate concern for

corporate management to employ hedging. Also hedged firm, being less risky can secure debt more easily and this enjoy a tax advantage. This would negate the Modigliani-Miller proposition as shareholders cannot duplicate such tax advantages. The companies use hedging partially implying that the companies may feel that they are not really exposed to exchange risk due to product diversification, diversified markets for their products, etc. Second, export firms may be using self-insurance against exchange risk and they may be feeling that shareholders can diversify exchange risk themselves, rendering corporate risk management unnecessary.

The findings in this study also indicates that export firms use internal technique by invoicing in foreign exchange currency and external technique using spot transaction. The findings also show that spot is an effective external hedging technique implying that both parties involved in foreign exchange fulfil their obligations two working days after conclusion of the trade. Two-day period between conclusion and execution of the agreement is required for completion of the accompanying paperwork. The premium/discount to the spot price depends on the interest rate for the currencies concerned so the management uses spot transaction to hedge trading risks and the risks arising from financial transactions.

#### **4.2.3 Effects of Foreign Exchange Rate on Import Costs Influence Revenue Performance**

The study sought to determine the annual total purchases to arrive to import purchases for the last 5 years from 2013 to 2018. From the findings shown by table 4.4, the total purchases of the firm ranged between Kenya shillings 100 million and over 400 million Kenya Shillings.

On the currency used by the suppliers to invoice the companies, the study found by virtue of table 4.3 that majority of the companies are invoiced using US dollar as shown by 51%, Kenyan shilling as shown by 17%, Euro as shown by 16%, Sterling pound as shown by 10% and

Japanese yen as shown by 6%. This shows that US dollar was the most currency used to invoice export firms by their suppliers. The study sought to determine the extent of usage of foreign exchange currencies on import purchases and accounts payables and the impacts they have on the future payments to the foreign suppliers invoiced in foreign currency.

From the findings used in recording of purchases and accounts payable as depicted by table 4.3 and, the study revealed that export firms used the following currencies to record purchases and accounts payable. They include Kenya shilling, US dollar, Euro, sterling pounds and Japanese Yen as shown by 30%, 47%, 16%, 3% and 4% respectively.



**Table 4.4 Effects of foreign exchange rate on import costs influence revenue performance**

<b>Total Purchases (MKshs)</b>		<b>Frequency</b>	<b>Percentage</b>
Min	Max		
100	200	23	33
201	300	29	41
301	400	14	20
over 400		4	6
Total		70	100
<b>Currency invoiced by suppliers</b>			
Ksh		12	17
US\$		36	51
Euro (€)		11	16
GBP (£)		7	10
Japanese Yen (¥)		4	6
		70	100
<b>Currency used in recording purchases and accounts payable</b>			
Ksh		21	30
US\$		33	47
Euro (€)		11	16
GBP (£)		2	3
Japanese Yen (¥)		3	4
		70	100
<b>Currency used to pay foreign accounts payable</b>			
Ksh		7	10
US\$		37	53
Euro (€)		18	26
GBP (£)		5	7
Japanese Yen (¥)		3	4
		70	100

The study found out that export firms book foreign purchase and account payables using US dollars. This implies that highly liquid currencies with low transactions costs will be chosen as medium of exchange. Currency invoicing in international trade focuses primarily on transactions costs and the stability and attractiveness of the major currencies. Comparing US dollars, Kenya

shillings, Euro, GBP and Japanese Yen, US dollars seems to be preferred since it is cheaper to do transaction.

The findings show that majority export firms in Kenya have a positive change on annual imports on purchases. This implies that the companies could be having more clients to supply their products. It means that companies' purchases could be a reciprocal of its export, that as they export more, their production level is increased and therefore the companies increase imports of raw materials.

The findings indicate that the companies are invoiced using US dollars. This implies that the companies could be sourcing their raw materials from US since from literature a foreign supplier uses its local currency to cater for fluctuation rates in the market. So, having invoiced in US dollars the companies also make their records in US dollars, as shown by the findings. This means that booking purchase and account payables in US dollars ease the responsibility of finance personnel on FX exposure management. Also, goods and primary commodities that are invoiced in a single vehicle currency have low transaction costs. Setting the prices of these goods in one currency increases the international comparability of these prices and the transparency of the market. The intuition behind this being that in trade between low inflation industrial and high inflation the low inflation currency of the industrial country dominates.

The findings also indicate that the companies pay their foreign account payables in US dollars. This implies that the companies are protected from fluctuations risks. Making payments in the supplier's currency insulate the company from any changes of the prices between the start and the end of transaction.

#### 4.2.4 Effect of Foreign Exchange Rate on Export Sales on the Revenue Performance

The study sought to determine the annual total sales to arrive to export revenue for the last 5 years from 2013 to 2018.

**Table 4.5 Effect of Foreign Exchange Rate on Export Sales on the Revenue Performance**

Total Sales (MKshs.)		Frequency	Percentage
Min	Max		
400	500	11	16
501	600	51	73
601	700	5	7
701 and above		3	4
Total		70	100
<b>Currency used to invoice exports</b>			
Ksh		5	7
US\$		13	19
Euro (€)		47	76
GBP (£)		2	3
Japanese Yen (¥)		3	4
		70	100
<b>Booking of sales and receivables (Ksh.)</b>			
Yes		0	0
No		70	100
		70	100
<b>Currency for recording export sales and account receivables</b>			
Ksh		2	3
US\$		9	13
Euro (€)		53	76
GBP (£)		2	3
Japanese Yen (¥)		4	6
		70	100

From the findings on table 4.5, the study established that total sales ranged between 400 million to over 700 million. On the percentage of the annual export sales compared to the total sales, the study found that percentage of annual export sales as compared to total sales ranged between

15% and 35%. This shows that export firms also sell to foreign countries. The study sought to determine the percentage growth in the annual total sales in the last 5 years, from the findings the study revealed that this ranged between 15% and 35% of the annual total sales. This shows that there has been a significant growth in the annual total and export sales for export firms.

The study sought to determine the currency used to invoice the export sales by export firms as illustrated in table 4.5. From the findings, the study found that most of the companies use Euro as shown by 67%, US\$ shown by 19% and Kenya shillings shown by 7%. Few companies use GBP and Japanese Yen shown by 3% and 4% respectively. Thus, Euro is the most currency used by the export firms to invoice their export sales.

The study sought to determine the currency used to record sales and account receivable for export firms under study. From the findings, the study found that most of the export firms use Euro, US dollar, and Kenya shillings to record their sales and account receivables as shown by 76%, 19% and 7% respectively as indicated in table 4.5 above. This shows that Euro is used to record sales and account receivable. This sought to confirm if the usage of foreign currencies in export sales and account receivables has any impact on the future receipt of the foreign debts invoiced in foreign currency.

The findings of the study indicate that export firms book their foreign account receivables using Euro (€) implying that euro play a decisive role in the choice of booking currency in its trade.

The study sought to determine the currency used to record sales and account receivable for export firms under study. From the findings, the study found that most of the export firms use Euro. This implies that the company make its sales to European countries like Netherlands whose currency is Euro. The use of Euro enables the company to monitor the foreign prices basing market available at that time. This will enable the company to know when to make sales

and when to make imports provided that low prices are maintain when importing and high prices when exporting thus promoting the net income of the company.

#### 4.2.5 Analysis of Secondary Data on Revenue Performance

The study sought to establish the average sales per firm, the average number of transactions, average exposure managed, average tonnes imported and average tonnes of exports. These were presented in table 4.6

**Table 4.6: Analysis of Secondary Data on Performance**

Year	Average Sales turnover per Firm (Ksh millions)	Average Number of Transactions	Average Exposure Managed (Millions)	Average Tones of Imports	Average tones of Exports
2014	17.5	7	2.5	1.96	4
2015	19.2	10	1.9	2.15	4
2016	22.3	9	2.5	2.5	3.5
2017	15.1	7	2.2	1.69	3
2018	20.8	11	1.9	2.32	3
<b>Average</b>	<b>18.98</b>	<b>8.80</b>	<b>2.19</b>	<b>2.13</b>	<b>3.50</b>

Source: Ministry of Industry, Trade and Cooperatives, Eldoret Office (2019)

The study findings indicated that on average, the average sales per firm was 18.98 million annually, the average number of transactions per export firm was 8.8 transactions, average exposure managed was Ksh 2.19 million, average tonnes imported was 2.13 tonnes and average tonnes of exports was 3.5 tonnes.

The study findings are interpreted to mean that exposure managed was mainly from exports as the amount of imports was not as much as the exports. The study findings also indicated that sales turnover varied annually but the exposure managed was fairly constant at about 11%.

### 4.3 Inferential analysis of Quantitative Data

The study sought to determine the significance between the independent and dependent variable.

The results were presented in table 4.7

**Table 4.7: Inferential Analysis**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.589 <sup>a</sup>	0.346	0.329	0.51915

a. **Predictors: (Constant)**, Unrealized foreign exchange gain or loss, Foreign exchange rate on import costs, Foreign exchange rate on export sales

Model	Analysis of Variance- ANOVA <sup>a</sup>				
	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	21.001	4	5.25	19.481	.000 <sup>b</sup>
Residual	39.618	147	0.27		
Total	60.62	151			

a. **Dependent Variable: Revenue Performance**

b. **Predictors: (Constant)**, Unrealized foreign exchange gain or loss, Foreign exchange rate on import costs, Foreign exchange rate on export sales

Model	Coefficients <sup>a</sup>				
	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta		
1 (Constant)	1.446	0.351		4.126	0
Unrealized foreign exchange gain or loss	0.142	0.07	0.157	2.04	0.043
Foreign exchange rate on import costs	-0.118	0.082	-0.109	-1.438	0.153
Foreign exchange rate on export sales	0.33	0.077	0.335	4.271	0.000

a. **Dependent Variable: Revenue Performance**

The study findings on summary of the model indicate that 34.6 % of the data was used to compute the regression model. This implies that the regression model was correctly computed and therefore it was fit for the study. This also implies that most of the data were important in the study and that they produced the regression model. Only a small proportion of the data acted as outliers in the study.

The study results on ANOVA indicate the regression model was significant at  $P=0.000$ . This implies that the regression model was correct and therefore it was fit for the study. This implies that all the variables that were used in computation of the regression model were suitable and that they were used in the study affect the independent variable either positively or negatively.

The regression equation is therefore as follows.

$$Y = 1.446 + 0.142 (\text{Unrealized foreign exchange gain or loss}) + 0.118 (\text{Foreign exchange rate on import costs}) + 0.33 (\text{Foreign exchange rate on export sales}) + (\text{error})$$

This implies that foreign exchange rate on export sales (33%) then Unrealized foreign exchange gain or loss (14.2 %) and then finally Foreign exchange rate on import costs (11.8 %) affects Revenue performance the least.

#### **4.4 Hypothesis Testing**

The study sought to test the hypothesis of the study

**H<sub>01</sub>:** There is no significant relationship between influence of unrealized foreign exchange gain or loss influence and revenue performance of Export companies in Eldoret town, Kenya.

The study findings indicated that there was a significant relationship between unrealized foreign exchange gain or loss and revenue performance of export firm ( $p=0.043$ ). Therefore the

hypotheses There is no significant relationship between influence of unrealized foreign exchange gain or loss influence and revenue performance of Export companies in Eldoret town, Kenya is rejected.

**H<sub>02</sub>:** There is no significant relationship between foreign exchanges on import costs influence and revenue performance of Export companies in Eldoret town, Kenya.

The study findings indicated that there was a significant relationship between foreign exchanges on import costs and revenue performance of export firm ( $p=0.153$ ). Therefore the hypotheses. There is no significant relationship between influence foreign exchanges on import costs and revenue performance of Export companies in Eldoret town, Kenya is accepted.

**H<sub>03</sub>:** The effect of foreign exchange on export sales on the performance of Export companies in Eldoret town, Kenya.

The study findings indicated that there was a significant relationship between foreign exchange on export sales and revenue performance of export firm ( $p=0.000$ ). Therefore the hypotheses There is no significant relationship between influence foreign exchange on export sales and revenue performance of Export companies in Eldoret town, Kenya is rejected.

## **4.3 Discussion**

### **4.3.1 Respondent Company Profile**

From the findings the respondents were from finance department thus viable to have the knowledge of the foreign exchange exposure. Edens (2017) indicated in his study “A holistic view of corporate foreign exchange exposure management” that management of foreign



exchange requires conversant and knowledgeable person who can understand all the transactions with foreign parties. Foreign transaction in most case involves personal judgment basing on the environment and fluctuations of rates. Foreign exchange exposure can cost the company its income if not handle by a knowledgeable person. The study further discussed that FX management is a procedure that are implemented with local and foreign policies without neglecting a step. A company is always exposed to several risks since there's a continuous fluctuation of foreign rates, thus a knowledgeable employee has the advantage of monitoring, recommending and reporting changes in foreign markets.

Findings also shows that the export firms involved in the study have been in operation for more than seven (7) years. This deem to be able to have participated and understand fully on complete cycles of foreign exchange. A study by Power (2014) shows that several companies have not implement hedging mechanisms because they have not fully engaged themselves in foreign exchange. Companies with little experience, according to the study, have not prioritize on foreign exchange gains or losses due to fluctuations of FX rates. These companies would learn from experience companies about other ways of gaining through proper managing FX by accountant and finance employees.

#### **4.3.2 Unrealized Foreign Exchange Gain or Loss on Revenue Performance**

The study sought to determine hedging technique concerning the use of foreign exchange policy and the level of hedging in the companies. The study found out that most of the export firms in Uasin Gishu County do not use written foreign exchange policy and a lesser percentage uses it. The study by Zhu (2015) agrees with these findings that foreign exchange policy is an alternative way of insulating the company from foreign external risks. The study indicated that other

techniques such as financial instruments or derivatives are better than written foreign exchange policy. Spot and forwards are methods which can be employed with little costs and are effective in management. Written policies could sometime not be understood by stakeholders thus not participating in general management of the company.

However, a study by Koester(2017) indicates that written policy is an integral and consistent part of the company's overall policy towards counter-party risk and the policy should be regularly reviewed and, where necessary, modified to take account of new circumstances such as changes in the scale or nature of the company's foreign exchange operations or in the method of settlement used. Zhu (2015) describes FX policy as clear, concise and relevant and it includes the financial goals, exposures to be hedged, and management's tolerance for risk and may even specify dollar amounts to be hedged. The policy should address certain questions such as whether to hedge cash flow, balance sheet or earnings.

A study by Goldstein (2014) also found out that the policy assures that foreign currency positions are maintained within prudent limits to avoid excessive risk of loss to a financial institution's capital as a result of fluctuations in foreign currency prices, promote maximum availability of foreign exchange at competitive rates and it allows financial institutions to conduct business in a profitable yet prudent manner. The study stated that basically the board of directors of each financial institution are responsible for ensuring compliance with the requirements of FX policy and for establishing an appropriate policy to limit the amount of risk to the financial institution resulting from transactions in foreign currencies. The open foreign currency limits are the maximum acceptable levels for financial

institutions which are fundamentally sound, well-managed and which have no material financial or operational weaknesses.

Some company management is aware of firm's exposure to foreign exchange rate risk while others understand that in a perfect market a company cannot increase their value by hedging i.e. corporate diversification is not necessary, since individual investors can diversify risk themselves. However, these managers will partially hedge because the transaction costs involved to acquire various hedges are much lower for a firm than for an individual investor. Company managers are therefore responsible to take decisions which aim at minimizing or eliminating the negative effects of currency fluctuations on balance sheet and income statement values, a company's receipts and payments arising out of current transactions, and on long term future cash flows. It is upon the creativity and innovations of managers in financial instruments to mitigate the impact of foreign currency rate fluctuations.

The findings also show that export firms hedge their companies from FX exposure partially with written FX policy. A study done by Allayanis and Ofek (2017) proves the efficacy of managing foreign exchange risks and a significant amount of evidence showing the reduction of exposure with the use of hedging tools for managing these exposures. The study used a multivariate analysis on a sample of S&P 500 non-financial firms and calculate a firms exchange-rate exposure using the ratio of foreign sales to total sales as a proxy and isolate the impact of use of foreign currency derivatives (part of foreign exchange risk management) on a firm's foreign exchange exposures. They found a statistically significant association between the absolute value of the exposures and the (absolute value) of the percentage use of foreign currency derivatives and prove that the use of derivatives in fact reduce exposure. The study noted that existence of

different kinds of market imperfections, such as incomplete financial markets, positive transaction and information costs, probability of financial distress, and agency costs and restrictions on free trade make foreign exchange management an appropriate concern for corporate management.

The study (Allayanis and Ofek, 2017) also argued that a hedged firm, being less risky can secure debt more easily and this enjoy a tax advantage. This would negate the Modigliani-Miller proposition as shareholders cannot duplicate such tax advantages. The MM argument that shareholders can hedge on their own is also not valid on account of high transaction costs and lack of knowledge about financial manipulations on the part of shareholders (Allayanis and ofek, 2017).

However, a study by Giddy and Dufey (2016) explains with theories about the irrelevance of managing the risk of change in exchange rates. For example, the International Fisher effect states that exchange rates changes are balanced out by interest rate changes, the Purchasing Power Parity theory suggests that exchange rate changes were offset by changes in relative price indices/inflation since the Law of One Price should hold. The study shows that these two theories suggest that exchange rate changes are evened out in some form or the other.

The findings in this study also indicates that export firms use internal technique by invoicing in foreign exchange currency and external technique using spot transaction. A study done by Khoury and Chan (2016) agrees with the above findings in that the use of spot transactions involving two parties that the currency can be sold in the spot market and purchased in the forward market. The study indicates in this transaction, trade is done within two working days thus enables the parties to trade with minimal interference of FX rates fluctuations.

#### **4.3.3 Effects of Foreign Exchange Rate on Import Costs Influence Revenue Performance**

The study also sought to understand the annual import purchases in the last 5 years and the type of currency used by companies to pay foreign account payables. The findings indicate that majority of companies use US dollars to pay foreign account payables. McKinnon (1999) agrees with the findings and he argues that homogenous goods and primary commodities are likely to be invoiced in a single vehicle currency with low transaction costs. Setting the prices of these goods in one currency increases the international comparability of these prices and the transparency of the market. The advantage of a vehicle currency like the U.S. dollar, McKinnon argues, is also due to its long history and familiarity. Similar lines of reasoning can be found in Magee and Rao (1998). They make a distinction between strong and weak currencies according to low and high inflation currencies. The intuition behind this being that in trade between low inflation industrial and high inflation developing countries, the low inflation currency of the industrial country dominates. Also, for trade in primary products a vehicle currency (US Dollar) might be optimal. The importance of the choice between different currencies came back into the economic discussion when major exchange rates became flexible after the breakdown of Breton Woods in 1973. The first question of interest was then, who was to bear the exchange rate risk in trade when exchange rates were flexible. It was assumed that a risk-averse exporter preferred to invoice in his own currency – producer currency pricing.

A study by Anac and Gozen (2014) also agrees with the above findings. The study indicates that the choice of the currency in which international trade is invoiced has important implications both at the micro- and macroeconomic level. At the firm level, the profit maximization of firms engaged in international trade is clearly affected by their choice of currency while at the macroeconomic level the currency of invoicing in international trade affects business cycle

correlations between countries and the transmission mechanism of monetary policy. The consequences of currency invoicing on the pass-through of the exchange rate are at the core of the New Open Economy Macroeconomics literature. While traditional macroeconomics assumed that the price of exports is set in the currency of the exporter so that exchange rate fluctuations lead to expenditure switching away from the appreciating currency's goods, the new macroeconomic literature allows for the possibility of pricing to market, where prices are set in the local currency and do not fluctuate with the exchange rate. The study further indicates that some exporters prefer to price in their own currency to avoid price uncertainty (monetary habitat), others prefer the choice of currency invoicing as a decision between price uncertainty and quantity uncertainty. Exporters pricing in their own currency know the price they will receive, but the quantity they sell is uncertain because the price in the local market fluctuates with the exchange rate. When the demand for the exporter's good is very sensitive to price changes, the exporter may prefer to set the price in the currency of the competitors. The study (Anac and Gozen, 2014) concluded that the choice of currency invoicing is, thus, central both for profit maximization at the firm level and for the transmission of monetary policy.

#### **4.3.4 Effect of Foreign Exchange Rate on Export Sales on the Revenue Performance**

The study also sought to determine the effects of foreign exchange export sales on net income of the company. The study found out that most of the companies use US Dollar as shown by 53% of the respondents.

A study on 'Limiting Foreign Exchange Exposure through Hedging' done by Becker and Fabbro (2016) agrees with the above findings. The study, using a sample of 50 companies in Australia,

found out companies uses their local currencies to make payments in foreign exchange transactions.

Marston (1996) argues that transactions are prone to risks when the company uses suppliers' currency in that the supplier payments are made at the current market price. So, when the transaction is made using supplier's price low income hence losses are incurred by the company

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter will discuss the summary of the findings, the conclusion and recommendations of the study.

#### 5.2 Summary of Findings

The study sought to investigate the effects of foreign exchange exposures on revenue performance of export firms in Kenya. The findings of the study are summarized as follows:

The finding of the study indicates that finance department was responsible for dealing with risk management in their organization implying that the personnel in finance department are familiar with the transaction that involve foreign exchange. These personnel are not only competent but also effective and efficient to interpret and manage the risks behind foreign exchange.

The finding indicated that majority of the respondents (56%) indicated that their companies were using hedging partially implying that the companies may feel that they are not really exposed to exchange risk due to product diversification, diversified markets for their products, etc. Second, export firms may be using self-insurance against exchange risk and they may be feeling that shareholders can diversify exchange risk themselves, rendering corporate risk management unnecessary.

The findings on foreign exchange policy indicates that most flowers companies do not have written foreign exchange policy. This implies that the companies use other hedging mechanisms as also indicated in the findings. These other mechanisms include invoicing in foreign exchange currency and spot transactions as external techniques. The findings also show that spot is an



effective external hedging technique implying that both parties involved in foreign exchange fulfil their obligations two working days after conclusion of the trade.

The study further found out that the total purchases of the companies ranged between Kenya shillings 100 million and over 400 million Kenya Shillings. On the currency used by the suppliers to invoice the companies, the study found that majority of the companies are invoiced using US dollar. From the findings the study revealed that export firms used US dollar currencies to record purchases and accounts payable.

The study found out that export firms book foreign purchase and account payables using US dollars. This implies that highly liquid currencies with low transactions costs will be chosen as medium of exchange. Currency invoicing in international trade focuses primarily on transactions costs and the stability and attractiveness of the major currencies.

From the findings the study established that total sales ranged between 400 million to over 700 million. On the percentage of the annual export sales compared to the total sales, the study found that percentage of annual export sales as compared to total sales ranged between 15% and 35%. This shows that export firms also sell to foreign countries. The study sought to determine the percentage growth in the annual total sales in the last 5 years, from the findings the study revealed that this ranged between 15% and 35% of the annual total sales. This shows that there has been a significant growth in the annual total and export sales for export firms.

The study sought to determine the currency used to invoice the export sales by export firms. From the findings, the study found that most of the companies use Dollar (\$). The study sought to determine the currency used to record sales and account receivable for export firms under study. From the findings, the study found that most of the export firms use US Dollar. The export

firms book their foreign account receivables using US (\$) implying that dollar play a decisive role in the choice of booking currency in its trade.

### **5.3 Conclusion**

This study has addressed the foreign exchange exposure management practices of export firms in Uasin Gishu County. The empirical part of this study shows, foreign exchange exposure and the number of foreign currencies a company uses in its operations have significant explanatory relationships with FX exposure management practices that a company Employs. Foreign exchange exposure management in a company is not a day's work neither a responsibility to be done by anybody. FX management is a work involving knowledgeable employees who can interpret the fluctuation of prices in the market hence able to advice the company when to do its transactions. Therefore, companies should equip finance departments and invest more knowledgeable personnel for through them the company increases their foreign income.

Companies can employ written foreign exchange policies to manage foreign risks exposure. However other companies involved in FX can use different mechanisms in combination including internal and external techniques. Invoicing in foreign exchange currency is an appropriate internal technique while spot transaction is an appropriate external technique. These techniques help them examine accounting and cash flow implications, taking into consideration their risk tolerance and corporate goals. Foreign exchange policies for it to be effective should be tailored to the specific needs of the company, providing a framework for corporate decision making and specific guidelines for implementing FX risk management.

Companies should book their foreign purchase and account payables using US dollars. Highly liquid currencies such as US dollars have low transactions costs hence should be chosen as

medium of exchange. Currency invoicing in international trade focuses primarily on transactions costs and the stability and attractiveness of the major currencies. Comparing US dollars, Kenya shillings, Euro, GBP and Japanese Yen, US dollars is preferred since it is cheaper to do transaction. One role for an international currency is its role in trade invoicing. This matters since the use of US dollar in the invoicing of suppliers a central role in how shocks and how one designs optimal monetary policy. It is important to note that the choice of the currency in which international trade is invoiced has important implications both at the micro- and macroeconomic level. At the firm level, the profit maximization of firms engaged in international trade is clearly affected by their choice of currency while at the macroeconomic level the currency of invoicing in international trade affects business cycle correlations between countries and the transmission mechanism of monetary policy.

#### **5.4 Recommendation of the Study**

The research made the following research recommendations

The study established that some company employees are not familiar and conversant on some of the foreign exchange transaction and management of risk involved. The study therefore recommends that companies should explore the route of continued education for those in workplaces through short term training that should be very practical oriented.

It is also established that export companies in Kenya uses limited ways of insulating their risks in foreign exchange. The study therefore recommends that these companies and other companies in Kenya to venture in other ways of hedging foreign risks that has resulted to unrealized losses.

Though export companies are effective in using Dollar currencies to record foreign account receivables, Kenya Shillings currencies yet another opportunity that these companies can

venture. Literature has shown that companies have minimal losses when it uses local currencies to book foreign account receivables.

### **5.5 Suggestions for Further Studies**

The researcher recommends the following areas for further studies:

- i. The role of written foreign policy on financial performance of a company
- ii. Best combinations of internal and external hedging techniques for better financial performance of a company.
- iii. Effects of different currency booking on financial performance of a company

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