MAKERERE UNIVERSITY

FIRM CHARACTERISTICS, FOREIGN EXCHANGE RISK MANAGEMENT AND PERFORMANCE
A CASE OF EXPORT FIRMS IN UGANDA.

By

OLUKA MOSES
BCOM (Acc) MAK
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DECLARATION

This dissertation is my original work and has never been published or submitted to any University before for any award.

Signed: ……………………………………….   Date: …………………………………

Oluka Moses

2006/HD10/6009U

APPROVAL

This is to certify that this Dissertation has been submitted for examination with our approval as University Supervisors.

Signed ……………………………… Date………………………………………

Dr.Nkote Nabeta

Signed ……………………………… Date………………………………………

Dr. Joseph Ntayi (PhD)

DEDICATION

I dedicate this book to my beloved mother Amoding Florence, for all the support.

Not forgetting other family members and friends at large. May the almighty Lord reward you all

abundantly. God bless you, Amen.

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First and foremost I praise and thank GOD, the foundation of all wisdom from the depth of my heart for being the unfailing source of strength. I wish to extend my sincere gratitude to all those people who helped me make this work what it is. Special thanks go to my supervisors Dr. Nkote Nabeta and Dr.Joseph Ntayi for their invaluable support in terms of guidance, advice, encouragement, time and patience accorded to me where I most needed. I am indebted to the entire management of the Makerere University Business School especially the graduate research centre for the hospitality and friendship, never tiring to offer a hand. I am also grateful to my friends for always encouraging me and giving all the necessary impetus to finish. I am very happy to express my wholehearted gratitude to all my friends for their support. I would like to most acknowledge the goodness of the Almighty God, who has given me the life & health, the opportunity to obtain wisdom & knowledge and all the resources which have enabled me to come this far.

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LIST OF ACRONYMS

BOU: Bank of Uganda.

BTTB: Background to the Budget.

OTC: Over the Counter.

RER: Real Exchange Rate.

RIR: Real Interest Rate.

SPSS: Statistical Package for Social Scientists.

UBOS: Uganda Bureau of Statistics.

UEPB: Uganda Export Promotion Board.

UMA: Uganda Manufacturers Association.

URA: Uganda Revenue Authority.

US$:   United States Dollars.

ABSTRACT

This study sought to examine the relationship between firm characteristics, foreign exchange risk management practices and the performance of Ugandan export firms.

A cross sectional survey and correlation research design was applied to study export firms in Uganda from the Agricultural and Manufacturing .The unit of analysis was the export firms in Uganda.

The majority of firms were small size firms which raises the question as to whether their capital base can accommodate the budget for total utilization of foreign exchange risk management techniques. Large firms are more sensitive to currency movements than small size firms. Firm size was found not to be significantly related to the use of Foreign Exchange Risk Management techniques though it was positively related to Firm Performance. The use of Foreign Exchange Risk Management is also positively related to firm performance which implies that the better a firm can manage the risk associated with Foreign Exchange, the better the levels of performance it's likely to realize. Most of the firms were Adult firms and therefore these should have experience in export business and foreign exchange risk management. Age of the firm is not significantly related to the use of Foreign Exchange Risk Management and a weak positive relationship to Firm Performance. The Internationalization of the firm is significantly related to the use of Foreign Exchange Risk Management and positively related to Firm Performance. Characteristics of the firm have an influence on the choice of hedging techniques. The volatility of the US$ against the Uganda shilling affects export trade. The availability of exchange risk management techniques coupled with their complexity calls for expertise in the adoption and usage. Export Firms are advised to pay more attention to foreign exchange rate movements and the related exposure management that a rises so as to benefit from exports.

CHAPTER ONE

INTRODUCTION

1.1   BACKGROUND

The adoption of a floating rate regime, the rapid globalization of national economies and the attempts by multinational corporations to seek investment opportunities and markets beyond their immediate borders account for the increasing exposure of firms to foreign exchange risk. Exchange rate variability is a source of cash flow risk for firms with foreign denominated assets and liabilities as well as firms with over seas operations, (Salifu *et al.,* 2007).The exchange rate is an important trade related instrument in that it directly affects the prices of exports and imports. In simple terms an appreciation of the exchange rate increases the prices of Ugandan exports, damaging competitiveness and decreases the price of imports, a depreciation of the exchange rate has the opposite effect. According to the Uganda Export Promotion Board, (2000), the exporter faces two kinds of foreign exchange risks. The first is the risk of depreciation of the foreign currency in which an exporter has invoiced the export contract. If the currency depreciates the exporter would receive less money in the home currency. The second is the risk of appreciation of the foreign currency in which the exporter holds a due. This would affect the exporter's product making it more expensive a broad.

The overall long term impact of exchange rate movements is determined by a number of complex linkages and time lags making it difficult to isolate (Uganda Trade Review, 2005).

Foreign exchange risk management according to Abor (2005) as cited by (Prindle, 1996) & Clerk *et al.,* (1993), is hedging against risk through a number of techniques, all actions taken to change the exposed positions of a company in one currency or in multiple currencies and these

are the techniques of making offsetting commitments in order to minimize the impact of unfavorable potential outcomes. The different types of hedging techniques are ; payments netting, prepayment, leading & lagging , hedging with derivatives , forward & futures contracts , currency options and currency swaps.

Foreign exchange fluctuations expose companies to foreign exchange risk, (Abor, 2005), moreover, this coupled with the different firm characteristics have a bearing on the degree of foreign exchange risk management in terms of policy and techniques, and consequently on the performance of export firms.

The Uganda shilling sustained steady appreciation against the US$ since 2006/07,appreciating by approximately 15% against the US$ since 2003.From June 2006 to June 2007 the shilling appreciated by 11.6% against the US$, during 2007/2008 the exchange rate continued to face appreciation pressures with the Uganda shillings appreciating by 8% against the US$, and between October 2008 and May 2009 the shilling depreciated against the US$ by 1.7%.(Uganda Trade Review ,2005 & Background to the Budget , 2007/2008, 2008/2009& 2009/2010).

Exchange rate volatility creates a risky business environment in which there are uncertainties about future profits and payments. These are especially exacerbated in countries where financial instruments for hedging against foreign exchange risk are not developed, which is the case in many developing countries including Uganda.(World Bank & MTTI, 2006).

1.2 Statement of the Problem

The US$ is the major currency used by Export firms in Uganda in their export transactions. The exchange rate between the US$ and the Uganda shilling has been fluctuating (Background to the Budget, 2007/2008, 2008/2009& 2009/2010), this is a source of foreign exchange risk for the export firms, although the Ugandan export volumes on aggregate have shown an increasing trend in the last seven years (2001-2008) from US$ 451,765,000 to US$ 1,724,300,000 (World Bank & MTTI 2006).These fluctuations between the US$ and the Uganda shilling over the period 2002-2008 have affected export firms differently depending on the direction of the exchange rate.

This exposure has affected the performance of these firms income or payment relationship, given the fact that these firms' characteristics may not fit into the Risk management strategies. Firm characteristics influence the use of foreign exchange risk management techniques to deal with appreciation and depreciation experienced by firms in Uganda which affects their operations The size of the firm, existence of the firm and Internationalization of the firm amongst other firm characteristics have been singled out to try to explain how export firms have faired on in their Export performance in regard to the appreciation and depreciation of the Uganda shilling against the US$ in light of the sophisticated nature of conventional foreign exchange risk management techniques.

1.3   Purpose of the Study

The purpose of the study was to examine the relationship between firm characteristics and foreign exchange risk management and performances of export firms

1.4   Objectives of the Study

i)   To establish the relationship between firm characteristics and Export firms'

performance.

ii) To establish the relationship between firm characteristics and foreign exchange risk

management.

iii) To establish the relationship between foreign exchange risk management and Export

firms' performance.

1.5   Research Questions

i)   What is the relationship between Firm characteristics and export firms'

performance?

ii)   What is the relationship between firm characteristics and foreign exchange risk

management?

iii) What is the relationship between foreign exchange risk management and Export

firms' performance?

1.6 Scope of Study

1.6.1 Geographical Scope

The research focused on firms in Uganda involved in Export trade, specifically those in

Kampala, Jinja, Entebbe and Mukono cities

1.6.2 Subject Scope

The study sought to focus on the firm characteristics, exchange rate volatility, foreign risk management and performance of export firms in Uganda in terms of their earnings (profitability), as prompted by the appreciation of the Uganda shilling against the US$ as from June /July 2006. The exchange rate volatility of the previous years was put in to perspective.

1.7   Significance of the Study

The research shall contribute to the knowledge of foreign exchange exposure and risk management. It shall bring to light the practice of Ugandan firms ,as to whether they give due attention to foreign exchange risk ,if not ,they can adopt these techniques to help salvage themselves from the increasing foreign exchange exposure as the effects are becoming a global phenomenon.

The financial institutions shall gain from this as they design foreign exchange rate exposure management products for the Ugandan Market.

To the scholars this shall stimulate research on the subject of foreign exchange risk as the capital markets activities and trading pick up in Uganda (more firms being listed).It shall also augment the limited body of empirical literature on exchange rate exposure of firms in Sub Saharan Africa .The results of this study shall serve a useful guide to corporate managers, financial managers and investors on the degree of foreign exchange exposure and the need to effectively manage firm exposure.1.7 Scope of the Study

1.8 Conceptual Frame Work

Figure 1.1 conceptual framework
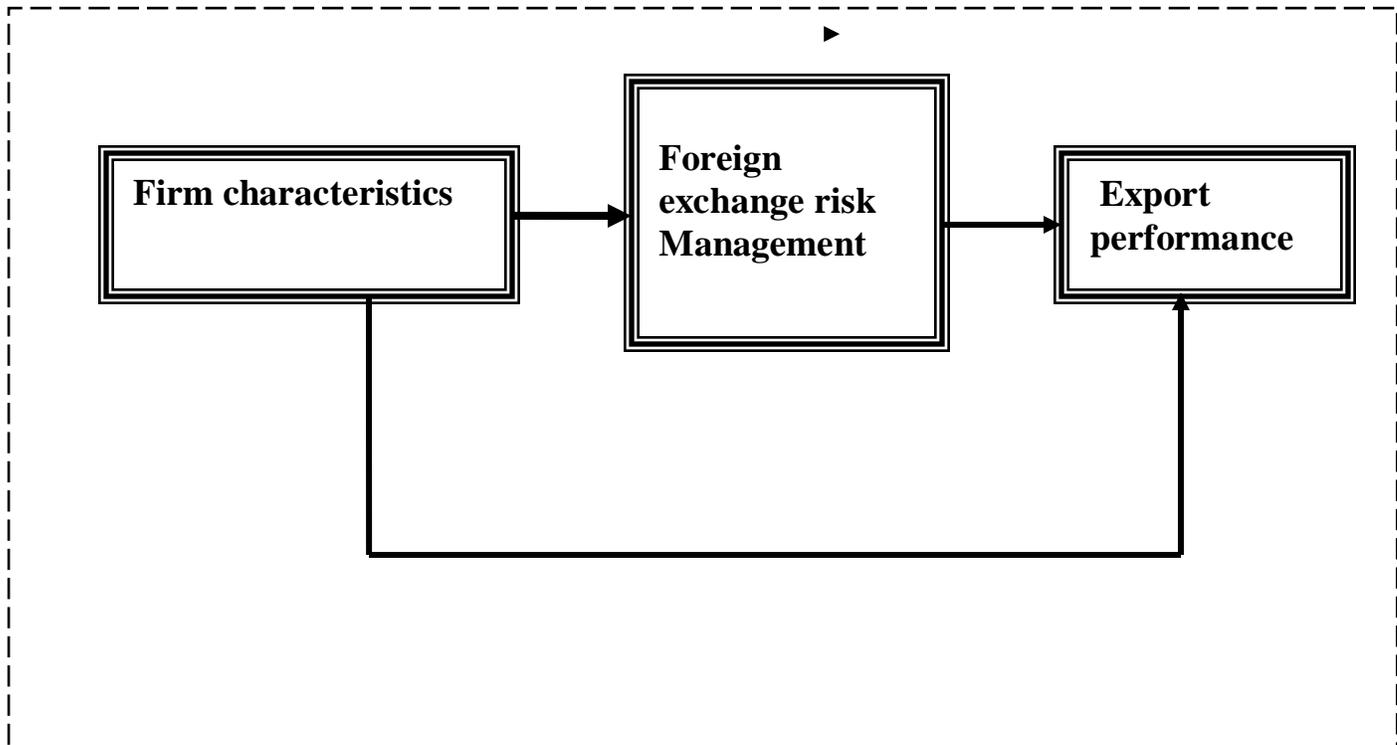
Source: Abor (2005),Bartram *et al*, (2007), Iatridis (2007) ,El-Masry (2006)

The conceptual framework operationalizes the various variables to show how the independent variable, Firm characteristics relate to foreign exchange rate risk with or without the application of foreign exchange risk management, (hedging) to impact on the dependent variable performance in terms of export performance.

CHAPTER TWO

LITERATURE REVIEW

2.1 Foreign Exchange Risk

According to Featherson, Littlefield & Mwangi (2006), foreign exchange risk arises when

fluctuation in the relative values of currencies affects the competitive position or

viability of an organization. Firms are exposed to foreign exchange risk if the results of their

projects depend on future exchange rates and if exchange rate changes cannot be fully

anticipated. Generally, companies are exposed to, Transaction exposure, Economic exposure and

Translation exposure (El-Masry, 2006; Salifu *et al*, 2007).

Transaction risk occurs where the value of the existing obligations are worsened by movements

in the foreign exchange rates. Transactional exposure arises from future cash flows such as trade

contracts and also occurs where the value of existing obligations are affected by changes in

foreign exchange rates. Economic risk relates to adverse impact on entity /income for both

domestic and foreign operations because of sharp, unexpected change in exchange rate.

Operational exposure occurs where the market position of a firm changes as a result of the effect

of exchange rate changes on competition, prices and demand (El-Masry, 2006).   Translation

risk is also related to assets or income derived from offshore enterprise. Translation exposure

occurs through currency mismatch and it is related to assets or income derived from offshore

enterprise (Madura, 2003).

Contingency exposure occurs from possible revaluations arising from future liabilities. The total

or economic exposure of a firm refers to all exchange rate effects through all the four channels of

foreign exchange rate risk (El-Masry, 2006).

2.2 Categories of Foreign Exchange Risks

Economic currency risk according to Uganda Export Promotion Board (2000) and Abor (2005) this occurs as a result of changes in real exchange rates. Economic currency risks are not directly accounted for in the financial statements of an exporter. Fluctuations of this sort have indirect financial effects as export transactions or sales may not take place as a result of the loss of competitiveness that is economic currency risks prevent sales from taking place. Economic currency risk has effects a cross the board, irrespective of the currency in which the quotations or the sales are made. Factors like the strength of competitor's currency, relative cost and prices in each country, business structures, and etcetera all lead to economic currency risks. Another category is Trading risk, occurs because there is an appreciation or depreciation in the currency in which sales or purchases are made. If the currency of the importing country appreciates, the exporter stands to gain. Trading risks occur either because of currency in which pricing was quoted is not the currency in which costing is done, or because an assumed (future) exchange rate is used at the time of price decision .However, because of the time lag between the pricing decision and the conversion of the sale proceeds into the currency in which costing is done, the assumed rate can be different from the actual exchange rate, (Uganda Export Promotion Board, 2000; Abor, 2005).

According to Uganda Export promotion Board (2000), an exporter's vulnerability to foreign exchange risk depends on the currency mix and competitive structure. Risk may be greater on account of currency mix if the exporter exports to more than one country. A balance of outflows and inflows of different currencies has to be achieved in order to minimize risk. As for the competitive structure, the particular industry in which the exporter is operating may also be prone to currency risks. More competition in the industry will expose the exporter to currency

risks due to price sensitivity. According to El-Masry & Omneya, (2007), foreign exchange exposure is the sensitivity of changes in the real domestic currency value of assets, liabilities or operating incomes to unanticipated changes in exchange rate.

2.3   Foreign Exchange Risk Management

Organizations can choose to do nothing about their exposure and accept the consequences of variations in currency values or the possibility that their governments may impose restrictions on the availability or transfer of foreign currency, they can "hedge against their exposure", that is they can purchase a financial instrument that will protect the organization against the consequences of those adverse movements in foreign exchange rates. They can also adopt partial hedging, but this is after a careful review of the risk (Featherson *et al.*, 2006).

According to Bank of Uganda Publications (2000), Risk management is described as the performance of activities designed to minimize the negative impact (cost) of uncertainty (risk) regarding possible losses. It is a systematic process for the identification and evaluation of pure loss exposure faced by an organization or an individual and for the selection and implementation of the most appropriate techniques for treating such exposure .The process involves; identification, measurement, and management of the risk. The objectives of risk management include; minimizing foreign exchange losses, to reduce the volatility of cash flows, to protect earnings fluctuations, to increase profitability and to ensure survival of the firm (Fatemi, 2000).

Basic elements of a sound risk management system are synthesized from Bank of Uganda guide lines focus on five elements of a sound risk management system that is, an active board & management oversight, adequate policies, procedures & limits, adequate risk monitoring and

management information systems (MIS), adequate internal controls and a risk management committee. A well functioning risk management system would clearly and unambiguously define where and with whom the responsibility for the risk lies (Abor 2005), foreign exchange risk management follows these principles too. According to Abor (2005) and Uganda Export Promotion Board (2000), Foreign exchange risks can be managed in various ways; however the risk managers' choice of the different types of hedging techniques may be influenced by costs, taxes, effects on accounting conventions and regulation. Planning for, covering foreign exchange risk is hedging the risk.

2.4 Techniques of Foreign Exchange Risk Management

Payments netting is system is used in international transactions, by multinational companies and involves reducing fund transfers between affiliates to only a netted amount. It requires a firm to have centralized organization of its cash management. There are basically two forms of payments netting. These include; Bilateral netting payment is valuable only to the extent that subsidiaries sell back and forth to each other. Multinational netting involves the transfers of a netted amount among three or more affiliates. The use of payments netting reduces the physical flow of another. As a result measurable costs such as the cost of purchasing foreign exchange, the opportunity cost of the float (time in transit) and other transaction costs are minimized or accommodated. Netting systems are set up to reduce the costs associated with inter-affiliate cash transfers that result from business transactions. The pay off from Multinational netting systems can be large relative to their expense Abor (2005).

Prepayment method of payment requires the importer to pay to exporter in full before shipment is made. Payment is usually made in form of international wire transfer to the exporter's bank account or foreign bank draft. This method affords the supplier the greatest degree of protection and it's normally requested of first time buyers whose credit worthiness is unknown or whose countries are in financial difficulty. If currency is thought to appreciate then prepaying enables the company to pay at a lower rate. If the future rate finally depreciates, the firm is worse of than if it had done nothing. This method posses a big risk to the importer as he or she depends totally on the integrity of the exporter but offers the greatest protection for exporters because no credit extension is required. The primary disadvantage of pre payment is that it can limit the exporter's sales potential Abor (2005)**.**

Another technique according to Abor (2005), is the leading and lagging, a lead strategy involves attempting to collect foreign currency receivables only when a foreign currency is expected to depreciate and paying foreign currency payables before they are due when a currency is expected to appreciate. On the other hand a lag strategy involves delaying collection of foreign currency receivables if that currency is expected to appreciate and delaying payables if the currency is expected to depreciate. Leading and Lagging involves accelerating payments from weak currency countries and delaying in flows from strong currency countries to weak currency countries. However lead and lag strategies can be difficult to implement. The firm must be in position to exercise some control over payment terms. Leading and Lagging is a zero sum game, that is while one party benefits, the counter part looses. Thus the benefit gained from taking advantage of exchange may be out weighed by the cost of losing business   due to the zero sum

nature of this method. The practice of leading and lagging has developed as one of many methods of hedging against adverse impact of exchange rate movements.

Hedging with derivatives, as elucidated by Abor (2005), is hedging which includes all acts aimed at reducing uncertainty about future (unknown) price movements in a commodity, financial security or foreign currency. Undertaking forward or futures sales or purchases of the commodity, Security or currency can be done over the counter (OTC) forward or in the organized futures market. As an alternative to speculation many financial managers are turning to hedging strategies and using derivatives to reduce foreign currency risk. Previous studies have shown evidence use of derivative products among Canadian, US and European firms in managing their risk including long run exchange rate exposure.

Forward and Future contracts, a forward contract involves a commitment to trade a specified item at a specified price at a future date. It is a contract made today for delivery of an Asset at a pre specified time in future at a price agreed today. No money changes hands until the expiry time. On the other hand a Futures contract is a special type of contract with standardized delivery dates and sizes that would allow trading on an exchange. A system of margin requirements designed to protect both parties against default Instead of the parties realizing the profit or loss at the expiry date, futures are evaluated every day and margin payments made across the life time of the contract. Forward and futures contracts are relatively similar foreign exchange instruments. Both forward and futures are agreements that bind two parties to exchange currencies at a fixed exchange rate at a future date. Essentially both contracts offer the benefit of securing cash flows on imminent transactions (Abor, 2005).

There are however a number of significant differences that distinguish forwards from futures. Forward contracts are customized in terms of the amounts and maturities of the currencies exchanged and are negotiated with commercial banks or big financial institutions. Conversely, futures contracts have standard lot sizes (which vary by currency) mature on a standard (quality) basis and are executed by securities brokerage houses on an organized exchange. Moreover futures major currencies verses the US dollar, the Mexican Peso, the British pound, the Swiss, France and the Austrian dollar) while forward contracts can be established for any currency. The difference in the usage level between forward and the futures contracts may be explained by the flexibility of forward contracts which can be favored to meet the customer needs as opposed to futures which can not. In addition the costs associated with futures contracts tend to be significantly higher than those associated with forward contracts, both in terms of transaction costs and prepayment required resulting in negative benefits cost analyses (Abor ,2005).

Currency options and Currency swaps is a strategy where a currency option gives the right but not the obligation to buy or sell a specific currency at a specified period of time. Options provide a number of advantages, they are used to hedge against exchange rate fluctuations arising from foreign investments or funding in any currency. Finally options offer a very high degree of gearing or beverage which makes them attractive for speculative purposes too. Exporters the rate moves against them and can take advantage of any gain if the rate moves in their favor. While American options can be exercised in whole or in part at any time up to expiration, European options can be exercised only at expiration. On the other hand a typical currency swap is an agreement between two parties to exchange currencies at the sport or current exchange rate, with the agreement that they will reverse the exchange rate that prevailed at the time of the initial

exchange. Currency swaps require the party receiving the currency with a higher interest rate in that country's currency to pay the interest to the counter party at a rate that represents the interest rate differential between the two countries. Currency swaps provide an opportunity for customers to balance currency resources in situations where there are excess funds in one currency and shortage of funds in another .Currency swaps may be so sophisticated or intimidating to most companies and often require extensive documentation. In a swap transaction of the simplest type, a currency is purchased in the spot market and simultaneously sold in the forward market. Conversely, the currency can be sold in the spot market and purchased in the forward market (Abor, 2005).

Borrowing the exposed currency is more flexible than forward contracts, especially for small contracts. Borrowing can be arranged for more flexible periods, with variable interest rates rather than fixed rates. The conditions for rolling over also tend to be more flexible than forward contracts (Uganda Export Promotion Board, 2000).

Matching liability techniques seeks to make inflows of currency equal to outflows to reduce translation risks by borrowing in the same currency and in the same amount as the exporter's assets. Thus if the US$ value of the asset declines, the exporters US$ liability declines as well, thus maintaining a balance sheet value at existing levels (Uganda Export promotion Board, 2000).

Discounting, factoring and forfeiting; Discounting is similar to borrowing in foreign currency or forward contract. If the shipment is on an open account basis where the invoices can be presented to a factor who would pay the exporter on maturity or prior to maturity, at a discount.

Factoring tends to be more expensive than forward contracts and is not often used as a hedging devise. Forfeiting is similar to discounting and factoring but for the fact that forfeiting involves medium and long term bills of exchange and not short term ones. Forfeiting is used more as a tool to avoid credit risk than a hedging tool. Exporters can open up foreign exchange accounts instead of converting all earnings straight in to local currency and they can also negotiate to be paid in currencies which are known to be stable (Uganda Export Promotion Board, 2000).

Abor (2005), indicates that, the practical relevance of most research findings in foreign exchange management lies in the fact that even though there are a number of techniques such as balance sheet hedging, use of derivatives, leading and lagging amongst others available to manage foreign exchange risk in most developed countries these measures tend to be rather too sophisticated and difficult to implement in developing countries, with underdeveloped financial systems.

Foreign exchange risk is classified under financial risk .The market for financial risk management instruments is well functioning and a nearly complete one. The attendant implication is that the array of risk management instruments is exhaustive, products are sophisticated and the task of risk management is fairly complex. This explains the relatively high ranking that is given to financial risk (Fatemi, 2000).

This study shall attempt to elucidate how firm characteristics in terms of size of the firm, age of the firm, and level of internalization relate to foreign exchange risk management and eventual impact on the performance of export firms in the Ugandan economy, which to some extent as been found out by El-Masry *et al.,* (2007), as being positively related.

The managers of born-global firms must play the role of (or hire) international accountants, exchange rate forecasters, geopolitical analysts, derivatives experts, global marketers, and international human resource specialists. This is a challenge to even the mature firms with extensive resources and organizational knowledge (Gleason et al as quoted by Bakunda 2006).Characteristics of the firms appear to explain the choice of hedging techniques but the use of certain hedging techniques appears to be associated with increases in the variability of some accounting measures (El-Masry, 2006).

2.5   Firm Characteristics

According to Bakunda,(2005), the engagement of a firm in international trade, describes the export development phenomenon at firm level, the progressive engagement of firms in export trade activities. The concept has been used in recent literature to explain the process by which individual firms initiate, develop and sustain their involvement in international trade activities. Increased foreign market involvement and increased foreign market commitment is reflected in; direct foreign market entry, use of foreign intermediaries, establishment of own sales branch (es) or marketing office(s) a broad and the setting up of own production facilities in a foreign market.

Size of the firm; firms begin as small exporters and as they press through the stages, size increases and they become experienced large exporters. The size of the firm was considered by many of the early researchers as one of the facilitating factors for export involvement and success. The meta-analysis by Chetty &Hamilton (1993) as quoted by Bakunda (2006), concluded that firm size had a medium positive effect on international behavior and performance, foreign exchange risk management being a major component in minimizing exposures that could affect export sales returns. The challenges of firm size hinges on the lack of

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uniform measurement of firm size, one strand is based on total firm sales and another on the number of employees. Small size less than £ 50 million turnover, medium size £50 million but less than £ 250 million turnover and larger size mote than £ 250 million turnover.

However recently with increasing technological development, the effect of firm size on export involvement and success has tended to diminish. The increasing use of e-commerce and on-line marketing has dramatically removed whatever deterrence size brought to the internationalization process of SME's even in the traditional industries, (Ibeh , 2002 as cited by Bakunda ,2005).Age of the firm; measured from the time of commencement of business activity as a registered legal entity. The categorizations by El-Masry (2006), Young firms are those with less tan 6 years, while Adult firms are those with 6 years but less than 10 years and the mature firms are more than 10 years. Expressed as the number of years in business appears to have either a negative effect or an insufficient effect on export behavior of which foreign exchange risk management is a component.

2.6 Performance

Fluctuations in exchange rates may decrease or eliminate profits, or may even result in losses, Uganda Export Promotion Board (2000).In an attempt to contribute to the performance of the firm, the goals and objectives of risk management shall be considered; ensuring survival of the firm, enhancing reported results, increasing the market value of the firm, influencing behavior of subsidiaries and managerial employees, increasing profitability, reducing cash flow volatility and earning volatility. The research by Abor (2005), on Ghanaian firms revealed that, they are more interested in the business as a going concern knowing that increased foreign risk could result in

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the collapse of the firm. They could therefore work on minimizing the risk exposure of the firm to ensure continuity.

Overall theory supports the existence of a relationship between the value of the firm and exchange rate movements. Economic theory suggests that changes in the exchange rate can produce a shift in the 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. An exchange rate movement affects both the prices of imported finished inputs, thus influencing indirectly those companies that compete with such firms, (Grambovas and Mcleay, 2006 as cited by El-Masry *et al*, 2007).

A number of studies especially in the USA and the major European stock markets have documented evidence of exposure of many firms with significant assets and cash flows denominated in foreign currencies. In many of these studies, exposure is measured by estimating the sensitivity of stock returns to exchange rate changes. Whilst there have been many empirical studies which have examined the relationship between foreign exchange exposure and firm value their results have however been mixed insensitive. Overall empirical analysis confirms that currency fluctuations will affect firm values especially with regard to the influence of exchange rate movements on the cash flows and accounting earnings of companies with international exposure, and on their stock prices. Present and previous studies have found out that the sensitivity of firm's values to exchange rate changes is positively correlated with the extent of foreign operations. This is due to more extensive hedging strategies undertaken by firms which are more internationally involved. (El-Masry *et al*, 2007).

Export performance is the relative success or failure of the efforts of a firm or nation to sell domestically produced goods and services in other nations. Export performance can be described in objective terms as sales, profits, or marketing measures or by subjective measures such as distributor or customer satisfaction. To measure export performance volume, value, competitiveness and export market share are adopted from Bahmani & Hegerty (2007), for this study

2.7 Relationship between Firm characteristics, Foreign Exchange Risk Management & Export Performance

El-Masry *et al* (2007), in the study of size and international operations, hypothesized that the larger the firm size , the lower the exposure beta should be .Larger firms should have sufficient resources , in terms of personnel and knowledge, to hedge their risk in international transactions leading to lower exposure .Firms with high level of internationalization actually are the ones with greater exposure .However ,they are also the ones with the incentive to hedge their exposure .As a result , the level of international activity can lead to higher or lower exchange rate exposure .Several measures have been used in the empirical literature to capture the international involvement of a firm but foreign to total sales ratio and foreign to total assets ratio are the most widely used and accepted measure of the extent of internationalization .A number of studies have found a positive association between foreign sales and exchange exposure. Firms' foreign activities are broadly and significantly related to exchange rate exposure and that, after controlling for these activities large firms are more sensitive to currency movements than small firms. On the other hand, firms with higher fraction of foreign debts have more negative foreign rate exposure, though this result is statistically insignificant.

Studies by Shin & Soenen (1999) as quoted by El-Masry *et al* (2007), have found significant evidence that US small multinational firms are exposed to foreign exchange risk and benefit from a weakening in the international value of the US dollar. They emphasize and argue that a smaller but significant negative effect for large firms with foreign operations exists. The findings of Solakoglu (2005) according to El-Masry *et al* (2007), in the study on the exchange rate exposure of Turkish companies for the period between 2001 and 2003, found that size of the firm and share of export revenue in total revenue have a negative effect on the exposure level.

According to El-Masry (2006), larger firms are more likely to use derivatives than medium and smaller firms, public companies are more likely to use derivatives than private firms and derivatives usage is greatest among international firms. The study further indicates that usage of derivatives is more common among larger than small firms and that the principal use of derivatives is for hedging purposes.

Firms engaged in international trade are often confronted with foreign exchange risk .Foreign exchange risk management is therefore crucial for companies frequently trading in the international market Abor (2005).The adoption of foreign exchange risk management techniques in firms has a positive relationship with the firm's degree of internationalization (El-Masry *et al* 2007).Salifu , Osei & Adjasi (2007), have suggested further studies to examine the importance of firm size and location in foreign exchange exposure management and firm performance, there is evidence of risk exposure particularly in the US dollar with a positive exposure in the manufacturing sector and negative exposure in the retail sector. According to El-Masry (2006), theoretical models of corporate risk management indicate that derivatives use increases with the

leverage, size, the existence of tax losses, the proportion of shares held by directors and the payout ratio. The corporate use of derivatives decreases with interest coverage and liquidity. Hedging is not without cost and it has proved quite challenging. Because the financial markets in the developing countries (LDC) are underdeveloped, the cost of hedging combined with the small foreign exchange transactions in these countries can be considerable and appear prohibitive. In some countries the hedging product may not be available. Their findings on foreign exchange management reveal that even though a number of techniques such as balance sheet hedging, use of derivatives, leadings & lagging amongst others available to manage foreign exchange risk in most developed countries, these measures tend to be rather too sophisticated and difficult to implement in developing countries with underdeveloped financial systems.

CHAPTER THREE
METHODOLOGY

3.1   Introduction

This section looks at the research methods and instruments used by the researcher. It specifically looks at the research design, study population, sampling, data collection, reliability and validity of the instruments, measurement of the variables and data analysis techniques that were used to answer the research objectives.

3.2 Research Design

The researcher used cross-sectional and correlation research designs. It was cross- sectional as the time covered was only that during the study and correlation as the relationship between variables was established.

3.3 Study Population

The study population was made up of 267 firms in the Export Trade; as provided by the Uganda Export Promotion Board, Uganda Export Directory (2005).

3.4 Sampling Design

Purposive sampling design was used to select 30 firms from 267 export firms comprising of Agricultural and manufacturing export firms. The respondents included ; Executive & Senior management, Treasury management, financial analysts, Finance managements, export

management that were selected using judgmental and purposive methods because they were in the best position to give the required information

3.5 Sample Size

The study drew from two sectors of agriculture and manufacturing. The sample size comprised of 30 Export firms in Uganda determined using Roscoes's 1975 rule of thumb that states that sample sizes of 30 and above are sufficient. Study units were chosen using proportionate stratified sampling and simple random sampling to ensure that it comprises the entire firm's representation. From each firm 3 respondents were considered, Executive & Senior managers, Treasury managers, financial analysts, export managers and Financial managers were considered appropriate respondents because they make decisions regarding the general management of the export business, Foreign Exchange Risk Management and are responsible for preparing company financial statements.

Table 3.1 Population and Sample size

Sector category	Total population size (number of firms)	Number of Firms in Sample	Percentage (%) of Final sample	Response Number of Firms	Response rate (%)
Agricultural	136	16	53	16	53.33
Manufacturing	131	14	47	13	43.33
TOTAL	**267**	**30**	**100**	**29**	**96.7**

Source: Computation by the Researcher

3.6 Data Source

3.6.1 Primary Data

The primary data was collected from Export firms by use of questionnaires; Executive & Senior management, Treasury management, financial analysts, Finance managements and export management were targeted

3.6.2 Secondary Data

Secondary data was requested from UEPB, URA, BOU, UMA, UBOS, Banks (Stanbic Bank & Standard Chartered Bank) and individual company records & publications. This was mainly for determining export volumes & earnings and performance.

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3.7 Instruments of Data Collection

With the help of research assistants, primary data was collected using Open and closed ended Questionnaires, which were self administered as there was need to obtain a high response rate,

give explanations to the questions and reduce time on data collection. Open-ended Questionnaires was sought to encourage respondents to share as much information as possible in an unconstrained manner

Closed-ended Questionnaires involved questions that were answered by simply checking a box from a set provided by the researcher.

3.8 Measurement of Variables

Firm characteristics was in terms of The size of the firm measured by number of employees & sales turnover, (El-Masry 2007 ; Abor 2005), Existence of the firm measured by number of years from establishment (El-Masry,2007) and Internationalization measured by trade intensity using ratio of export sales to total sales (Bakunda, 2005).

Export performance was measured by export sales turnover (Bahmani & Hegerty, 2007).

Foreign exchange risk was measured by the real exchange rate El-Masry (2006).

Foreign exchange risk management measured in terms of availability of the instruments and the cost of the instruments (El-Masry, 2007 & Abor, 2005)

3.9 Reliability and Validity

The reliability was measured using the Cronbach Alpha Coefficient while on the other hand, the Validity of the questionnaire was assessed using the Content Validity Index. The results in the table below showed that the Variable items were both reliable and valid as observed from the coefficients which were above 0.5 in either case.

Table 3.2 Reliability and Validity

Variable	Anchor	Cronbach Alpha Value	Content Validity Index
Firm Characteristics	Anchor	0.661	0.846
Risk Management	Anchor	0.659	0.800
Performance	Anchor	0.670	0.667

3.10 Data Processing, Presentation and Analysis

Having collected the data it was edited for consistency, errors and omissions; tables and bars graphs were used to present the data. The unit of analysis was the individual export firms and data was analyzed using computer programs especially SPSS. The analyzes tools used were ; spearman correlation coefficient to test the relationship of between variables , regression analysis for determining the extent to which the independent variables explained the variations in the dependent variables, the chi-square tests were used to test for differences and factor analysis was used to reduce factors to a manageable level for further analysis

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1   Introduction

In this chapter, analysis tables, charts and figures are presented and the interpretations given in accordance with the research objectives. The findings reported in this chapter are derived from a survey conducted using interviews, questionnaires, and documentary analysis. The findings were from 29 export firms and the respondents included: Exporting firms' management, Treasury departments, financial analysts, Finance management, export management and the additional findings were obtained from secondary data from UEPB, URA, BOU, UMA, UBOS, banks and individual company records & publications.

The chapter is divided into five sections; background information, firm characteristics, foreign exchange risk management and export performance, relationship between variables .The Unit of analysis was the individual Export firm.

4.2 Background Information

The background information on the unit of analysis was derived by analyzing data collected from specialization by Rank by Affiliation to Organization distribution and Respondents category, Category of Business and currencies commonly used in Export.

4.2.1   Respondents category

Frequencies and percentages were done for the distribution to determine the respondents category which was drawn from various levels and ownership categories in the management of Export firms, this was necessary to analyze the extent to which different stake holders' play in foreign exchange risk management.

Table 4.1 Showing Respondents category

		Frequency	Valid Percent	Cumulative Percent
Valid	Officer	3	10.3	10.3
	Middle Management	6	20.7	31.0
	Senior Management	7	24.1	55.2
	Executive Management	13	44.8	100.0
	Total	29	100.0	

Source: Primary

The results in the table 4.1 above showed that the Executive Management personnel comprised the majority about 50% while officers made up the least 10% of the sample.

4.2.2 Rank by Affiliation to Organization distribution

The above findings were further analyzed using cross tabulation and chi-square tests. Findings are presented in table 4.2.

Table 4.2: Showing Rank by affiliation to organization distribution.

			Affiliation To Organization				Total
			Owner	Partner	Employee	Shareholder	
Rank	Officer	Count			3		3
		Row %			100.0		100.0
		Column %			23.1		10.3
	Middle Management	Count		2	4		6
		Row %		33.3	66.7		100.0
		Column %		50.0	30.8		20.7
	Senior Management	Count		1	14	6	7
		Row %		14.3	57.1	28.6	100.0
		Column %		25.0	30.8	66.7	24.1
	Executive Management	Count	27	1	2	3	13
		Row %	69.2	7.7	15.4	7.7	100.0
		Column %	100.0	25.0	15.4	33.3	44.8
Total		Count	9	4	13	3	29
		Row %	31.0	13.8	44.8	10.3	100.0
		Column %	100.0	100.0	100.0	100.0	100.0
				$X^2 = 22.197$		df = 9	Sig. = .008

Source: Primary Data

The results in the table 4.2 above showed that among Executive Management persons, the majority (69.2%) are owners while the minorities (7.7%) are partners and shareholders each of which comprised 7.7% of the sample. The Chi-square test results showed that there is a significant association between one's Affiliation to Organization and the rank the person holds in the organization (Sig. = .008)

4.2.3 Category of Business

Frequencies and percentages were done for the distribution to determine how the export firms are categorized in terms of their ownership and control which is an important aspect in management of foreign exchange risk management.

Table 4.3 Showing Category of Business

Position	Frequency	Percentage	Valid Percentage	Cumulative percentage
Sole proprietorship	9	31.03	31.03	31.3
Partnership	17	58.62	58.62	89.62
Limited company	2	6.90	6.90	96.55
Subsidiary of Multinational	1	3.45	3.45	100
Total	29	100	100.00	

Source: Primary

The results in the table 4.3 above showed that most of the respondent firms were partnerships about 59. %, while subsidiaries of Multinational were the least nearly 4%.

4.2.4 Currencies commonly used in Export

Frequencies and percentages were done for the distribution to determine the currency which is mostly used. There was need to isolate out that currency which is dominantly used in export transactions by the firms for purposes of critical analysis of that currency verses the Uganda shilling.

Figure 4.1: Showing Exports frequently used or quoted Currency
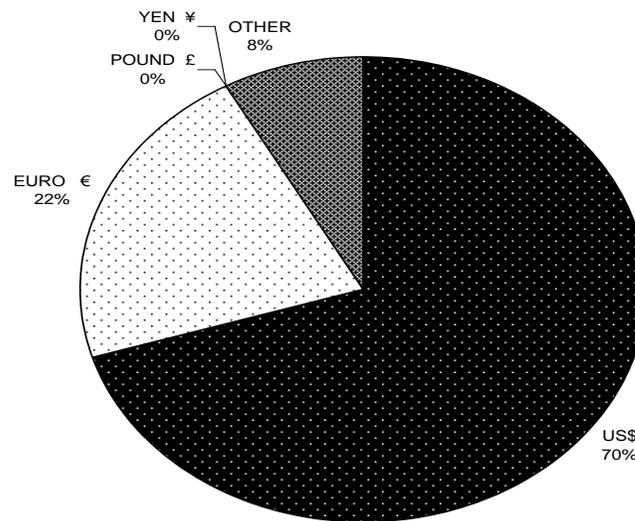
Source: Primary Data

The results from the figure 4.1 above shows the US$ being the most frequently used currency or quoted currency in the exports of the respondent firms eliciting a response of 70 % usage, the Euro (€) taking 22% and the YEN (¥) and the POUND (£) being the least used although there is evidence of exports to these countries that bear these currencies as their legal tender. The Other currencies category comprised of the Kenya Shilling, the Rwandese Francs and the Tanzania Shilling 8%.

4.3 Firm Characteristics Analysis

4.3.1 Size of the Firm

Frequencies and percentages were done for the distribution to determine the firms in terms of size derived from annual total sales turnover. Size estimation was important for gauging the financial strength and the magnitude of transactions regardless of whether they are generated locally or from exports.

Table 4.4: Showing Size of the Export firm.

Size in US$	Frequency	Percentage	Valid Percentage	Cumulative percentage
Below 100 million	26	89.66	89.66	89.66
100-500 million	1	3.45	3.45	93.11
Above 500 million	2	6.89	6.89	100
Total	29	100	100	100

Source: Primary Data

The results from the table 4.4 above show that the majority of the export firms having Annual total sales turnover of below $100 million consisting of about 90 % that is small size firms while those above $500 million almost 7% and medium sized firms of $100-$500 million less than 3.5%.

4.3.2 Existence of the Firm

Frequencies and percentages were used to determine how long the firm has been in export business, this was to measure the experience of the firms in export business and foreign exchange risk management.

Table 4.5: Existence of the Firm.

Range-years; Age	Frequency	Percentage	Valid Percentage	Cumulative percentage
Less than 5 years	4	13.8	13.8	13.8
5 to 10years	17	58.6	58.6	72.4
Over 10 years	8	27.6	27.6	100
Total	29	100	100	

Source: Primary Data

The results from the table 4.5 above show those firms with 5 years to 10 years in export business 58.6 % as the majority, over 10years 27.6% and 13.8% for the firms with below 5 years in export business. The results revealed a majority of the respondent firms being adult firms.

4.3.3 Internationalization

 Frequencies and percentages were used to determine the extent the firms are engaged in export, i.e what composition of its' total sales are attributed to exports, do the firms obtain most of their revenues from exports which are subject to the volatile foreign exchange rate?

Table 4.6: Showing % of exports to total sales

% of exports to total sales	Frequency	Percentage	Valid Percentage	Cumulative percentage
< 25	1	3.45	3.45	3.45
25-50	8	27.59	27.59	31.04
51-75	6	20.69	20.69	51.73
> 75	14	48.28	48.28	100
Total	29	100.00	100.00	

Source: Primary Data

The results from the table 4.6 above show 48.28% of the respondent firms having more than 75% of exports to total sales, 27.6% of the respondent firms having 25%-50% of exports to total sales, 20.7% of the respondent firms having 51%-75% of exports to total sales and 3.5% of the respondent firms having less than 25% of exports to total sales

4.4 Foreign Exchange Risk Management

The fluctuation of the major currency used in export that is the US$ was generated to determine the trend of the exchange rate movement buying and selling rates over a period of 7 years to measure the appreciation and depreciation of the Uganda shilling and the extent of volatility.

Fiqure 4.2.Annual fluctuation of the US$ dollar rate against the Uganda shilling 2003-2009
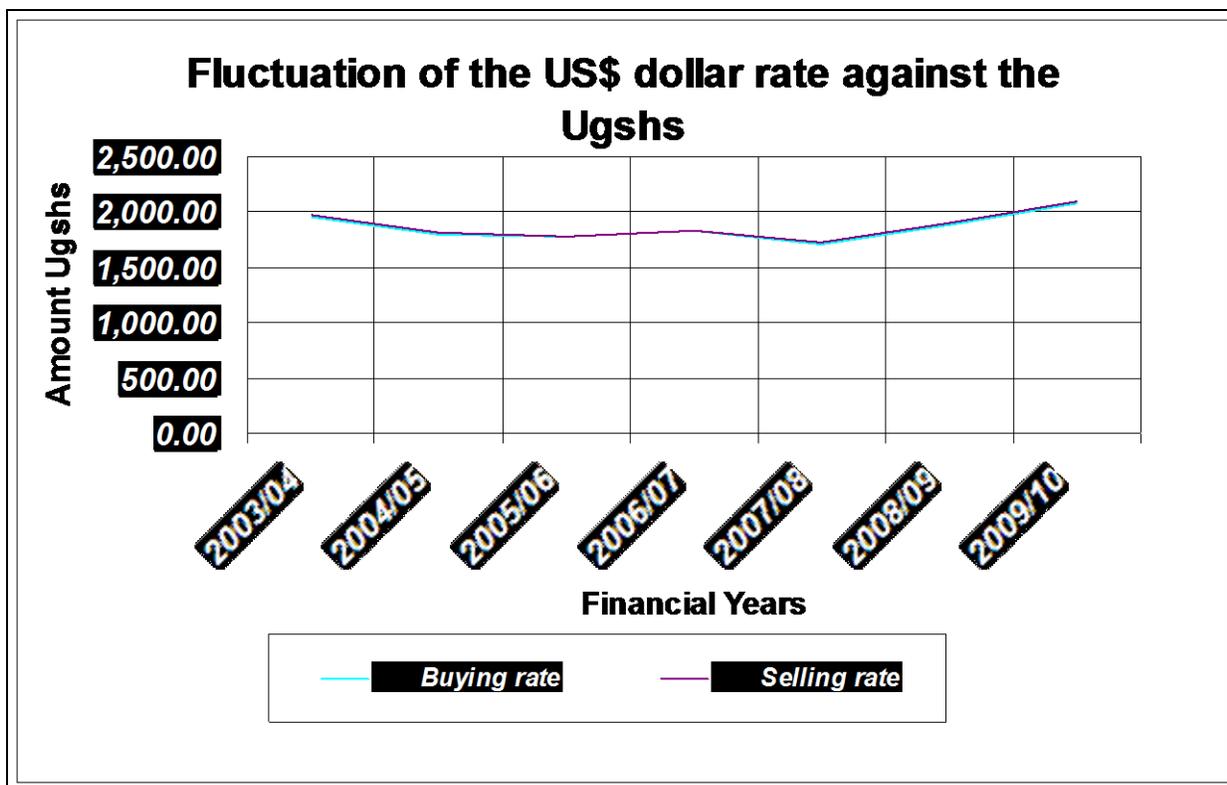
Source: Secondary data (Uganda Bureau of Statistics)

Fiqure 4.2 above the figures extracted showed an irregular unstable pattern in the last five years with a fall from 2004 to 2005 in the exchange rate, and then arise in 2006 in the exchange rate and again a fall in the exchange rate in 2007 & 2008 and arise in 2009.

4.5. Export Performance

Frequencies and percentages were applied to determine the level of Export performance; this was in terms of annual export sales turnover .This was aimed at establishing how firms are performing in terms of export sales.

Table 4.7: Export Performance of the firms.

Annual Export Sales turnover US$	Frequency	Percentage	Valid Percentage	Cumulative percentage
Below 100 million	27	93.10	93.10	93.10
100-500 million	0	0.00	0.00	93.10
Above 500 million	2	6.90	6.90	100
Total	29	100	100	

Source: Primary Data

The results from the table 4.7 above shows the majority of the Export firms having annual Export sales turnover of below $100 million consisting of 93% while those above $500 million a bout 7% .The majority were small sized firms

4.6 Relationships between the Variables

To determine how the dependent variables are related to the independent variable.

Pearson (r) Correlations were employed to test for the relationships between the variables. The Pearson was used because it's more suited for discrete data than the other correlation measures.

Table 4.8: Showing the Relationship between the Variables.

		1	2	3	4	5
Firm Size-	1	1.000				
Firm Age-	2	.101	1.000			
Internationalization-	3	.170	.379*	1.000		
Foreign Exchange Risk Management-	4	.372	.137	.500**	1.000	
Performance-	5	.527**	.179	.486**	.472*	1.000
** Correlation is significant at the 0.01 level (2-tailed).						
* Correlation is significant at the 0.05 level (2-tailed).						

Source: Primary Data

4.6.1 Relationships between the Size of the firm and Foreign Exchange Risk Management

The results in the table 4.8 above showed that firm size is not significantly related to the use of Foreign Exchange Risk Management though it was positively related to Firm Performance (r = .527*, p<.05). It was further observed that the use of Foreign Exchange Risk Management is also positively related to firm performance (r = .472*, p<.05). This implies that the better a firm can manage the risk associated with Foreign Exchange, the better the levels of performance it's likely to realize.

4.6.2 Relationships between the Age of the firm and Foreign Exchange Risk Management

The results in the table 4.8 above showed that Age of the firm is not significantly related to the use of Foreign Exchange Risk Management(r = .137, p<.05)) and it was not significantly to Firm Performance (r = .179, p<.05).

4.6.3 Relationships between the Internationalization of the firm and Foreign Exchange Risk Management

The results in the table 4.8 above showed that the Internationalization of the firm is significantly related to the use of Foreign Exchange Risk Management(r = .500**, p<.01) and positively related to Firm Performance (r = .486**, p<.01).

4.7 Regression Model

The regression model was derived for the purpose of estimating the independent variable on the dependent variable to determine the magnitude of the correlation coefficient, this was generated to explore the extent to which the predictors i.e. Firm Size, Firm Age, Engagement in Export and Foreign Exchange Risk Management can determine the firm performance (dependent variable).

Table 4.9 Regression Model: Magnitude of the Correlation coeffient

4.6 Regression Model

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Dependent Variable: Firm Performance	
	B	Std. Error	Beta				
(Constant)	.522	.994		.525	.605	R Square	.459
Firm Size	.325	.157	.369	2.067	.051	Adjusted R Square	.360
Firm Age	.054	.362	.027	.150	.882	Sig. F Change	.007
Internationalization	.407	.217	.361	1.875	.074		
Foreign Exchange Risk Management	.282	.330	.160	.856	.401		

Source: Primary Data

The results in table 4.9 indicate that the predictors have the potential of explaining 36.0% of the Variance in Firm Performance (Adjusted R Square = .36). Among the predictors, the most influential at explaining firm performance was Firm Size (Beta = .369, Sig. = .051). It was observed that the regression model was significant (Sig. F Change <.05).

4.8   Analysis of Variance (Anova) Findings

ANOVA results were used because they allow us to compare categorized attributes against variables, and also allow us to asses whether there were significant differences across the categorical attributes of the units.

Table 4.10: Showing ANOVA Results for Business Status by Variable.

	N	Mean	Std Deviation	Std Error	F	Sig
Firm Size	29	8.5	2.27	0.80	2.088	.144
Firm Age	28	8.30	1.36	0.55	.595	.559
Internationalization	29	7.5	1.76	0.70	7.132	.003
Foreign Exchange Risk Management	28	5.93	0.70	0.18	.056	.946
Export Performance	28	5.24	4.13	1.17	.028	.973

Source: Primary Data

The results in the table 4.10 above were used to present the ANOVA results for the Status of the businesses by study variable. Firm size enlisted the highest mean while export performance took the least.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter, the researcher discussed findings from the analyses as were in chapter four, drew conclusions and made recommendations following the order of the research objectives.

The purpose of the study was to examine the relationship between firm characteristics and foreign exchange risk management practices on Ugandan export firms, performances.

5.2 Discussion of Findings

5.2.1 Background Information

Most of the respondent firms were under the category of partnerships. The most frequently used currency or quoted currency in the exports of the respondent firms was the US$ dollar. Most of the respondents were at the rank of Executives, from whom responses were solicited on risk management practices, since they are the policy makers and decision makers, it is important they understand risk management and the techniques there in available so as to give direction.

Further more the majority of the Executive Management was found to be owners of the firms. The chi-square revealed that there is a significant association between one's affiliation to the organization and the rank the person holds in the organization. In regard to the ownership and control, most export firms are directly controlled by the owners' .There are few partners and shareholders in control or in managerial positions .Most export firms are under the control of owners , who are more interested in controlling the outflows and maxi zing inflows.

The use of conventional risk management techniques entails incurring financial costs; this deters the use of these techniques. According to literature, Risk management is a highly specialized process and needs particular skills in the identification, measurement and management; these are mostly in the Accounting and Economics specialization (Abor, 2006; Uganda Export Promotion Board, 2000).

5.2.2 Firm characteristics and Export firms' performance.

Size of the Firm was determined in terms of annual total sales turnover. Size estimation was important for gauging the financial strength and the magnitude of transactions regardless of whether they are generated locally or from exports. Export firms having Annual total sales turnover of below US$ 100 million were found to be the majority. Secondly Existence of the Firm that is how long the firm has been in export business, this was to measure the experience of the firms in export business and foreign exchange risk management. Firms with more than 5 years in export business were the majority. The results revealed a majority of the respondent firms being adult firms. The findings indicated that age of the firm has a weak positive relationship to Firm Performance and Lastly the Internationalization in regard to the intensity was generated to measure the extent the firms are engaged in export, what composition of its' total sales are attributed to exports. Do the firms obtain most of their revenues from exports which are subject to the volatile foreign exchange rate? More of the respondent firms were found to have more than 75% of exports to total sales. The findings revealed that the Internationalization of a firm is positively related to Firm Performance.

The regression model was generated to explore the extent to which the predictors; Firm Size, Firm Age, Internationalization and Foreign Exchange Risk Management can determine the firm performance (dependent variable). The results indicate that the predictors have the potential of explaining a small percentage of the Variance in the Firm Performance with the regression model being significant. Among the predictors the most influential at explaining firm performance was firm size. It was revealed that firm size is positively related to export performance.

5.2.3 Firm characteristics and Foreign exchange risk management.

The results show that the majority of the export firms are small size firms .This brings in to play the aspect of the capital base, the extra financial muscle needed to engage in effective use of foreign exchange techniques like derivatives in the maximization and optimization of favorable export performance. It was also revealed that firm size is not significantly related to the use of Foreign Exchange Risk Management though it was positively related to Firm Performance. It was further observed that the use of Foreign Exchange Risk Management is also positively

related to firm performance. This implies that the better a firm can manage the risk associated with Foreign Exchange, the better the levels of performance it's likely to realize.

El-Masry *et al* (2007), in the study of size and international operations, hypothesized that the larger the firm size , the lower the exposure beta should be .Larger firms should have sufficient resources , in terms of personnel and knowledge, to hedge their risk in international transactions leading to lower exposure. Firms' foreign activities are broadly and significantly related to exchange rate exposure and that, after controlling for these activities large firms are more sensitive to currency movements than small firms.

The findings indicate that most of the respondents firms have more than 5 years in export business qualifying to be categorized as Adult firms; these should have experience in export business and foreign exchange risk management. Age of the firm is not significantly related to the use of Foreign Exchange Risk Management and has a weak positive relationship to Firm Performance. El-Masry (2006), Young firms are those with less tan 6 years, while Adult firms are those with 6 years but less than 10 years and the mature firms are more than 10 years. Expressed as the number of years in business appears to have either a negative effect or an insufficient effect on export behavior of which foreign exchange risk management is a component.

The managers of born-global firms must play the role of (or hire) international accountants, exchange rate forecasters, geopolitical analysts, derivatives experts, global marketers, and international human resource specialists. This is a challenge to even the mature firms with extensive resources and organizational knowledge Gleason et al., (as cited by Bakunda, 2006).

Findings on this revealed majority of the sampled firms are involved in export trade, whose transactions are denominated in the US$ which is facing volatility, which calls for emphasizes on the need for the use of foreign exchange risk management techniques to remain competitive. The level of internationalization of the firm is significantly related to the use of Foreign Exchange Risk Management and positively related to Firm Performance. According to El-Masry *et al* (2007),Firms with high level of internationalization actually are the ones with greater exposure .However ,they are also the ones with the incentive to hedge their exposure .As a result , the level

of international activity can lead to higher or lower exchange rate exposure .Several measures have been used in the empirical literature to capture the international involvement of a firm but foreign to total sales ratio and foreign to total assets ratio are the most widely used and accepted measure of the extent of internationalization .A number of studies have found a positive association between foreign sales and exchange exposure. The adoption of foreign exchange risk management techniques in firms has a positive relationship with the firm's degree of engagement.

Characteristics of the firms appear to explain the choice of hedging techniques but the use of certain hedging techniques appears to be associated with increases in the variability of some accounting measures (El-Masry, 2006).

5.2.4 Foreign exchange risk management and Export firms' performance

The findings revealed Exchange rates have continued to fluctuate at an un stable trend which under pins the need for the adoption of foreign exchange risk management techniques by firms engaged in export trade if they have to be competitive .International experience has shown that low levels of inflation and a stable and competitive real exchange rate are important for export growth (Background to the Budget 2007/2008).

Availability of the instruments determines their use which in turn affects export performance.

Interviews carried from Bank of Uganda, Stanbic bank and Standard chartered bank indicate for instance the un availability of derivatives. Further more even if these were to be available, these would be at high cost coupled with the characteristic of the management and taxes these yield a negative cost benefit analysis. Abor (2005), indicates that the practical relevance of most research findings in foreign exchange management lies in the fact that even though there are a number of techniques such as balance sheet hedging, use of derivatives, leading and lagging amongst others available to manage foreign exchange risk in most developed countries, these measures tend to be rather too sophisticated and difficult to implement in developing countries with underdeveloped financial systems.

Findings on export performance reveals a continued increase in export volume and value an indicator which calls for the introduction of foreign exchange risk management techniques to

cover the exposure in export trade as the economic indicators world wide continue to negate .Although exports continue to show an increasing trend amidst the volatility of the US$, the exporter remains uncertain especially as the Uganda shilling appreciates against the US$, but gains when the Uganda shilling depreciates against the US$.

5.3 Conclusions

The study looked at Firm Characteristics, Foreign Exchange Risk Management and Performance a case of Export Firms in Uganda. Characteristics of the firm have an influence on the choice of hedging techniques. The variables under firm characteristics were Firm size, Firm Age and Internationalization. The study revealed that a volatile Exchange rate affects export trade. The volatility of the US$ against the Uganda shilling in did has had effects on export trade. The availability of exchange risk management techniques coupled with their complexity calls for expertise in the adoption and usage.

Volatility continues to characterize foreign exchange rates; in conjunction with increase in export volumes results in a complex aspect that necessitates the protection of export value or earnings as foreign exchange rate exposure expands.

The majority of firms were identified as small size firms which raises the question as to whether their capital base is sufficient to accommodate the budget for total foreign exchange management. The analysis found out firm size as being insignificantly related to the use of foreign exchange risk management techniques. Large firms are more sensitive to currency movements than small size firms. Age of the firm was found not to affect foreign exchange risk management. The Internationalization is significantly related to the use of foreign exchange risk management techniques and positively related to performance.

The objectives of the study were achieved and the study therefore deemed to have been a success ,though information on the various hedging techniques was limited in most of the firms and thus little was achieved to that extent , lastly it was quiet difficult to obtain concrete information on export performance from the various firms due to the confidential nature of the information, the research therefore relied on the estimated export volumes .The majority of the Export firms had

annual Export sales turnover of below $100 million consisting of 93% while those above $500 million a bout 7% **.**

5.4 Recommendations

The following are the recommendations following the study on Firm Characteristics, Foreign Exchange Risk Management and Performance, a case of Export Firms in Uganda.

Foreign exchange risk management is a very important function in the maximization of the earnings of export firms especially given that there are a number of currencies used in the fulfillment of the transactions and translation to the acceptable currency between the parties concerned, the risk has been exacerbated by the high volatility in the recent times, with the dollar exchange rate plummeting and falling to un expected levels. If firms have to remain competitive and benefit from export trade they have to adopt foreign exchange risk management or else they perish. A do nothing approach is dangerous.

Export firms can no longer afford to take foreign exchange risk management as a by the way, it must be parts and parts of their organizational strategic activity thus a component of their annual budgets. Their must be deliberate attempts to analyze risk and the possible techniques to manage this exposure. The technique should be well spelt out and known to the management. In some firms the word foreign exchange risk management was strange and no conventional techniques were known, it was done involuntary.

There is a need to emphasize the study of foreign exchange risk management, the increasing importance of foreign exchange risk management in order to benefit from export trade in a fragile economic environment, as the US$ being a major currency and other foreign currencies continue to remain unstable. Firms should be well equipped with personnel who understand and apply conventional foreign exchange risk management techniques appropriately to the benefit of the firm.

5.5 Limitations of the Study

The main limitation was getting access to the management of these export firms, theses are very busy personnel and above all issues of finance are so sensitive ,most often times it was difficult to get through or even receive the questionnaires back, as most of them preferred to fill the questionnaires and be collected after agreed time, this consumed time. The researcher overcame this by giving out many questionnaires to many firms beyond the sample size of 30 so as to take care of delays. Obtaining the empirical data needed for descriptive analysis and the cross sectional study proved quiet hard to easily get.

The geographical coverage by use of stratified random sampling proved difficult to control the over lap in case there are few firms in certain sectors.

The methodology adopted was limited by lack of adequate benchmarks and measurement models for control the reliability, validity and quality of the data.

5.6   Areas for further Research

- The effect of Taxes on foreign exchange risk management.
- The effectiveness of Derivative usage as a means of foreign exchange exposure management.
- A comparative analysis of Listed and unlisted firms experiences in foreign exchange rate management.
- Does, "The do nothing approach", in foreign exchange risk management work?
- The best approach for Small medium Enterprises (SME) in foreign exchange risk management.

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APPENDIX A 3

QUESTIONNAIRE   No…

MAKERERE UNIVERSITY KAMPALA

MAKERERE UNIVERSITY BUSINESS SCHOOL

Questionnaire on

Firm Characteristics, Foreign Exchange Risk Management and Performance.

A Case of Export Firms in Uganda.

Dear Respondent,

A study on firm characteristics, foreign exchange risk management and performance of export firms is being carried out. This study will help policy makers, management and other stakeholders understand the relationship between firm characteristics, foreign exchange risk management and export earnings. How these impacts on the performance of Export firms in Uganda, arising from the exchange rate volatility.

In order to accomplish this study, I am kindly requesting you to complete this questionnaire. The information provided will be treated with utmost confidentiality.

Thank you for participating and making this study a success.

Researcher; Oluka Moses

         0782669523

SECTION A: BACKGROUND INFORMATION

Please tick☑ the appropriate category in the column provided on the right per question and in case, it is "other" or "none above"   Specify by writing in the space provided, the appropriate category.

1. State where you fall in the organization.   ☑

Officer level	
Middle management	
Senior Management	
Executive Management	

2. State which category best describes the legal status of this organization.

Sole proprietorship	
Partnership	
Limited company	
Subsidiary of multinational Co.	

3. Which currency are your export transactions frequently quoted in?

US$ (Dollar)	
The Euro	
Pound Sterling	
Japanese Yen	
Other specify………………………………………………………….	

SECTION B FIRM CHARACTRISTICS AND EXPORT PERFORMANCE

4. What is the annual export sales turn over of this organization?   ☑

Below £ 50 million ($100million)	
£ 50 million to £ 250 million (US$100million to US$ 500million)	
£251 million to £ 450 million (US$501 million to US$ 1,000 million)	
Above £ 450 million (US$1,000 million)	

5. What is the annual total sales turner over of this organization?　　　　　　　☑

Below £ 50 million ($100million)	
£ 50 million to £ 250 million (US$100million to US$ 500million)	
£251 million to £ 450 million (US$501 million to US$ 1,000 million)	
Above £ 450 million (US$1,000 million)	

6. How long has this organization been in export business?

Less than 3 years	
3 years to 5 years	
Above 5 years	

7. State the percentage of export sales to total sales

Under 25%	
25%-50%	
51%-75%	
Above 75%	

8. State year of establishment of the firm?…………………………………………………

9. State the different currencies you use in export quotations?

……
……
……
……
……

SECTION C

Please respond by ticking☑ one of the given options Strongly Agree, Agree, Neither agree nor Disagree, Disagree, Strongly Disagree. per question in the space provided for each question	Strongly Agree	Agree	Neither agree nor Disagree	Disagree	Strongly disagree
Foreign Exchange Risk Management	1	2	3	4	5
Foreign exchange is a potential source of risk identified by my company					
My company is generally exposed to foreign exchange risk					
Exchange rate movements create uncertainty in the company's future business deals					
Exchange rate movements have affected the company's profitability over time.					
Exchange rate movements have affected the company's sales growth over time.					
Exchange rate changes affect the company's revenues.					
My company carries out its foreign exchange exposure projections in the different currencies					
My firm makes forecasts to determine the expected gain/loss due to exchange rate movements.					
My firm projects its costs to assess the impact of exchange rate movements on its financial performance.					
There is awareness of the existence of foreign exchange exposure					
Exchange rates have been favorable to our firm					
The firm clearly identifies loss exposure					
The firm clearly evaluates the loss exposure					
Clear policies for foreign exchange risk management are in place					
The firm always implements the most appropriate techniques					
There are clear reporting procedures on foreign exchange risk.					
Our team clearly understands the procedure of management of risk					
The firm empowers its risk managers adequately					
The firm has a good team managing its exposure					
The firm has good expertise analyzing its exposure					
The firm has a clearly written policy for management of exposure					
Our goal of management is to always limit the variability of cash flows					
Our goal of management is to always limit the variability of asset value					

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Please Respond By Ticking☑ One Of The Given Options Strongly Agree, Agree, Neither Agree Nor Disagree, Disagree, Strongly Disagree. Per Question In The Space Provided For Each Question	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
Export performance	1	2	3	4	5
Exchange rate volatility has affected our export prices					
Exchange rate volatility has affected our export earnings					
Exchange rate volatility has affected our export volumes					
In the last 5 years the firms' export volumes have increased					
In the last 5 years the firms' export prices have increased					
In the last 5 years the firms' earnings from exports have increased					
In the last 5 years the firms' value of exports have increased					
The firms' competitiveness in export trade has increased					
Foreign exchange volatility contributed much to the enhancement of the firms' profitability from export trade					