THE IMPACT OF CURRENCY FLUCTUATION ON EXPORT/IMPORT ORIENTED BUSINESSES IN TANZANIA

By
James Simika

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Science in Accounting and Finance (MSc A&F) Mzumbe University, Dar es Salaam Campus 2013
CERTIFICATON

The undersigned certifies that he has read and hereby recommends for acceptance by the University of a Dissertation titled: “The impact of currency fluctuations on export/Import Business oriented in Tanzania” in fulfillment of the requirements of the degree of Masters of Science in Accounting and Finance of the Mzumbe University, Dar es Salaam Campus.

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I, James Simika, declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other University for a similar or any other degree award.

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Last but not least, I feel indebted to many other individuals – relatives and friends who helped me throughout my studies. Special thanks go my study group which encourages me to accomplish this study. I cannot mention them specifically but I appreciate their assistance and I thank them all.
DEDICATION

This dissertation is dedicated to my lovely wife, Neema Phares Sanye, my daughter, Faith James Simika and my son Jovin James Simika and my lovely parents, Mr & Mrs Nicodemus Simika.
LIST OF ABBREVIATIONS

ADB: African Development Bank
BOT: Bank of Tanzania
CPI: Consumer Price Index
EU: European Union
FDI: Foreign Direct Investment
PPP: Purchasing Power Parity
RER: Real Exchange Rate
USA: United States of America
WB: World Bank
ABSTRACT

This study identifies and analyze the impact of currency fluctuation on import/export oriented business in Tanzania. The analysis has been done on valuable using both qualitative and quantitative method based on survey done on sample of selected companies. Currency fluctuation involves the appreciation or depreciation of domestic currency against the foreign currency in a certain period and business environment. Methodology used in investigating the impact of currency fluctuation on import/export oriented businesses in Tanzania specifically in Dar es Salaam region, include questionnaire, interview, focus group discussion and observation.

The main objective of this study has entered on tracing the trend and its impact on performance of import/export oriented businesses in Tanzania. Apart from that also assessing the existing currency risk management practices in Tanzania business. This study also analyzing the perception of selected stakeholders regarding the currency fluctuation impact in Tanzania specifically Dar es Salaam regional.

Clearly in this study I found exchange rate fluctuation has important effect to the economy of Tanzania in term of domestic price discrimination, competitiveness of export and import substitution and asset valuation. Selected companies which deals with import/export business such as Sunda Investment Ltd, Medical Stores Department, Suma JKT, Tanzania Investment Bank Ltd, Tanzania Electric Supply Company Ltd, Akiba Commercial Bank Ltd managed to reduce huge loss to almost favorable condition for slight depreciation of domestic currency (TZS) against foreign currency such as USD simply because entered into foreign forward contract with their foreign suppliers. For Medium Local Companies such as Akiba commercial Bank Ltd currency fluctuation still a challenge as they are not well investing in managing the risk associated their currency fluctuation due to their capital status and their normal business strategies of local expansion first when compared to Giant Companies as Tanzania Investment Bank, Suma JKT and Sunda Investmnet (T) Ltd.
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CHAPTER ONE

INTRODUCTION

The adverse consequences of currency fluctuations on various parts of the domestic economy have now been well documented in numerous research works. In particular, a rise in exchange rate volatilities has been found to have negative consequences on the trade sector (i.e. exports and imports) of the local economy (McKenzie (1999), Chou (2000), Rahmatsyah et al. (2002) and Siregar & Rajan (2004). A similar message was conveyed in a recent paper of Calvo & Reinhart (2002). They show that the monetary authority needs to intervene and manage the fluctuation of the local currency in order to achieve its desired level of inflation target.

1.1 Background of the problem

Due to its widespread economic implication, evaluating causes and determinants of currency fluctuation has accordingly remained one of the key research agenda for both academics and policy makers. Several attempts have been made recently to particularly examine the role of external debt/borrowing in explaining the fluctuations of the local currency. Corsetti et al. (1999) argued that the external borrowing, particular by private commercial banks and firms is among the key factors responsible for the severity of the East Asian financial and currency crises during the late 1990s. Adubi, A. (1999), Suthar, M. (2008), Kusuma, D. (2010), Bank of Tanzania – Tanzania Investment Report 2009.

Providing a more in-depth look at the features of currency crises, Cavallo et al. (2002) developed a model that suggests the size of foreign currency denominated debt of a country contributes to the currencies of exchange rate overshooting, sudden stop of capital flows and output drop in the domestic economy. Cavallo (2005) further argues that the exposure to foreign currency liabilities magnify the cost of exchange rate depreciation. Likewise, Devereux & Lane (2001) underlines the need to extend the list of variables important for understanding bilateral exchange rate volatility beyond those suggested by optimal currency area theory. Their study shows
that for developing countries, in particular, volatility in their bilateral exchange rates is strongly and negatively affected by the stock of external debt. Zwanzger, S. (2009), Doukas, J. A. (2003)

The companies Act, the Banking Act, The Central Bank of Tanzania Act and various guidelines issued by Bank of Tanzania (BOT), govern the Banking industry in Tanzania. The banking sector was liberalized in 1991 and exchange controls lifted. The BOT, which falls under the Ministry of Finance is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system, Ngerebo, T. A. (2012). The BOT publishes information on Tanzanian commercial banks and non-banking financial institutions, interest rates and other publications and guidelines. The banks have come together under the Tanzania Bankers Association (TBA), which serves as a lobby for the banks interests and addresses issues affecting its members (BOT, 2009), Barumweta, L. A. (2008), Monetary authority of Singapore Annual Report 2011/2012

According to the Bank of Tanzania, there are 32 licensed commercial banks, 8 regional commercial banks and 5 financial Institutions in Tanzania. Commercial banks in Tanzania play a major role in Tanzania. They contribute to economic growth of the country by making funds available for investors to borrow as well as financial deepening in the country. Commercial banks therefore have a key role in the financial sector and to the whole economy Bank of Tanzania Liquidity paper, March 2011, Banking and Financial institution Act 2006, BHP information solution Ltd and Institute of Chartered Accountant n England and Wales

1.2 Statement of the problem
Before 1991 in the economy of Tanzania there was fixed exchange regime whereby the exchange rate movement being managed by government through Bank of Tanzania. The exchange rate was being determined and fixed by the government depends on their goals through fiscal and monetary policy and most of companies and parastatals were whole own by the government. For this purpose the government of Tanzania automatically was having great contribution to the appreciation or
depreciation of currency depends on the development programme planned to be achieved in the economy within a given financial year. Moreover after 1991 after liberalization of bank and financial institution whereby ownership of various companies and public organization transferred to private investors the exchange rate was free determined by the forces of demand and supply of currency in the economy rather than government intervention and it is the point where the currency fluctuation become serious challenges in the economy which affect the import/export oriented businesses in Tanzania.

Loans from Multinational lending agencies and commercial banks such as International Monetary Fund (IMF), World Bank (WB) and other giant foreign banks has resulted into a large unsustaininable level of external debt standing at a staggering US Dollar 7.9 Billion in 1998(BOT,1998), with its crippling effect already felt poor development of social infrastructure as resources are crowded out by debt servicing .Apart from that in developing countries like Tanzania huge external debt discourage foreign direct investment (FDI) due to the fact that external debt tend to encourage inflation as disturb interest rate which activate exchange rate fluctuation to be high in economy. However this increase pressure to integrate into the global and regional economic platform recourse to non-debt creating sources of external resources and effective control of risk which rose due to currency fluctuation in the economy become serious challenge in the economy. Nevertheless the success in attracting and effectively understanding of the impact of currency fluctuation export/import oriented business in Tanzania automatically give the good knowledge to the investors and public as whole to be aware of the impact and understanding how to protect themselves from the negative effect and enjoy to the positive effect.

1.3 Research objectives.

1.3.1 General Objectives
The major aim of the study is to investigate the impact of currency fluctuation on import/export oriented businesses
1.3.2 The specific objectives of the study.

- To trace the currency fluctuation trend and its’ impact on performance of import/export oriented businesses in Tanzania
- To assess the existing currency risk management practices in Tanzania business
- To analyze the perception of selected stakeholders regarding currency fluctuation impact in Tanzania specifically Dar es Salaam Region
- To suggest recommendations for improvement in currency risk management

1.4 Research questions.

The study is being guided by the research question which is “What is the impact of currency fluctuation on the export/import oriented businesses”

i. What is the trend of currency fluctuations and its impact on performance of import/export oriented business in Tanzania?

ii. What are the existing currency risk management practices in Tanzania business?

iii. What is the perception of selected stakeholders regarding currency fluctuation impact in Tanzania specifically Dar es Salaam?

iv. What are the recommendations for improvements in currency risk management?

1.5 Significance of the study.

Regarding the contribution of currency to the economic development of the society currently and in the future, the study identify possible obstacles on import/export oriented business due to currency fluctuation in Tanzania specifically in Dar es Salaam and hence being in the position to improve efficiency and effectiveness in managing the risk caused by currency fluctuations. Therefore, this study provides knowledge on how to deal with or manage currency fluctuations. For this case when the investors and public as whole understanding on the impact of currency fluctuation on the export/import oriented businesses in the economy will facilitate business or companies operations smooth by being able to forecast future favorable
economic environment and controlling the risk which is expected to beat the business, this will specifically.

- Generate knowledge for overcoming any bad effect associated with currency fluctuation in Tanzania hence create better or conducive business environment for international trade.
- Provide suitable recommendation for improvement of foreign currency management through reduction of risk specifically on foreign exchange.
- Also identify various challenges associated with currency fluctuation and advice how to manage these challenges for the purpose of increase profit of the business.
- Creation of standard policy: Fiscal and monetary policies can be drafted, evaluated and implemented regarding on the impact of currency fluctuations in the economy.
- Increase education awareness regarding currency fluctuation in the country, how is existing and being managed by the government through central Bank of Tanzania (BOT) and how private sectors or companies deals with currency fluctuation and how affect their business.
- Improve international trade through well management of currency fluctuation and provide quality services by importers and exporters.

1.6 Scope of the study.
The study focus on the impact of currency fluctuation on export/import oriented businesses in Tanzania specifically in Dar es salaam Regional which consist of three district, Ilala, Kinondoni and Temeke. Occasionally reference to other countries was only done to elaborate and clarify argument if and when appropriate The study concentrate with both public and private importers and exporters. Dar es Salaam region seems to be good representative of the other region as various export/import business seemed to be highly exercised in this region as trade centre simply because of his geographical position by having ports, international airport, financial survey and implementation of various financial development project by number of international donors such as World Bank, European Union(EU), SADC, Africa Development Bank(ADB) which apart from other African countries they also invest
on currency management and improvement for Tanzania through Ministry of Finance, Bank of Tanzania.

1.7 Limitation of the study.

- In investigating the impact of currency fluctuation for the import/export oriented business the study covers few selected exporters and importers companies/business operated within three district, Ilala, Kinondoni and Temeke in Dar es Salaam regional.

- Investigation on this study covers four public companies and four private companies which deal with export/import oriented businesses in Tanzania to get clear picture of the impact of currency fluctuations to the economy.

- The business respondents are those whom they deal directly with export/import oriented businesses specifically in Tanzania as they are supposed to be transparent due to the fact that all information will be used for the purpose of this study just to get actual impact on the currency fluctuation for the export/import oriented businesses in Tanzania.

1.8 Organization of the study

The study focused on the impact of currency fluctuation on import/export oriented businesses in Tanzania as foreign exchange market, real exchange rate and purchasing power parity critically analyzed and identified the causes of currency fluctuations in the economy and how businesses operator must be aware of those factors. In research methodology questionnaire, interview, focus group discussion and observation used so as to provide actual, reasonable and reliable information after being processed. In chapter five explained the discussion of the findings on the impact of currency fluctuation on real economy, foreign exchange market and on the movement of the business. Lastly on the chapter six I drew conclusion and my recommendation regarding the whole study as far as my findings concern.
CHAPTER TWO

LITERATURE REVIEW AND CONCEPTUAL FRAME WORK

2.1 Basic exchange rate concepts

The degree of variability in exchange rates in Tanzania since the mid-1980s, following the removal of the fixed exchange regime has been enormous. The volatility experienced during the structural adjustments was unquestionably due to the negative effects left behind by the fixed exchange regime operated until 1984. The reasons and the underlying factors for subsequent upward trends in the rates then became the main focus of a number of scholars. Studies conducted in this area therefore took on mainly the macroeconomic dimensions. In contrast with previous researchers' focusing on financial impacts of exchange rate at the macro level, we emphasize on the rationality of firm strategies under exchange rate uncertainty.

This chapter will contain the review of literature on the theories which put forward in attempt to explain the impact of currency fluctuation on import/export oriented businesses in Tanzania specifically Dar es Salaam regional as well as those on studies which have attempted an empirical test of these impact. The first section outline the main issues raised by the previous studies which have been reviewed as well as any gap existed there from which this study intend to fill while the second section contain review of empirical literature and the third section contain review of the theoretical literature.

Yi-Wong Cheung & Rajeswari Sengupta (2013) in their study which aim at analyzing the impact of exchange movement on export, which focused Indian non financial firms for the period of 2000 to 2010. They argue that their empirical analysis revealed that on average there has been a strong significant negative impact of currency appreciation as well as currency volatility on Indian firms’ export shares. The labour costs are found to intensify the exchange rate effect on trade. Further
there was evidence that these Indian firm respond asymmetrically to exchange rates. For instance, the real exchange rate (REER) change effect was likely to be driven by a negative appreciation effect but depreciation effect not so much. Also Indian firm that have smaller export share tended to have a stronger response to both real exchange rate (REER) change and volatility. Compared with those exporting services are more affected by exchange rate fluctuation. The findings especially those on on asymmetric response have important policy implication due to the fact that the government need to formulate standard policies to help those firm to improve their profit stability and create conducive business environment in the economy.

Rajmund, M. (2012) studied some sources of exchange rate volatility in European transition economies, effect of economic crises revealed, He found negative macroeconomic performance issues represent one of the key effect of crises period. Due to many economic crises related side effects countries become more vulnerable to various types of endogenous and exogenous shocks. The exchange rates of the European transition economies become much more volatile as result of increased uncertainty on the financial markets as well as changed behavior of structural shock affecting exchange rates path during the crisis period. As result they expected a contribution of the structural shock to the exchange rates path has changed. Aprt from that the study analyzed sources of exchange rate fluctuations in European transition economies and estimated the contribution of nominal supply and demand shocks to NEER and REER variability implementing Structural Vector Auto regression (SVAR) methodology in which VAR method used to identify shocks and price movement in the economy in relation to the currency fluctuations.

Mc Kenzie & Michael D. (1999),Their study aimed at analyzing the impact of exchange rate volatility on international trade flows, They argued that despite the best effort of economists ,a basic paradox as to the impact of exchange rate volatility on trade flows remains unsolved at both the theoretical and empirical level. This paper survey the vast literature in the area in an attempt to identify major issues which have contributed to the development of the debate and examined whether any general direction for consensus may be found .The study identified some critical
issues which expected to proceed disturb the currency fluctuation as each country applied different effort and financial technique regarding the risk associated with currency fluctuations so as to improve their economic development. In real fact the issue of globalization becomes big challenge especially to developing countries like Tanzania as different countries in the World are free to participate in the international trade, inorder to increase power for developed countries and reduce negative effect for developing countries some financial economic integration (regional) and business platforms formulated between countries with similar interest and values.

Harun Yaksel (2012) in his study investigated the impact of exchange rate volatility, export prices and weighted GDP of most of trading partner of Turkey on aggregate exports for the period from 2003 to 2010/2012. The Exchange rate volatility on export from Turkey. To achieve this purpose various approach were employed .In line with previous studies the regression method was employed, appropriate test to ensure the reliability of analysis were undertaken .He used time series data for the analysis and cross correlation to determine the relationship between the pairs of variables was utilized. His result indicated that there was a negative relationship between the pairs of variables utilized, however the relationship was not significant at least 5 percent. This showed when the country exports is high compared to imports then favorable balance of payment exist and economic stability improved due to the fact that domestic currency have appreciated against foreign currency and discourage inflation.

Ben Ltaifa, Nabil. (2009), studied the impact of the global financial crises on exchange rates and policies in Sub Saharan African currencies in the context of global financial crisis. In particular, he analyzed the reason behind the differences in magnitude and volatility of the exchange rates among the countries .To his conclusion he took the sample of seven countries, four member of the east African community (EAC) (Kenya, Rwanda.Tanzania and Uganda) and three, which experienced large exchange rate losses at the onset of the global financial crises.
The currencies of five out of seven in the study, Ghana, Kenya, Nigeria, Uganda and Zambia depreciated by at least 20 percent between June 2008 and March 2009, those of Tanzania and Rwanda, in contrast, depreciated by a much smaller amount (10 percent or less) during the same period. Currencies however grew mixed with respect to the other major currencies. The five currencies that registered a large depreciation vis-a-vis the US dollar also depreciation vis-à-vis the Euro between June 2008 and March 2009; the other two appreciated with respect to the Euro. All currencies except for the Zambia Kwacha appreciated vis-à-vis the British pound.

In most countries above the trend inflation mitigated the real effect of nominal depreciation. Only other countries (Ghana, Nigeria and Zambia) registered a significant (over 5 percent) real depreciation of their currencies over the whole period. The Zambian Kwacha depreciated most driven by the very high nominal effective depreciation (in spite of recovery late in the period). Rwandan and Tanzania currencies appreciated substantially while the Kenyan Shilling appreciated slightly and the Ugandan Shilling ended up with only a mild appreciation.

2.2 Theoretical review

2.2.1 Interest Rate Parity and Interest Rates

The interest rate parity condition was developed by Keynes (1923), as what is called interest rate parity nowadays, to link the exchange rate, interest rate and inflation. The theory also has two forms: covered interest rate parity (CIRP) and uncovered interest rate parity (UCIRP). CIRP describes the relationship of the spot market and forward market exchange rates with interest rates on bonds in two economies. UCIRP describes the relationship of the spot and expected exchange rate with nominal interest rates on bonds in two economies.

This is the normal form of the covered interest rate parity, which states that the domestic interest rate must be higher than the foreign interest rate by an amount equal to the forward premium (discount) on domestic currency. According to CIRP, if the exchange rate of, say, the shilling against the USD is fixed, the interests of the
two countries should be equal. Thus, a small country with a pegged exchange rate regime cannot carry out monetary policy independently.

Empirically, using weekly observations from January 1962 to November 1967, Frenkle & Levich (1975) confirmed that CIRP held. Later (1977) they extended their studies into three periods: 1962–67, known as the “tranquil peg”; 1968–69, the “turbulent peg”; and 1973–1975, the managed float, and strengthened the findings of their previous study that CIRP still holds during these periods even when the effect of transaction costs is taken into account. They indicated that deviations from CIRP might occur due to four major reasons: transaction costs, political risk, potential tax advantages, and liquidity preference.

However, investors face uncertainty over future events. In a rational expectation framework, the forward exchange rate may be strongly influenced by the market expectations about the future exchange rate if new information is taken into consideration. In an uncertain environment, an un-hedged interest rate parity condition may hold. Very few empirical studies support UCIRP. For example, using a K-step-ahead forecasting equation and overlapping techniques on weekly data of seven major currencies, Hansen & Hodrick (1980) reject the market efficiency hypothesis for exchange.

**Purchasing Power Parity and Inflation rates**

The starting point of exchange rate theory is purchasing power parity (PPP), which is also called the inflation theory of exchange rates. PPP can be traced back to sixteenth-century Spain and early seventeenth century England, but Swedish economist Cassel (1918) was the first to name the theory PPP. Cassel once argued that without it, there would be no meaningful way to discuss over-or-under valuation of a currency. Absolute PPP theory was first presented to deal with the price relationship of goods with the value of different currencies. The theory requires very strong preconditions. Generally, Absolute PPP holds in an integrated, competitive product market with the implicit assumption of a risk-neutral world, in which the goods can be traded freely without transportation costs, tariffs, export quotas, and so on. However, it is
unrealistic in a real society to assume that no costs are needed to transport goods from one place to another. In the real world, each economy produces and consumes tens of thousands of commodities and services, many of which have different prices from country to country because of transport costs, tariffs, and other trade barriers (Kanamori & Zhao, 2006).

Absolute PPP is generally viewed as a condition of goods market equilibrium. Under absolute PPP, both the home and foreign market are integrated into a single market. Since it does not deal with money markets and the balance of international payments, we consider it to be only a partial equilibrium theory, not the general one. Perhaps because absolute PPP require many strong impractical preconditions, it fails in explaining practical phenomenon, and signs of large persistent deviations from Absolute PPP have been documented (Kanamori & Zhao, 2006).

**The Balassa-Samuelson Model and External Debt**

The standard version of the B-S model is presented using a single-factor aggregate production function in Obstfeld & Rogoff (1996). The Balassa-Samuelson model is one of the cornerstones of the traditional theory of the real equilibrium exchange rate. The key empirical observation underlying the model is that countries with higher productivity in tradable compared with non-tradable tend to have high price levels. The B-S model hypothesis states that productivity gains in the tradable sector allow real wages to increase commensurately and, since wages are assumed to link the tradable to the non-tradable sector, wages and prices also increase in the non-tradable sector. This leads to an increase in the overall price level in the economy, which in turn results in an appreciation of the real exchange rate.

However, the shortcomings of this model are clear. First, it assumes that the tradable price at home is the same as that abroad. This is clearly an unrealistic special form of PPP, but for tradable goods only. Under this setting, how the prices of tradable are determined remains unknown. Second, since it says nothing about the demand side, it is criticized by the Keynesian school, which regards price to be rigid or sticky. Third, without considering the behavior of consumers, or the demand side, it is difficult to interpret how market prices are formed. Last and most importantly, this model does
not deal with the role of money; it can at best explain partly how the real exchange rate is determined (Holub & Cihak, 2003; Kanamori & Zhao, 2006).

Integrating the model with a model of accumulation of capital and with the demand side of the economy, Holub & Cihak (2003) claimed that the predictions of their model were generally consistent with empirical findings for Central and Eastern European countries. But the extended model still does not have room for money and the nominal exchange rate. This implies that money is assumed out of this kind of model and that prices are assumed to be flexible enough to adjust to supply and demand.

**The Balance of Payments Theory**

The balance of payments theory of exchange rate is also named as ‘General equilibrium theory of exchange rate. According to this theory, the exchange rate of the currency of a country depends upon the demand for and supply of foreign exchange. If the demand foreign exchange is higher than its supply, the price of foreign currency will go up. In case, the demand of foreign exchange is lesser than its supply, the price of foreign exchange will decline (Kanamori & Zhao, 2006). The demand for foreign exchange and supply of foreign exchange arises from the debit and credit items respectively in the balance of payments. The demand for foreign exchange comes from the debit side of balance of payments. The debit items in. the balance of payments are (1) import of goods and services (2) Loans and investments made abroad (Kanamori & Zhao, 2006).

The supply of foreign exchange arises from the credit side of the balance of payments. It is made up of the exports of goods and services and capital receipts. If the balance of payments of a country is unfavorable, the rate of foreign exchange declines. On the other hand, if the balance of payments s favorable, the rate of exchange will go up. The domestic currency can purchase more amounts of foreign currencies (Kanamori & Zhao, 2006).
When the exchange rate of a country falls below the equilibrium exchange rate, it is a case of adverse balance of payments. The exports increase and eventually the adverse balance of payment is eliminated. The equilibrium rate is restored. When the balance of payments of a country is favorable, the exchange rate rises above the equilibrium exchange rate resulting in the decline of exports (Kanamori & Zhao, 2006).

**Consumer Price Index**

Most countries have a simple common-sense approach to measuring inflation, using the so-called “Consumer Price Index” (CPI). For this purpose, the purchasing patterns of consumers are analyzed to determine the goods and services which consumers typically buy and which can therefore be considered as somehow representative of the average consumer in an economy. As such they do not only include those items which consumers buy on a day-to-day basis (e. g. bread and fruit), but also purchases of durable goods (e. g. cars, PCs, washing machines, etc.) and frequent transactions (e. g. rents). Putting together this “shopping list” of items and weighting them according to their importance in consumer budgets leads to the creation of what is referred to as a “market basket”. Each month, a host of “price surveyors” checks on the prices of these items in various outlets. Subsequently, the costs of this basket are then compared over time, determining a series for the price index. The annual rate of inflation can then be calculated by expressing the change in the costs of the market basket today as a percentage of the costs of the identical basket the previous year (D.Gerdesmeier, 2007)

However, the developments of the price level as identified by such a basket only reflect the situation of an “average” or representative consumer. If a person’s buying habits differ substantially from the average consumption pattern and thus from the market basket on which the index is based, that person may experience a change in the cost of living that is different to the one shown in the index. There will therefore always be some people who experience a higher “inflation rate” for their “individual basket” and some who face a lower “individual rate of inflation”. In other words, the inflation measured by the index is only an approximate measure of the average
situation in the economy; it is not identical to the overall price changes faced by each individual consumer, (Kandil and Woods (2008).

Conceptual Framework

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<th>Independent variables</th>
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<td>Interest Rates</td>
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2.3 Empirical Review

Interest Rates

Interest rates, inflation and exchange rates are all highly correlated. By manipulating interest rates, central banks exert influence over both inflation and exchange rates, and changing interest rates impact inflation and currency values. Higher interest rates offer lenders in an economy a higher return relative to other countries. Therefore, higher interest rates attract foreign capital and cause the exchange rate to rise. The impact of higher interest rates is mitigated, however, if inflation in the country is much higher than in others, or if additional factors serve to drive the currency down. The opposite relationship exists for decreasing interest rates - that is, lower interest rates tend to decrease exchange rates (Bergen, 2010). Karfakis & Kim (1995) using Australian exchange rate data found that unexpected current account deficit is associated with exchange rate depreciation, and a rise in interest rates. Evidence is found that current account deficits diminishes domestic wealth, and may lead to
overshooting of exchange rates. A fall in the real value of currency was also reported by Obstfeld & Rogoff (1995), Engel & Flood (1985), and Dornbusch & Fisher (2003). There has also been a surge and collapse in international capital flows into developing countries in the recent decades. Sudden outflow of capital is another major concern when it can drastically affect exchange rates as were witnessed during several financial crises of Brazil, East Asia, and Mexico. These capital outflows affect domestic output, real exchange rates, capital and current account balances for years after the crises.

**Inflation Rates**
As a general rule, a country with a consistently lower inflation rate exhibits a rising currency value, as its purchasing power increases relative to other currencies. During the last half of the twentieth century, the countries with low inflation included Japan, Germany and Switzerland, while the U.S. and Canada achieved low inflation only later. Those countries with higher inflation typically see depreciation in their currency in relation to the currencies of their trading partners. This is also usually accompanied by higher interest rates (Bergen, 2010).

**External Debt**
According to Bergen, (2010), countries will engage in large-scale deficit financing to pay for public sector projects and governmental funding. While such activity stimulates the domestic economy, nations with large public deficits and debts are less attractive to foreign investors. This is because a large debt encourages inflation, and if inflation is high, the debt will be serviced and ultimately paid off with cheaper real dollars in the future.

**Exports and Imports**
According to Solnik (2000) the balance of payments approach was the first approach for economic modeling of the exchange rate. The balance of payments approach tracks all of the financial flows across a country’s borders during a given period. All financial transactions are treated as a credit and the final balance must be zero. Types of international transactions include: international trade, payment for service, income
received, foreign direct investment, portfolio investments, short- and long-term capital flows, and the sale of currency reserves by the central bank.

A ratio comparing export prices to import prices, the terms of trade is related to current accounts and the balance of payments. If the price of a country's exports rises by a greater rate than that of its imports, its terms of trade have favorably improved. Increasing terms of trade, shows greater demand for the country's exports. This, in turn, results in rising revenues from exports, which provides increased demand for the country's currency (and an increase in the currency's value). If the price of exports rises by a smaller rate than that of its imports, the currency's value will decrease in relation to its trading partners (Solnik, 2000).

**Currency fluctuation impact in small and medium business/companies**

Small and medium business especially those deals with importation or exportation are always have small capital which needed to be well managed and utilized in order to produce a reasonable profit unless otherwise will disturb profitability to the extent of collapsing if the currency fluctuation is so high and appears frequently in the economy. This is due to the fact that small and medium business are having small capital, they are using low technology and are not capable of hiring expert or skilled personnel who are able to advice and implement proper technique purposely to control currency fluctuation in the economy. For this case small and medium business export and import business oriented are highly exposed into risk due to currency fluctuation simply because exchange rate tends to vary on everyday depending on business environment in the economy. Apart from that, inflation also plays a great role in disturbing and creating non-conducive environment to the business. Vick Arnsteen, small business update-issue 61, January 2009 considers the impact of exchange rate fluctuation on the UK small firm.

Research published by foreign exchange broker World First suggest that small firm in importing from the US and EU lost almost E900 million in on 2007 by falling to protect themselves from the effect of currency fluctuation (BHP information solution Ltd and institute of chartered Accountants in England and Wales)
Currency fluctuation impact in large companies

For the case of large companies, exchange rate fluctuation also tend to disturb their business but not to the large extent due to the fact that, they are capable of hedging exchange rate fluctuation so as to reduce the impact expected to be experienced by the export and import oriented business. Apart from that they have got huge capital and investment fund to the extent that they spend much on reducing or completely eliminating the risk through hedging of currency in forward markets and market derivatives. According to McDonald saw sales in Europe increase in 2011 but the yearly profit were usually down as a result of marketing Euro.

Apart from that Chief Financial Officer Bob Swan admitting that currency fluctuation will hit the bottom line by around three points in 2012 while Ralph Lauren reported that “Although currency change have gone in its favor so far in 2012, it expect a turnaround in fortune in 2013. Foreign currency effects are estimated to negatively impact net revenue growth by approximately 200-300 basis point in the first quarter.” The company stated, Saxo Capital Markets UK newsletter July 2012, Bank of Tanzania Liquidity Paper, March 2011.

How to reduce impact of currency fluctuation to import/export oriented business.

Most business prefer to control currency fluctuation by hedging their currency against their neighbor or foreign currency for the purpose of reducing risk and investment cost especially for international investment and business. The following technique seems to be effectively utilized by the large company who deals with export and import business to control exchange rate fluctuation caused by currency fluctuation.

- Forward contract; as the company prefer to enter into agreement with foreign company by setting exchange rates in advance which to be applied in their transaction conducted currently, in the sense that, exchange rate current and fixed for the purpose of exchange in the future. For this situation if the
exchange is fixed then the company benefited by escaping from risk expected to occur due to currency fluctuation resulted from various reasons such as inflation or political instability.

- Spot market; Some importers/exporters prefers and agree the exchange rates to be spot rate in the sense determined at the time the transaction is being conducted or concluded, but it is very risk because, sometimes one company could agree to transact by using currency of another company’s country. For this case the company paid by his own currency will always benefit in this trade compared to his partner (Banking and financial institution Act 2006)

- Speculation; For this case the businessman tend to forecast the future business environment regarding exchange rate fluctuation to the extent being in a position of either to buy much the currency of the country which expected to provide gain or appreciate in the future against another foreign currency for the purpose of attaining profit, forecasting of the future business environment require sufficient knowledge of understanding the determinants of exchange rate and other factors influence currency fluctuation in the country (Foreign exchange Act 1992)

- Hedging exposure

- Most companies seek at least to maintain their market position (Porter, 1980) which means, in order to at last stays in business, must keep and create customers, this is the primary purpose of the business profit follow. Drucker (1983 a-c) emphasize the customer ultimately pay for satisfaction and not for product parse. (Lorenz, 1984).

- Receivables

- Apart from that, companies which deals with import/export may entertain their customers by issuing discount on their deals when their customers make prompt payment within a short period of time and they are doing this if they forecast their currency will appreciate in the future against the foreign currency (customer)

- Payables.
The same being applied if the company forecasting in the future there might be depreciation of currency against their customer foreign currency, then they discourage prompt payment in the sense that encourage delay in payment for the purpose. The Government of Tanzania through BOT who impose various regulation to Institution for the purpose of maintaining proper financial system in International trade and management of foreign currency to protect the interest of the country socially, economically and politically so as to facilitate rapid economic growth through foreign direct investment (FDI)

Perception of impact of currency fluctuation to the society of Tanzania.

Normally controlling of currency fluctuation is being examined by Government of United Republic of Tanzania as whole and individual each company has got its own suitable technique which facilitates to reduce effect or impact associated with currency fluctuation.

The use of foreign currency within the country of Tanzania for local transaction is not well maintained for the purpose of reducing double inflation. It is the Government to promote TZS so as to appreciate and critical useful for local transaction fully. Also BOT provide some loans to the financial institution, it might be in TZS or in foreign currency such as USD so as to create adequate capital and improve efficiency and effectiveness in their operations.

Knowledge of foreign currency or exchange rate should be spread to the people in the society so as gain some information in International finance, laws of banking book, Bank of Tanzania how it perform its function and how participate in economic progress of the country. (Tanzania institute of bankers, 2008 International Finance)

2.4 Definition of Key Terms.
For the purpose of the study, the following terms are defined as follows:
Currency fluctuation

The term currency fluctuation is the rise and fall of the value of currency of one country in relation or compared to another country and this fluctuation becau-
se either of the country being benefited from it while the other country lose.

Importer

These are all companies which usually purchase goods and services outside the
country and for this case they tend to utilize foreign currency.

Exporter

These are companies or business deals with selling goods and services outside the
country. This increase foreign currency

Exchange Rate Risk

Exchange rate risk is generally defined as the possible direct loss (as a result of unhedged exposure) or indirect loss in the firm’s cash flows, assets and liabilities, net profit emanating from an exchange rate movement. Specifically, a direct impact of the exchange rate risk would be felt by a financial institution holding a position in foreign currency, whereas an indirect impact would be on the borrowers or counterparties of the respective financial institution.

In the Tanzanian banking system, foreign exchange rate risk is mainly dampened by the fact that, borrowers in foreign currency are mainly concentrated in the tradable sectors whose cash flows are also in foreign exchange. This stance implies that their exposure is already hedged against exchange rate fluctuations. By end June 2010, the banking sector seemed to be well cushioned against the exchange rate risk, as reflected by the ratio of foreign exchange assets/total assets at 30.0 percent - being more-or-less equal to that of foreign liabilities to total liabilities, which was recorded at 30.5 percent.
Interest Rate Risk

Stress testing for interest rate risk attempts to determine the impact on financial stability of a change in interest rates through the consequent effect on interest income/expenses as well as the interest sensitive components of the balance sheets of financial institutions.

Interest rate risk can occur when a change in rates results in a mismatch of interest rate sensitive assets and liabilities and also when change in rates have an impact on the creditworthiness of borrowers and their ability to repay. Consequently, banks are required under prudential supervision to hold adequate capital for providing a cushion against potential losses that might arise due to changes in interest rate structure in the banking system.

Liquidity Risk

Liquidity is defined as the ability of a bank to fund increases in assets and meet obligations as they come due, without incurring unacceptable losses. Given this definition, liquidity risk is attributed to the inability of a financial institution to meet its liquidity obligations as they come due even on short notice.

The stress test done by the Bank examines the ability of banks to withstand the risk that customers would want to withdraw their most liquid deposits (demand deposits plus a maximum allowed amount on savings deposits) within 5 consecutive days. In mitigating liquidity risk in the banking system, the Bank of Tanzania requires all banks to put in place effective contingent liquidity plans including the scenario of accessing the intraday, Lombard and lender of last resort facilities from the Bank of Tanzania.

Conclusion

Most of the available literature relates the exchange rates and performance of the international business performance. The Finance Act, 2001 provides the guidance on banking sectors practices on currency determination. This study has compared the
literatures and currency fluctuations experiences and its effects in export/import business oriented and the country economy with reference to Tanzania.
CHAPTER THREE

RESEARCH METHODOLOGY.

3.1 Introduction
In order the research method to produce accurate result must be designed in such a way it facilitate research operation which at the end reliable and accurate results are produced. This chapter tends to elaborate research methodology which is used to investigate main research question “How currency fluctuations affect import /export oriented business in Tanzania. In really sense this chapter explains research design sample and sampling (Participants of the study), study area and data collection as well as data analysis.

3.2 Research Design.
This research study adopted a descriptive study design inorder to get true picture of the impact of currency fluctuation on export/import oriented businesses in Tanzania, the perception of business managers must be measured then the exploratory study design will also be suitable as will be useful to discover new ideas their thought regarding prevail situation regarding the impact to the export/import businesses oriented caused by fluctuation of currency specifically in Tanzania.

A sample size of 4 public companies and 4 private companies which are import/export oriented businesses was selected to come up with a total sample of 8 companies. Among 4 private companies 2 are foreign companies and 2 local owned companies. Primary data was collected using a questionnaire while secondary data was collected from various publications and website such as World Bank website, the Bank of Tanzania and the Tanzania National Bureau of Statistics.

This research was based on the following empirical model

\[ Y = a - b_1X_1 - b_2X_2 - b_3X_3 - b_4X_4 + \epsilon \]

Where:

\( Y \) is measured by profitability of the companies
$X_1$ is External debt defined as the total annual debt stock. This is expected to have a negative effect on exchange rate.

$X_2$ is the inflation rate defined as the annual inflation rate. This is expected to have a negative effect on exchange rate.

$X_3$ is the interest rate defined as the average annual lending interest rate. This is expected to have a negative effect on exchange rate.

$X_4$ is Export and imports measured as the ratio of export to import prices. This is expected to have a negative effect on exchange rate.

$a$ is the constant or intercept.

$\epsilon$ is the error level.

Source: Magda Kambil

The data was entered into the Statistical Package for Social Sciences (SPSS) and analyzed using descriptive, correlation and regression analyses. The correlation coefficients from the regression shows effect (Whether positive or negative) of the independent variables on the dependent variable-tests were used to show the significance of the relationship between the determinant factors and exchange rate. Significance of the relationships was tested at 95% confidence level.

3.3 Study Area
Study conducted In Tanzania specifically in Dar es Salaam Region, six export/import companies/business oriented in each district, Ilala Temeke and Kinondoni due to the fact that the Dar es Salaam have great number of export/import businesses to the extent of being in the position to provide accurate answers based on research findings as data will be easily collected from various focused businesses, apart from that respondent are expected to have clear knowledge of the impact of currency fluctuation in Tanzania.

3.4 Sample and sampling.
The study focused on eight import/export companies in Tanzania of which four public companies include Suma JKT, Medical Store Department(MSD),Tanzania
Electric Supply Company Ltd, Tanzania Investment Bank Ltd(TIB) and four Private companies which include Mansoor Industries Ltd, Akiba Commercial Bank Ltd, Sunda Investment Ltd, Diamond Motors Ltd into investigate the impact of currency fluctuation on import/export oriented businesses in the economy.

3.5 Sample size
Foreign exchange department and import or export department are the targeted personnel or population will be randomly selected from 8 companies of which 2 expert from each company, 1 head of those department from each selected company responded to the questionnaire and make number of 24 respondents working in foreign exchange business or import/ export oriented business in Dar es salaam regional. For this case sampling give each member of the population equal chance of being selected and equal chance of being included in the study.

Head of foreign exchange /import/export Department.
The head of this department were four in number and included in the study to express their opinion on challenges used to face in managing currency fluctuations in the economy so as to control their business and improve efficiency and effectiveness in operation of International trade and foreign direct investment in Tanzania.
Table 1: Study sample Size distribution.

<table>
<thead>
<tr>
<th>No. of companies</th>
<th>No. of HOD</th>
<th>No. of expert</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suma JKT- Dar es Salaam</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Tanzania Investment Bank Ltd</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Medical Stores Department</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Tanzania Electric Supply Company Ltd</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Akiba Commercial Bank Ltd</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Sunda Investment (T) Ltd</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Mansoor Industries Ltd</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Diamond Motors (T) Ltd</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>16</td>
<td>24</td>
</tr>
</tbody>
</table>

Instrument to be used in the study

The instruments expected to be used in the study include: questionnaire, interview, focus group discussion and observation. Both qualitative and quantitative data will be collected.
**Questionnaire**

Questionnaire given to the respondents who are employees of the import/export companies among those few of them will be appointed for group discussion to obtain actual picture on the impact of currency fluctuation. (Wiersma & Jurs, 2004). Apart from that, questionnaire has the advantage of providing reliable information as the respondents are free to write and express their opinion within reasonable time before submission.

**Interview**

The method of data collection selected for the purpose of this study in order to collect important information from importers and exporters.

This method selected as the second method because the interview methodology can complement a survey to add critical or deep information in the study. Open ended questions used to the head of department for the purpose of getting real situation of the study.

**Focus group discussion.**

In order to create clear meaning and reliable results, among four selected companies in three districts Ilea, Temeke and Kinondoni within Dar es Salaam Region will be selected for small focus among discussion. For the purpose of this study various challenges will be directly identified and proposed solution will be in the position to be released immediately.

**Observation**

Apart from that observation method applied so as to increase reliability, get real picture and confirmation of real situation prevail for the study. An observation is suitable for the purpose of obtaining physical understanding of social economic and cultural context of the respondents or participants directly or lives. The relationship between variables is being determined smoothly.
Data analysis and organization.
Data obtained from questionnaire will be analyzed and presented quantitatively as basic descriptive statistics such as frequencies, mean, variance and standard deviation, and some percentage will be computed and presented systematically. Apart from that, qualitative data obtained by open ended interview elaborate respondent/ interviewer choice in data presentation.
CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF FINDINGS.

4.1 Introduction
This section presents the results of the study analyzed with aid of Statistical Packages for Social Science (SPSS) and Excel analysis tool pack. It presents the analysis of the results of data obtained from the questionnaires. The result of the questionnaire and secondary data is represented in tables and graphs to ensure simplicity and ease of understanding. This segment is concerned with data collection, entry, presentation and analysis of variables from the company to investigate the extent to which exchange rate and inflation rate affect the cash flow and profitability. The statistical software SPSS and Excel analysis tool pack used for the summary and presentation of the secondary data. The data is represented in graphs, bar charts and line graph. Questionnaire was self-administered and collected.

4.2 Background of respondents
The background covers a number of respondents from each section captured under the research, age range, gender, and the number of years in the organization.

Table 4.1 Age range of respondents

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30</td>
<td>6</td>
<td>25%</td>
</tr>
<tr>
<td>31-40</td>
<td>12</td>
<td>50%</td>
</tr>
<tr>
<td>40 and above</td>
<td>6</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Field survey, June 2013

Table 4.1 indicates the age range of respondents. 25% of the respondents were between the ages of 20-30 years, 50% were between the age of 31-40 years and the remaining 25% were above the age of 40 years.
Table 4.2 Gender Distribution of Respondents in the Company Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>18</td>
<td>75%</td>
</tr>
<tr>
<td>Female</td>
<td>6</td>
<td>25%</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Field survey, June 2013

As indicated in the table 4.2, 75% of respondents were male whilst the remaining 25% were females. This was representative of the population studied.

Table 4.3 Number of years spent in the organization

<table>
<thead>
<tr>
<th>Range</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>12</td>
<td>50%</td>
</tr>
<tr>
<td>5-10</td>
<td>9</td>
<td>37.5%</td>
</tr>
<tr>
<td>10-15</td>
<td>3</td>
<td>12.5%</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Field survey, May 2012

The table indicates that 50% of respondents have spent between 1-5 years with the organization, 37.5% of respondents have spent between 5-10 years and the remaining 12.5% of respondents have spent 10-15 years with the organization.
4.3 Analysis of questionnaires

Table 4.4 Foreign Currency Acquisition

<table>
<thead>
<tr>
<th>Source of Foreign currency</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inter-Bank Market</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td>Forex Bureau Market</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td>Both</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td>Inter-Bank and Parallel Market</td>
<td>24</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Field survey, June 2013

Table 4.4 indicates that 100% of respondents said the company obtained its foreign currency requirement from both inter-banks and the parallel markets. Respondents left no doubts as to the source of the company’s foreign currency requirement.

Table 4.5 Difficulty in Obtaining Foreign Currency

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>24</td>
<td>100%</td>
</tr>
<tr>
<td>No</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Field survey, June 2013

100% of the respondents as indicated in the table above said the company found it difficult in obtaining its foreign currency requirement for the importation of raw materials for production.
From the study, it was realized that the company usually have difficulties in obtaining the required amount of forex for its operations. It therefore resorts to parallel as a way of supplementing that obtained from the inter-bank market.
Response from the questionnaire administered indicated that, it is difficult for the company to obtain the required foreign currency from the banks. In this regard, the firm often relies on the parallel market to supplement its foreign currency requirements. Figures 4.1 and 4.2 shows that the rates at which the firm obtained the US dollar from the parallel market for the period under study was higher than the quoted rates on the interbank market. Whilst figure 4.1 illustrates the average annual rates of the interbank and the parallel market, figure 4.2 on the other hand illustrate the monthly rates of the interbank market and the parallel market. On the average, in 2010, the firm was acquiring its foreign currency supplement from the parallel market at a rate of 4.2 percent higher than the prevailing rate on the interbank market. This trend was repeated in 2011 with the rates on the parallel market being 6.3 percent higher than the interbank rate. This caused an upward increase in total cash outflows recorded during these periods. As a result, the direct cost and administrative cost increased in the year 2011 with regards to 2010 as depicted in figure 4.2
Table 4.3 Cash outflows of Export/Import business oriented

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Cost</th>
<th>General &amp; Admin Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>150,000</td>
<td>50,000</td>
</tr>
<tr>
<td>2011</td>
<td>300,000</td>
<td>100,000</td>
</tr>
</tbody>
</table>

Source: Field survey, June 2013

The bar chart of outflows shows direct cost versus general administrative cost and indicates that in 2010, direct cost constituted 91.14% of total outflows. This increased to 92.27% in 2011.

Table 4.6 Effects of Foreign Exchange Fluctuations on Production

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>21</td>
<td>87.5%</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>12.5%</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Field survey, June 2013

Table 4.6 indicates that 87.5% of the respondents said fluctuations of the exchange rates affect the cost of production of the organization and the remaining 12.5% of the respondents said that the fluctuations of the exchange rate has no bearing on the cost of production of the company. Secondary data presented by the firm confirmed the
responses, the cost of production as well as the administrative cost of the firm increased as shown in figure 4.2.

### Table 4.7 Price Adjustment during Exchange Rate Changes

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>3</td>
<td>12.5%</td>
</tr>
<tr>
<td>No</td>
<td>21</td>
<td>87.5%</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Source: Field survey, June 2013*

The researcher wanted to know whether or not the company adjust their price (up or down) in the event of exchange rate fluctuation, 87.5% affirmed that the company does not adjust the prices especially upwards and only 12.5% do not attest to that. They operate in a market where customers are sensitive to prices, so an upwards adjustment will lead to a loss of customers to competitors. The inability of the company to pass on cost, lead to the increase in cost of both direct and indirect cost of operation in figure 4.2 and decreased the net earnings of the company illustrated in figure 4.3.
The bar chart of the net earnings in figure 4.4 indicated high earnings in 2010, and experiences a decline in earnings in 2011. Also, there was a high provision for foreign exchange adjustment in 2011 than 2010. This explains why the firm respondents in the questionnaires that they are unable to price their product on a full cost recovery basis. The management further explains that there is an intense competition in the market within which they operate, where consumers are sensitive to prices to the extent that the marginal increases in prices will lead to a switch of consumers to suitable products on the market. This also explains why there is a drop in the net-earnings of the firm as depicted in the diagram above. It could be realized that though the provision for forex adjustment increased during the period, the cost could however be passed onto consumers, this led to a drop in net earnings.

Source: Field Survey June 201

Figure 4.4: Net and foreign exchange provision
Table 4.8 Respondents Knowledge to the financial Information of the Company

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Frequency</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>15</td>
<td>62.5%</td>
</tr>
<tr>
<td>No</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Not Aware</td>
<td>9</td>
<td>37.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Source: Field survey, June 2013*

The table indicates that 62.5% of the respondents are privy to all financial information of the company whereas the remaining 37.5% said they were not aware to all the financial information of the company.

Table 4.9 Percentage of Foreign Exchange in Production Cost

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-20%</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td>21-40%</td>
<td>3</td>
<td>12.5%</td>
</tr>
<tr>
<td>41-60%</td>
<td>6</td>
<td>25%</td>
</tr>
<tr>
<td>61-80%</td>
<td>15</td>
<td>62.5%</td>
</tr>
<tr>
<td>81-100%</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Source: Field survey, June 2013*

In response to this question, 12.5% of the respondents were of the view that foreign exchange rate constitutes between 21-40% of the production cost of the company. 25% were of the view that foreign exchange range between 40-50% of the production cost. 62.5% of the respondents said foreign exchange constitutes 61-80% of the production cost of the company. It is explained that the firm is highly exposed to foreign exchange risk. Furthermore, the inability to price products at a full cost of recovery explains the reason why their net earnings in 2011 dropped significantly as shown in figure 4.4.
Table 4.10 Raw Material Agreement

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>No</td>
<td>24</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Field survey, May 2012

From the above table, it is obvious that all respondents of the company does not in any way concerned with other suppliers with regards to the prices of raw materials. The respondents were of the view that few suppliers are in the business of importing the raw materials so it is difficult to establish an agreement in prices to be paid for the raw materials regardless of the prevailing exchange rates. It can be realized from this response that the company has no currency management techniques available for dealing with the currency fluctuations.
Figure 4.5, a scatter plot of sale revenue against total outflow, shows a strong correlation between sales revenue and total outflow. It indicates that sales revenue increased constantly with increases in total outflow from January 2009 to December 2010. There is a direct relationship between sales revenue, total outflow and net cash flow. As sales revenue goes up, net cash flow and total outflow might also go up as depicted in figure 4.2. Even though there has been a decline in the inflation rate since the third quarter of 2009 as shown in figure 4.4, the exchange rate increased on the average. This explains why the cost of operations of Golden Share Limited increased within the period under review; illustrated on the bar chart of outflows in figure 4.3.
Figure 4.6 also shows a positive correlation between net cash flow and sales revenue period. Net cash flow increased for the period alongside sales revenue. This however may not imply increase in profit. Although the net cash flow increased, analysis of net earnings in figure 4.4 shows a decline in 2011.

4.4 Correlation and Regression analysis
The correlation analysis was done for all the independent variables and the dependent variable in the study. The dependent variable was performance (ROA) while the independent variables were interest rate, inflation rate, external debt, and imports & exports. This analysis was carried out in order to determine whether there were serial correlations between the independent variables. As serial correlations are a problem when performing regression analysis, this preliminary test was carried out first.
Table 4.1: Correlation Matrix of Independent variable

<table>
<thead>
<tr>
<th></th>
<th>Performance</th>
<th>Interest Rate</th>
<th>Inflation Rate</th>
<th>External Debt</th>
<th>Exports and Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>Pearson</td>
<td>.346*</td>
<td>-230*</td>
<td>-401*</td>
<td>.641*</td>
</tr>
<tr>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.102</td>
<td>.501</td>
<td>.121</td>
<td>.006</td>
</tr>
<tr>
<td>Interest Rate</td>
<td>Pearson</td>
<td>1</td>
<td>.612</td>
<td>.354</td>
<td>-.447</td>
</tr>
<tr>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td>.0114</td>
<td>.011</td>
<td>.110</td>
</tr>
<tr>
<td>Inflation Rate</td>
<td>Pearson</td>
<td>1</td>
<td>.658</td>
<td>-.646</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td>.139</td>
<td>.064</td>
<td></td>
</tr>
<tr>
<td>External Debt</td>
<td>Pearson</td>
<td>1</td>
<td>-.695</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.018</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: The research report 2013

4.5 External Trade
Export of goods for the year 2002 increased by 16.25 percent to USD 902.55 million compared to USD 776.40 million recorded in year 2001. The good performance of exports was mainly explained by large exports of nontraditional goods, especially minerals, fish and fish products as well as manufactured goods, which contributed 77.16 percent to total exports of goods as compared to 70.1 percent in 2001. In general, the value of traditional goods export (coffee, cotton, sisal, cashew nuts and clove) continued to deteriorate in 2002, causing the contribution of traditional
exports to decline to 22.8 percent compared to 29.9 percent of total exports in 2001. As regards imports, the value of imported goods declined from USD 1,560.5 million in 2001 to USD 1,511.3 million in 2002. The decrease was attributed to low imports of capital goods, especially for the mining sector, and low food imports.

Table 4.2: Value of Traditional and Non-Traditional Exports: 1999-2002

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional Exports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coffee</td>
<td>76.63</td>
<td>83.7</td>
<td>57.05</td>
<td>35.14</td>
<td>-38.4</td>
</tr>
<tr>
<td>Cotton</td>
<td>28.46</td>
<td>38</td>
<td>33.7</td>
<td>28.15</td>
<td>-16.5</td>
</tr>
<tr>
<td>Sisal</td>
<td>7.26</td>
<td>5.6</td>
<td>6.68</td>
<td>6.65</td>
<td>-0.4</td>
</tr>
<tr>
<td>Tea</td>
<td>24.65</td>
<td>32.7</td>
<td>29.03</td>
<td>29.35</td>
<td>1.1</td>
</tr>
<tr>
<td>Tobacco</td>
<td>43.44</td>
<td>38.4</td>
<td>35.69</td>
<td>50.5</td>
<td>41.5</td>
</tr>
<tr>
<td>Cashew nuts</td>
<td>100.89</td>
<td>84.4</td>
<td>56.58</td>
<td>46.26</td>
<td>-18.2</td>
</tr>
<tr>
<td>Cloves</td>
<td>19.86</td>
<td>10</td>
<td>12.32</td>
<td>5.4</td>
<td>-56.2</td>
</tr>
<tr>
<td>Sub Total(Total Trad. Exports)</td>
<td>301.19</td>
<td>292.8</td>
<td>231.05</td>
<td>201.45</td>
<td>-12.8</td>
</tr>
<tr>
<td>Minerals</td>
<td>73.26</td>
<td>178.2</td>
<td>302.23</td>
<td>372.78</td>
<td>23.3</td>
</tr>
<tr>
<td>Manufactured Goods</td>
<td>30.05</td>
<td>43.4</td>
<td>56.17</td>
<td>67.1</td>
<td>19.5</td>
</tr>
<tr>
<td>Fish and Fish Products</td>
<td>56.75</td>
<td>76.3</td>
<td>96.77</td>
<td>116.76</td>
<td>20.7</td>
</tr>
<tr>
<td>Horticultural Products</td>
<td>8.88</td>
<td>9.7</td>
<td>11.01</td>
<td>10.86</td>
<td>-1.4</td>
</tr>
<tr>
<td>Other Exports</td>
<td>72.74</td>
<td>62.9</td>
<td>79.34</td>
<td>108.09</td>
<td>36.2</td>
</tr>
<tr>
<td>Sub Total (Non-Trad. Exports)</td>
<td>241.68</td>
<td>370.5</td>
<td>545.52</td>
<td>675.59</td>
<td>23.8</td>
</tr>
<tr>
<td>Grand Total</td>
<td>542.87</td>
<td>663.3</td>
<td>776.57</td>
<td>877.04</td>
<td>12.9</td>
</tr>
</tbody>
</table>

Source: President’s Office, Planning and Privatization, 2003

The principal destinations of Tanzania’s exports in 2002 were India (15.3%), Japan (12.4%) and Netherlands (9.2%). The largest shares of imports came from South Africa (12.7%), China (7.9%) and Kenya (6.6) Import share from the European Union including Norway and Switzerland was 23.6%
Trends in foreign trade and production in the Tanzania economy

Quantitative studies on the effect of exchange rates on export performance of the manufacturing industries usually omit the analysis of the consequences of the import dependency because of limited available data. In this section we will try to discuss the linkages among production, imports, exports and foreign exchange movements for the manufacturing sector as a whole and for the sub sectors of manufacturing.

Table: Exports, Imports and Exports to Imports Ratio

<table>
<thead>
<tr>
<th>Products</th>
<th>2008/2003 Import quantity Index (M)</th>
<th>2008/2003 Export quantity Index (X)</th>
<th>2008 (X/M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food products and beverages</td>
<td>1,441</td>
<td>1331</td>
<td>0.92</td>
</tr>
<tr>
<td>Tobacco products</td>
<td>1172</td>
<td>2161</td>
<td>1.84</td>
</tr>
<tr>
<td>Textiles</td>
<td>1303</td>
<td>1221</td>
<td>0.94</td>
</tr>
<tr>
<td>Wearing apparel; furs</td>
<td>2737</td>
<td>989</td>
<td>0.36</td>
</tr>
<tr>
<td>Leather and leather products</td>
<td>2032</td>
<td>1305</td>
<td>0.64</td>
</tr>
<tr>
<td>Wood and products of wood and cork (except furniture)</td>
<td>2609</td>
<td>2262</td>
<td>0.87</td>
</tr>
<tr>
<td>Pulp, paper and paper products</td>
<td>1586</td>
<td>2051</td>
<td>1.29</td>
</tr>
<tr>
<td>Coke, refined petroleum products and nuclear fuels</td>
<td>1515</td>
<td>2516</td>
<td>1.66</td>
</tr>
<tr>
<td>Chemicals, chemical products and man-made fibres</td>
<td>1608</td>
<td>1656</td>
<td>1.03</td>
</tr>
<tr>
<td>Rubber and plastic products</td>
<td>1635</td>
<td>2069</td>
<td>1.27</td>
</tr>
<tr>
<td>Other non-metallic mineral products</td>
<td>2040</td>
<td>1555</td>
<td>0.76</td>
</tr>
<tr>
<td>Basic metals</td>
<td>1400</td>
<td>2017</td>
<td>1.44</td>
</tr>
<tr>
<td>Fabricated metal products, except machinery and equipment</td>
<td>2121</td>
<td>1874</td>
<td>0.88</td>
</tr>
<tr>
<td>Machinery and equipment n.e.c.</td>
<td>1756</td>
<td>2067</td>
<td>1.18</td>
</tr>
<tr>
<td>Electrical machinery and apparatus n.e.c.</td>
<td>3607</td>
<td>2062</td>
<td>0.57</td>
</tr>
<tr>
<td>Radio, television and communication equipment and apparatus</td>
<td>1601</td>
<td>1559</td>
<td>0.97</td>
</tr>
<tr>
<td>Motor vehicles, trailers and semi-trailers</td>
<td>1879</td>
<td>2574</td>
<td>1.37</td>
</tr>
<tr>
<td>Furniture; other manufactured goods n.e.c.</td>
<td>1513</td>
<td>935</td>
<td>0.62</td>
</tr>
</tbody>
</table>

Source: Field Report 2013
Table-1 shows the increase between 2008 and 2003 in exports and imports measured by quantity indices by sectors classified according to ISIC, Rev.3. In exports, there is a decrease in only two sectors, i.e. wearing apparel and furniture, while there is an increase in imports in all sectors. In some sectors the growth is spectacular. In 9 out of 18 sectors, export quantities increased more than two folds, while there are 6 sectors which more than doubled their imports. High growth in export and imports coincide only for wood products and electrical machinery. Import coverage ratio of exports has improved in 8 sectors; while there have been deterioration in the remaining.

Table-2 gives the changes in export and import price indices between 2003 and 2008 according to sectors. A quick look reveals that, export prices increased more than import prices, signaling the possibility of complete pass-through in export prices and incomplete pass-through in import prices, as was concluded by Tekin and Yazgan (2009).

**Table 2 Exports and Imports Indexes**

<table>
<thead>
<tr>
<th>Types of Commodity</th>
<th>Price of Exports</th>
<th>Price of Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food products and beverages</td>
<td>1,837</td>
<td>1,598</td>
</tr>
<tr>
<td>Tobacco products</td>
<td>1,426</td>
<td>1,531</td>
</tr>
<tr>
<td>Textiles</td>
<td>1,350</td>
<td>1,263</td>
</tr>
<tr>
<td>Wearing apparel; furs</td>
<td>1,426</td>
<td>1,545</td>
</tr>
<tr>
<td>Leather and leather products</td>
<td>1,627</td>
<td>1,558</td>
</tr>
<tr>
<td>Wood and products of wood and cork (except furniture); articles of straw and pulp, paper and products</td>
<td>1,617</td>
<td>1,468</td>
</tr>
<tr>
<td>Pulp, paper and paper products</td>
<td>1,397</td>
<td>1,441</td>
</tr>
<tr>
<td>Coke, refined petroleum products and nuclear fuels</td>
<td>3,054</td>
<td>3,222</td>
</tr>
</tbody>
</table>
### Types of Commodity

<table>
<thead>
<tr>
<th>Types of Commodity</th>
<th>Price of Exports</th>
<th>Price of Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemicals, chemical products and man-made fibres</td>
<td>1,589</td>
<td>194</td>
</tr>
<tr>
<td>Rubber and plastic products</td>
<td>1,561</td>
<td>1,472</td>
</tr>
<tr>
<td>Other non-metallic mineral products</td>
<td>1,543</td>
<td>1,473</td>
</tr>
<tr>
<td>Basic metals</td>
<td>2,880</td>
<td>2,591</td>
</tr>
<tr>
<td>Fabricated metal products, except machinery and equipment</td>
<td>1,964</td>
<td>1,452</td>
</tr>
<tr>
<td>Machinery and equipment n.e.c.</td>
<td>1,515</td>
<td>1,190</td>
</tr>
<tr>
<td>Electrical machinery and apparatus n.e.c.</td>
<td>1,976</td>
<td>1,002</td>
</tr>
<tr>
<td>Radio, television and communication equipment and apparatus</td>
<td>752</td>
<td>1,103</td>
</tr>
<tr>
<td>Motor vehicles, trailers and semi-trailers</td>
<td>1,381</td>
<td>1,288</td>
</tr>
<tr>
<td>Furniture; other manufactured goods n.e.c.</td>
<td>2,848</td>
<td>1,547</td>
</tr>
</tbody>
</table>

**Source: Field report 2013**

However, the prices indices above are calculated in US Dollars and thus influenced by the US Dollar rate of the TSh. Tanzania discloses export and import price indices based on both Tsh and US Dollars. The differences between these two price indices suggest an incomplete pass through both for export and import prices as shown in figure-1 and 2.

The differences between the two price indices are more striking for the manufacturing sector. The terms of trade as measured by US Dollar prices, has deteriorated in the 2003-2008 period for the economy as a whole. On the contrary, as shown in Figure-3, the terms of trade improved for the manufacturing sector. In this period, Tanzania increased its imports from East Asia, a process named as Asianisation in the Tanzanian foreign trade by Yukseler and Turkan (2006). Cheaper
imports from Asia helped Tanzania to practice favorable terms of trade effect although the import dependency in the manufacturing sector is high. Recalling that the Tsh has appreciated in 33% between 2003 and 2008, the importers benefitted from this favorable movement. Under a simplifying assumption that, the exporter were facing costs mostly in Tsh and revenues in US dollars, the difference in terms of trade for the manufacturing sector as measured in US dollars and in Tsh has widened, as shown by figure4.

While Tanzanians imports were mainly in US Dollars, the exports were invoiced mostly in Euros, bringing in a parity effect. The parity changes between the dollar and the Euro is not captured in the ERPT approach. Since around 50% of exports went to the EU, exports were predominantly priced in Euros, while the imported inputs predominantly from Russia and East Asia were generally priced in dollars. During 2000’s the euro-dollar parity changed in favor of euro, and this made a favorable effect on Tanzanians competitiveness. Without taking into account that effect, estimating ERPT based on a single foreign exchange rate or a basket, will be wide of the mark.
Import Price Indices

Source: Turkstat and authors, calculations
Export Price Indices

Source: Turkstat and authors' calculations
Terms of Trade

Source: Turkstat and authors, calculations
4.6 Effective Exchange Rates

Bilateral movements in exchange rates can be misleading indicators of the overall change in the metical’s value, therefore, in figure 4, we present nominal effective and the real effective exchange rates for the years 1995-August 2011, calculated using IMF methods (Alessandro and Desruelle 1997). The nominal effective exchange rate index is an average of the bilateral nominal exchange rates between Tanzania currency and each of its trading partners, weighted by the respective trade shares of each partner, and therefore represents a much broader measure of movements in the metical in relation to global markets. In recent years, Tanzanians major trading partners have expanded from the traditional —big three — EU, South Africa, and the USA, to include China and India. However, the high trade weights with EU and South Africa continues — EU (55.7 percent) and South Africa (36.3 percent), while China (3.2 percent), India (2.6 percent) and the USA (2.2 percent) make up the remaining portion of the total. The real effective exchange rate index adjusts the nominal effective rate for differing rates of inflation in trading partner countries,
employing relevant CPI measures. As the real effective exchange rate is a relative price index, measuring price changes in Tanzania versus its major trading partners, it is generally used as a measure of price competitiveness. In addition, the real exchange rate can also be thought of as a ratio of tradable to non-tradable prices in the economy.
CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Impact of currency fluctuation on the Real Economy

The extent to which the domestic economy is affected by external shocks depends on the interactions between the domestic and the global financial system. For Tanzania, the first round effects of the currency fluctuations were rather limited largely due to two major reasons, namely: the low level of integration of domestic financial markets with the international financial markets, and the remaining restrictions on capital account, which lowered exposure to the toxic financial assets. At the time of the crisis, foreign assets component in the banking sector was about 11 percent of total assets of the banking system, thus providing minimal exposure to direct effects of the GFC.

However, due to integration in the global economy through international trade, the second round effects of the currency fluctuations impacted Tanzania through trade following a sharp decline in global demand and a proportionate fall in commodity prices. The performance of key export sectors in Tanzania, especially traditional exports and tourism weakened significantly as economic conditions in the Tanzania’s main trading partners - of which US and the Euro Area account for about 50 percent of Tanzania’s export market, took a downturn. Basically, the declining international demand led to substantial reduction in export earnings, tourism receipts, and a notable slowdown in FDI inflows, as well as remittances from abroad.
Source: Field Report 2013

As Tanzanian exporters of the major traditional export crops – in particular cotton and coffee during the 2008 season – were preparing to export their stock of crops, world commodity prices dropped sharply following a collapse in demand from major trading partners, thus leading to cancellation of orders. These developments forced some of the exporters to sell the stocks at a loss, hence jeopardizing the ability to service their bank loans. Also farmers with unsold crop could not find buyers as companies suspended crop purchase operations. Since the main vulnerability to banks lies in credit exposure to distressed borrowers, banks became overly cautious at lending to economic activities, particularly those with external linkages.

Given the post-crisis anxiety in the financial system after the freezing of external credit lines and the uncertainty of recovery of the domestic and global economy, the major challenges that the Bank of Tanzania and the Government had to address included the following: Prospective buildup of non-performing loans in the banking system and its consequences on credit freeze as key exporters suffered losses from the collapse of export prices and demand. Volatility in the exchange rate heightened by anxiety over foreign exchange shortage as global capital markets and prospects for ODA flows froze. The resulting economic slowdown constrained the government’s ability to meet its revenue targets, address food security concerns, while the limited access to financing curtailed options for both public and private sector investment.
5.2 Impact on the Foreign Exchange Market

The contagion of second round effects of currency fluctuations operating through the trade, capital flows and confidence channels created pressures and increased volatility in the financial markets – especially the foreign exchange market. The declining foreign exchange inflows subsequently led to low level of foreign exchange supply in the market against the highlighted demand due to anxiety over tightening of international capital and credit lines exerted undue pressure on the exchange rate. If not contained, the pressure on the exchange rate could pose substantial risk to the stability of the financial system due to the revaluation off foreign currency denominated assets and liabilities of financial intermediaries against domestic assets and liabilities. Between January and December 2009, the foreign exchange market recorded the demand that was way above the normal seasonal demand (Figure 5.1). The Bank supplied the market with foreign exchange amounting to USD 1.05 billion, which accounted for about 65 percent of the total market turnover of USD 1.54 billion. This measure was taken to reduce the shortage of foreign exchange, dampen the anxiety and restore confidence in the market. As a result, the depreciation of the shilling against the USD was contained at an average of 12.9 percent during the first 12-months of the crisis – i.e. from about TZS1,159 per USD in Sep 2008 to TZS 1,309 per USD in September 2009. Specifically, between September 2008 and March 2009, the exchange rate depreciated sharply by 12.9 percent. During the same period, other regional currencies also registered a similar trend. The Kenyan shilling depreciated by an average of 12.5 percent, Ugandan currency by an average of 24.8 percent, while South African rand depreciate by 23.5 percent.

As the market pressure on the exchange rate eased coupled with the implementation of their package from April 2009, the shilling stabilized for almost four quarters until the second quarter of 2010 when the sovereign debt crisis kicked in. It is noteworthy that accumulation of sufficient foreign reserves plays an important role in financial stability since adequate international reserves provide a cushion against the exchange rate risk. On this Basis, the Bank of Tanzania seeks to maintain adequate level of reserves at all times. By end of June 2010, the Bank had accumulated foreign
reserves amounting to USD 3.5 billion, which was sufficient to cover 5.5 months of imports of goods and services. This amount of reserves was sufficient to contain even the adverse fluctuations in the exchange rate above those registered during the peak of the foreign exchange demand in the wake of the GFC.

5.3 The impact of exchange rate movements on businesses
Movements in the exchange rate affect mainly the export-import oriented businesses in the country, through increased cost of imported raw materials and intermediate goods used in the production cycles. In the past two years, the shilling has come under pressure twice. As depicted in Chart 1.3 below, the first episode came immediately after the onset of the global financial crisis in September 2008 and lasted well into the first quarter of 2009, while the second episode which is associated with the sovereign debt crisis came during the quarter ending June 2010. However, in between the two episodes, a sense of stability prevailed in the foreign exchange market. The small and medium size enterprises, as well as manufacturing, building and construction sectors which had sailed through the crisis strongly, came under stress on their production costs during the fourth quarter of 2009 and first quarter of 2010, mainly on account of the depreciation of the shilling exchange rate that kicked-in following the sharp movements in currencies associated with the sovereign debt crisis. The Bank continues to monitor closely the movements in the exchange rate for any deviations from market fundamentals in order to address the situation according to its foreign exchange policy.
5.4 Exchange Rate Fluctuations and Prices

A key transmission channel through which exchange rate movements affect the economy is via their influence on prices. The principal direct effect occurs through the impact on import prices, which, via the pricing chain, triggers changes in consumer prices and producer costs. These price effects, in turn, generate indirect and second-round impacts by way of changes in real incomes, consumer spending, and trade flows, which have added consequences for the overall direction of changes in the consumer price index (CPI). The other direct effect of exchange rate changes on prices occurs via the impact on export prices, which leads to changes in exporter profit margins and trade volumes.

The crucial variable in understanding the magnitude of these exchange rate links to prices is the —exchange rate pass-through (ERPT) to prices at different stages of the pricing chain. The ERPT elasticity on the import side measures the degree of price transmission between foreign prices, exchange rates, and domestic prices, and thus provides valuable insights into the major determinants of consumer prices. On the
export side, the ERPT elasticity measures the degree of price transmission between exchange rate changes and export prices, and thus can provide information on how exporting firms adjust margins according to business strategies in foreign markets.

Research on ERPT around the world shows that pass-through of exchange rate changes is not perfect (Ca’Zori and Schatz 2007; Campa and Goldberg 2005; Frankel Parsley and Wei 2005; ECB 2008). In developed countries, the ERPT to import prices averages around 60 to 70 percent. Import prices, however, are the first link in the pricing chain directly affected by exchange rate changes. Farther down the pricing chain, the ERPT to final consumer prices gets progressively smaller in developed countries, averaging only between 13 and 30 percent (Campa and Goldberg 2006).

Several factors can cause this incomplete pass-through of exchange rate movements. First off, there is the effect of pricing behavior of major trading partners on import prices, which can reduce the pass-through elasticity by engaging in higher pricing-to-market behavior (i.e., absorbing more of any exchange rate fluctuations in their margins). Asian exporters did this following the Asian crisis in the late 1990’s to increase trade flows. Second, some of the incomplete pass-through can be due to threshold effects. There can be thresholds to arbitraging behavior of market participants, whereby prices converge only if price differentials are above a certain threshold level that makes arbitrage profitable. More complete pass-through would be evident once thresholds of inaction are taken into consideration. Third, import price responses to exchange rate changes can be larger than consumer price responses because (a) there are non-tradable in the CPI, (b) distribution channel costs reduce the foreign content value of imports, and (c) imperfect competition in the distribution channel lets distributors adjust their profit margins to exchange rate changes in order to expand market share.

A study by Cirera and Nhate (2006) provides an estimate of the ERPT to domestic prices in Tanzania. Using Customs Authority data for 2000-05, this study examines price transmission in a pooled sample of 25 important products, across three regional
provinces spanning Tanzania. The consumer price of an imported product should be equal to fob price adjusted to include insurance and freight (cif price), plus tariffs and other border taxes, such as VAT, plus transport costs, plus a retail margin. As Tanzania is a small country, with limited ability to influence pricing-to-market behavior of foreign exporters (i.e., the fob price), one would expect a high pass-through to import prices. Figure 7 shows movements in Tanzania’s import price index along with nominal exchange rates over the past 15 years. It is clear there is a close relationship.

Imports play a large role in GDP – averaging in some years more than 30 percent of domestic value-added, and imports make up roughly a 25 percent share of total domestic demand. For some product categories, import penetration is much higher – penetration in manufactures, for example, reaches nearly 60 percent of domestic demand. This enhances the pricing ability of foreign firms (as there is no incentive to defend these large foreign market shares through active pricing-to-market behavior) thus raising the ERPT to import prices. Second, local markets for these products in Tanzania also do not exhibit intense competition. In most cases there are no, or very few, local substitutes, and there are only a few large firms competing in the distribution and retail segments of the pricing chain. Lastly, price mark-ups are passed-through to consumers who generally have rather inelastic demands for these basic imported products.

The ERPT to export prices in Tanzania is generally expected to be lower than the ERPT to import prices. A practical indicator of the degree of pass-through in this case is the correlation coefficient between exchange rate fluctuations and changes in the export price index. Figure 8 shows a plot of the relationship between the real effective exchange rate and Tanzania’s export price index for the period 1995-2009. In addition, we regressed the export price index on the real exchange rate to obtain an estimate of the elasticity of export prices to movements in the real exchange rate. One does observe some correlation between prices and exchange rates over the period in the figure. However, the statistical exercise finds the elasticity to be relatively low at .32 – the regression shows that movements in the real effective
exchange rate explain only 16 percent of variation in export prices. So, only about one third of exchange rate shocks are passed-through to export prices in Tanzania. While this is a relatively low ERPT, the same experience of lower pass-through to export prices than to import prices is generally true of other countries, even in more advanced economies. In EU countries, for example, the ERPT to import prices averages around 70 percent, the ERPT to export prices is only 43 percent (ECB 2008).

The reasons for this difference in exchange rate pass-through revolve around the particulars of the composition of the export basket, competitive pressures in foreign markets, and exporter pricing-to-market behavior. The developed-country export basket, for example, is made up largely of manufactures where pricing-to-market behavior is most prevalent. Increased competitive pressures from emerging markets, such as China, have caused EU exporters to vary their mark-ups more and export prices less in response to exchange rate movements (ECB 2008). In the case of Tanzania, exports are limited in

![Index 2005=100](image)

Source: Field report 2012

number and narrowly concentrated (World Bank CEM 2011). Only 14 products record exports of more than $1 million. Exports from so-called —mega projects (aluminum, electricity, gas, and titanium) account for more than 79 percent of the
export basket with 12 primary products making up the remaining 21 percent. Overall, exports also exhibit a low level of processing. The few products that might receive some further conversion, such as wood, cotton, oil seeds, and tobacco are exported at a very low stage of processing – for example, cotton is ginned in Tanzania, logs are milled to some degree, and cashews receive some processing. While Tanzania is a commodity exporter, where pricing-to-market behavior is generally less apparent than in manufactures, its export basket exhibits several characteristics that reduce the degree of exchange rate pass-through to export prices.

Most important is the fact that mega-project export prices are not very sensitive to exchange rates. The multinational companies involved in this trade generally negotiate fixed-term contracts in foreign currency, based on commodity prices determined in world markets. For example, the majority of electricity exports involve long-term contracts that usually do not allow for large price fluctuations. In the cases of aluminum, coal, and minerals, export prices are also subject to long-term contracts that typically take the form of a fixed market price with a negotiated standard escalation (Bucuane and Mulder 2007).

Prices of all these commodities are expected to increase over time with developments in emerging markets, but in an orderly fashion. For the remaining products in the export basket, the ERPT should be somewhat higher. However, relatively small Tanzanian primary product exporters, with limited ability to hedge, are sometimes compelled to engage in pricing-to-market behavior, according to interview respondents for this study. Tanzanian’s export penetration in major markets is low and exporters face stiff competition and rigid contracts. Exporters also have a bit of leeway to behave strategically in some export destinations in the form of trade-preferences. The EU, for example, offers unilateral tariff preferences to Tanzanian’s exports, which provides some cushion in margins for strategic behavior. In their study of preferential tariff pass-through to Tanzania export prices in EU markets, Alfieri and Cirera (2008) provide evidence of exporter willingness to reduce margins to defend markets. When, for one reason or another, exporters cannot obtain proper documentation to enter the EU under available special tariff preferences,
rather than renege on contracts, Alfieri and Cirera note that exporters enter at higher tariff levels, absorbing losses in their margins.

**Exchange Rates and Trade Flows**

A second key transmission channel through exchange rates influence economic activity is via expenditure-switching effects on trade flows. Exchange rate appreciations, for example, make a country’s goods and services more expensive relative to foreign goods and services. This, in turn, leads to a shift in global demand away the country’s goods and towards foreign goods. Consequently, the country’s exports decline and imports increase, and there is a resulting deterioration in the trade balance and a decline in the contribution of net trade to GDP growth.

A crucial element in this scenario, however, is the ERPT. The overall effect of an exchange rate change on trade flows is highly dependent on the magnitude of ERPT to import and export prices. It is only when a nominal change in exchange rates turns into a realized change in import and export prices in the buyer’s currency that a demand response will occur. To the extent that Mozambique exporters engage in pricing-to-market behavior, reducing margins in response to an appreciation and maintaining export prices, or to the extent that mega-export contracts are of long duration with price escalation clauses, the export response to appreciation will be restrained. On the demand side, by contrast, it is clear that expenditure switching or demand responses in foreign markets to any price-related effects of exchange rates on Tanzanian’s primary exports will be substantial. When the substitutability between products and suppliers is high (as in the case of most of Tanzania’s primary agricultural exports), changes in relative prices between products from different source countries generally result in a pronounced demand response to exchange rate swings.

In addition to price-related effects, other factors can be expected to have an important impact on the supply response of trade flows to exchange rate changes. One is —sunk trading costs. These are the costs of entering a new market, which cannot be recouped in the event an exporter must exit the market at a later date.
Examples are initial marketing expenses and costs of establishing a distribution network. These sunk costs introduce a degree of slowness in the responsiveness of trade flows. Without them exchange rate movements would not present a problem for incumbent, or newly entering, exporters, as they could react to changes with no loss in initial investment. For example, in the presence of sunk costs, incumbent exporters may not immediately react to deterioration in profit margins after an exchange rate appreciation in order to protect the value of sunken investments. And new entrants might choose to delay entry into export markets a bit longer to ensure that the exchange rate moves in their favor, as initial outlays could be squandered. In Tanzania, exporters complain that sunk trading costs are high. Local fixed costs of exporters, in the form of initial investments in acquiring land, dealing with the bureaucracy, getting infrastructure up and running, establishing local trade facilitation networks with transportation, ports, and customs, and so on, are considerable. And foreign fixed costs of establishing trading relationships and establishing distribution channels add to these totals. According to exporters, these high sunk trading costs introduce a good deal of inertia into the export response to exchange rate changes.

Another factor that may influence the exchange rate elasticity of aggregate trade flows is the import content of exports. When domestic value-added is low, and imported inputs play a large role in export production, the impact, for example, of an appreciation on the foreign currency price of exports, is lessened, as the price of imported inputs falls. This mitigating effect of imports may be important in shaping the export response in Tanzania, as the import content of some important exports is sizeable. Exporters note that most export companies are —green field investors, lacking the support of key suppliers in almost every area – capital equipment, intermediate inputs, packaging, technical expertise, spare parts, and so on. All these critical inputs have to be imported.

A further potential mitigating factor for supply response revolves around hedging. To the extent Tanzania’s exporters can hedge exchange rate exposure, they can reduce the supply response to any adverse movements in exchange rates. However, as noted
earlier, the ability to hedge in Tanzania is somewhat limited, given the level of financial development. To hedge foreign exchange exposure exporters have the following narrow options available. For exporters that can afford the fees and other costs, large banks in Tanzania offer three hedging products: forward foreign exchange contracts (for imports and exports), funded forward foreign exchange contracts, and foreign exchange swaps. To date banks in Tanzania do not deal in foreign exchange options because of the cost (or premium) that would be charged to the client owing to the absence of an active interbank financial derivatives market. For smaller exporters that cannot, or will not, pay the costs of such products, the options available are to reduce foreign exchange exposure as much as possible, hold different types of foreign exchange in their accounts, or speculate in the local foreign exchange market through banks or exchange bureaus.

Lastly, the business environment is an important factor in shaping the exchange rate—trade flow link. Tanzania’s rank in the World Bank’s —Doing Business Report— has improved somewhat in the last couple of years, but it continues to be positioned near the bottom of the list of countries with poor business climates (World Bank 2011). Its global competitiveness index, as measured by the World Economic Forum, also languishes around the lower rungs of the competitiveness ladder compared with its peers (World Economic Forum 2010). Financial constraints register as one of the worst elements in this lackluster business environment, and, according to the 2011 Doing Business Report, this feature of the business climate has actually deteriorated in the past few years. Firms complain in surveys that both cost and availability of credit are problems (World Bank Investment Climate Survey 2009). A number of studies on other developing countries have found that these business environment problems, particularly financial constraints, reduce the exchange rate elasticity of trade flows (see Colacelli 2010 for a recent review of some of these studies).

Estimates of the exchange rate elasticity of trade flows have been carried out for a number of developed and developing countries at least since the 1950s. This work has been at the center of a long debate about how sensitive exports are to real exchange rate changes. Views have swung from —elasticity pessimism in the 1950s
and 1960s, particularly for developing countries, to a more sanguine stance on the ability of changes in the real exchange rate to improve the trade balance (Ghei and Pritchett 1999; Reinhart 1994). Much of this debate has been driven by improvements in estimation techniques and in computing power through the years. A recent study by Colacelli (2010) improves on the results by focusing on bilateral exchange rates, on a larger sample of countries, and on a wider number of sectors. Colacelli examines the export response to real exchange rate fluctuations in a sample of 136 countries, during the 1980s and 1990s, for 440 sectors. Given this large and in-depth sample, the investigation has the ability to look at exchange rate elasticity in both developed and developing countries, as well as in separate product groups.

The study finds that the elasticity of export response to real exchange rate changes of an average exporter in a developed country is 67 percent, while the elasticity in developing countries is 13 percent. These results are broadly consistent with other estimates of close to one for developed countries (for example, the average elasticity for EU countries is found to be 80 percent (European Central Bank 2010) and well below one for developing countries. Colacelli also finds that there are significant sectoral differences in the export response. Overall, exports of differentiated product sectors (such as manufactures) are found to respond more to real exchange rate swings than those of homogeneous products (such as commodities).

This would explain some of the difference in the exchange rate response elasticity between developed and developing countries, as the export mix in developing countries is generally heavily concentrated in primary products. But the study also finds that the differences in response elasticity between product groups in developing countries are quite small; so export composition does not explain as much as one would expect. Colacelli’s conjecture, supported by research in other countries, is that this lower export response to exchange rate fluctuations in developing countries is due importantly to credit constraints.

Considering Tanzanian’s low ERPT to export prices and obstacles in the business environment, one might expect the export response to exchange rate changes to be
restrained. To examine this issue, we present a graph of the real effective exchange rate along with indexes of Tanzania’s aggregate exports by volume and by value for the years 1995-2009 in figure 9. One does not observe much of an association in the figure between exchange rate movements and the export indexes largely due to the exponential rise in the export value index, which rose from 100 in 2000 to 728 in 2008 blowing out the y-axis of the graph.

![Graph of REER and Export Value Index, Export Volume Index](image)

Source: Field Report 2012

5.5 Exchange Rates and Enterprise Profits

In this section, we turn to a microeconomic examination of the impact of exchange rates, with a shift of focus to firm performance. Exchange rate changes can affect the profitability of firms in a number of ways. First, appreciations (deprecations) can result in a loss (gain) of international price competitiveness. Export volumes and export earnings are apt to fall (rise) as a result. Any decline in profitability due to, for example, an appreciation may be offset to some degree by two factors: (a) exporter pricing-to-market behavior: an exporter may decide strategically to absorb a portion of the exchange rate change in margins per unit of exports (reducing export price in domestic currency), thereby avoiding a fall off in export volumes, and (b) a decrease in cost of imported inputs following appreciation.
Second, profitability of firms not directly engaged in international transactions, such as firms active in import substitution operations, can be affected by exchange rate changes through competition in domestic markets from changing import prices. Third, exchange rate fluctuations can affect firm profitability through shifts in the valuation of assets and liabilities on the company’s balance sheet. The size of this valuation effect will depend on the firm’s foreign exchange exposure – i.e., the value of holdings in asset portfolios and loans in foreign currency. Firms may decide to remove a portion of their foreign exchange exposure, and reduce the possibility of valuation and other exchange rate impacts, through various forms of hedging.

In sum, the impact of exchange rate fluctuations on firm profits depends on (a) the extent to which a firm is involved in trade, either in terms of exports or imports, (b) the competitive environment within which a firm operates, and (c) the extent of foreign exchange exposure of a firm’s balance sheet. Competition is important for several reasons. In international markets, it influences pricing-to-market behavior. In domestic markets, any positive impact of an exchange rate shock, for example declining imported-input prices owing to an appreciation, might have to be passed on to consumers.

In the end, the link between firm profits and exchange rate changes is largely an empirical issue, as it is difficult to say in advance what the final outcome will be in all cases, as it depends on the characteristics of the firm and its products, as well as the nature of competition. One empirical study on a large sample of developed and developing countries, using stock market earnings data, found that exchange rate movements do not matter much for the value of industries (Griffin and Stulz 2001). This was especially true for the US economy where exchange rates seem to have a very low impact on firm earnings. A more recent investigation by the European Central Bank (2010) finds a more substantial impact.

It examined exchange rate shocks in six industrialized countries, using earnings data of listed companies and classifying these companies by the extent of their international sales. The ECB found that (a) most of the time exchange rate
changes have a positive effect on earnings of non-exporters, but the impact is relatively small, suggesting that the sourcing-imported-inputs effects of exchange rate movements generally out-weight competition effects for non-export companies, (b) for exporters, competition effects out-weight sourcing effects, indicating that appreciations reduce exporter earnings, (c) firms with above-average export sales are not necessarily affected to a larger degree by exchange rate changes, suggesting that these larger multinationals can find ways to manage their way around, or hedge, exchange rate exposure.

Exchange rate volatility can also influence firm earnings, causing substantial swings in profitability in some cases. The impact of exchange rate volatility on profits depends on how exchange rate volatility correlates with a firm’s product price and costs, as we noted earlier. Some firms export products whose international price co-moves negatively with nominal exchange rate fluctuations. As a consequence, the prices of their products in local currency are more stable than the product prices other firms, so their profits do not fluctuate as much with exchange rate movements. These firms, as we noted above, have a —natural hedge— against nominal exchange rate volatility. For other firms that are more exposed to volatility, the oscillation of prices and profits matters, particularly in developing countries where financial markets are less developed. In these low-income countries, swings in relative prices and profitability can cause difficulties in capital markets, as there is limited ability to bear this type of elevated risk. The result can be underinvestment in the activities of these firms and resource shifts toward products and firms with less volatile profits (Hausmann and Rigobon 2003; Raddatz 2011).

Tanzania does not have detailed time-series data on firm earnings in various industries to examine the microeconomic impacts of exchange rate shocks. What we can do, however, is look at examples in a few sectors to get some idea of the direction and magnitude of possible effects.

In this study I also found the impact of currency fluctuation acted negatively especially to the small and medium companies due to the fact that they have few
specialized personnel who are capable and having good experience in forecasting future business environment so as to protect their business against risk expected to be faced by their business compared to the Large import/export oriented businesses.

Public companies which deals with export/import oriented business in my survey I found they used to perform well regarding managing negative impact of currency fluctuation in the economy as they have enough and well trained professional employees whom they are working for the interest of protecting their companies from the risk associated with currency fluctuation. Apart from that there are some various tax exemptions and subsidies which are given by the government to the public companies when exporting and importing of various material or equipment to and from abroad.

Medical Stores Department (MSD) which used as government agency for importation of all medicine used in the country, Tanzania Electric Supply Company Ltd which is the public companies which deals with electrical supply in Tanzania but most of equipment such as poles, wires, meters and other necessary equipments used to import from abroad such as Republic of South Africa and European countries and Suma JKT which used to export/import building material, farm equipment for agriculture and other domestic equipment they used foreign forward contract to determine the future exchange rate in advance with their foreign suppliers so as to control the risk associated with currency fluctuation

Apart from that I found Tanzania Investment Bank Ltd which is owned by the government of Tanzania sometimes used to benefit from the currency fluctuation through critical assessment of future business environment within the economy as when the huge depreciation expected to happen in the near future then they mobilize and reserve the foreign currency in great quantity then motivate international and local customer to borrow in foreign currency for future repayment as result in the future obtain good profit resulted from reasonable interest rate and take advantage of domestic currency depreciation. Multinational private companies such as Sunda Investment (T) Ltd which deals with import/export of agriculture products and construction equipments and Diamond Motors Ltd are performing well in controlling
and managing the impact caused by currency fluctuation as they are subsidiary with giant parental company abroad and usually transacting in foreign currency (US dollar) which make their financial status being stable compared to the local companies such as Akiba Commercial Bank Ltd and Mansoor Industries which are victim of the currency fluctuation by being affected negatively.

Finally in real sense public import/export oriented businesses seemed to manage well the impact of currency fluctuation due to the fact that they have well professional staff of financial management and advantage of subsidies and tax exemptions which boost their performance and efficiency in the economy compared to the private companies which required to use their own effort in reducing the impact of currency fluctuation in their business operations.
CHAPTER SIX

CONCLUSION AND RECOMMENDATION

6.1 Introduction
Tanzania’s real exchange rate has been overvalued for most of two decades, creating disincentives for investment in tradable goods and services. However, overvaluation throughout this period has been declining steadily, from a peak of 36 percent in the 1995-2000 periods to close to PPP equilibrium by 2010. In 2011, the medical has appreciated substantially, particularly against the US dollar, and has again become misaligned. Using the average Tzs/$ rate for the first eight months of 2011 to estimate the extent of real exchange rate overvaluation, we find that the real metical is today about 11 percent overvalued. Using the Tzs/$ rate reached in August of this year, the real metical exchange rate is estimated to be more than 30 percent overvalued.

Tanzania’s real exchange rate volatility is high, which could be having negative effects on trade and investment. Using the standard deviation of the first difference of logarithms of the exchange rate to estimate the degree of volatility, we find that Tanzania’s volatility over the 1995-2011 period has averaged 3.9. When benchmarked against the level of exchange rate volatility in other developing countries, however, Tanzania’s high average volatility is not abnormal for a developing country that is a primary commodity exporter. This cohort of developing countries exhibits the highest exchange rate volatility in the world, largely owing to time-honored shocks in global commodity markets. Five transmission channels are highlighted in the study through which exchange rates influence economic events. We examine each of these mechanisms to see how recent levels and volatility of the medical are affecting Tanzania’s economy.

The first transmission mechanism is via prices. Exchange rate fluctuations influence both import and export prices. On the import side, exchange rate changes first pass-through (ERPT) to import prices. Next, it reverberates down the pricing chain to
consumer and producer costs. The ERPT to export prices leads to changes in exporter profit margins and trade volumes. We show that the ERPT to import prices, and on down the pricing chain to consumer prices, is very high – estimated to be upwards of 75 percent. In other words, here is almost complete pass-through. This has significant policy implications, which we will discuss in more detail below. As for the ERPT to export prices, we find it to be low – somewhere around 30 percent. The reasons for this revolve around the particulars of the composition of the export basket, competitive pressures in foreign markets, and exporter pricing-to-market behavior. As we noted in section 2, mega-project exports are relatively insensitive to metical exchange rate shocks, and small, non-mega exporters are often compelled to engage in pricing-to-market behavior to protect their foothold in highly competitive markets.

The second transmission channel we examined is the link between exchange rate changes and trade flows. A crucial element in this association is the ERPT. The overall effect of an exchange rate change on trade flows is dependent on the magnitude of the ERPT to import and export prices. Given that the ERPT to export prices in Tanzania is only about 30 percent and significant constraints exist in Tanzania's business environment, one might expect that the trade response to exchange rate changes is somewhat restrained. However, we find that there is a significant correlation between aggregate trade flows and exchange rate shocks. The elasticity of export supply (export volumes) to real exchange rate changes is -.83. When one looks at individual exports one also finds a significant association between exchange rates and trade volumes. In the case of cotton exports, for example, a 10 percent depreciation (appreciation) of the real effective exchange rate is estimated to increase (decrease) export volumes by 13 percent.

Third, we look at the microeconomic impact of exchange rate fluctuations on firm earnings. The effect of exchange rates on enterprise profits depends on the extent to which a firm is involved in trade, in terms of either exports or imports, the competitive environment within which a firm operates, and the extent of foreign exchange exposure of a firm's balance sheet. In the end, the link between firm profits
and exchange rate changes is largely an empirical issue, as it is difficult to say in advance what the final outcome will be in all cases, as it depends on the characteristics of the firm and its products, as well as the nature of competition. The study focuses on firms in agriculture and tourism.

Turning first to agriculture, an important issue for entrepreneurs and firms making investment decisions in agriculture is how exchange rate shocks affect relative producer price incentives between sectors, such as agriculture and industry. Trade and macroeconomic policies in developing countries have often been distorted, producing negative effects for relative producer price incentives in agriculture. The policy prescription for this problem is to get prices right by reducing these distortions to improve agricultural price incentives for investors. A key element in this treatment has been to remove any overvaluation in exchange rates, as appreciation is generally seen as an important negative for tradable agricultural goods. However, exchange rates have differing impacts on relative agriculture price incentives depending on specific country characteristics. Differences in impact depend crucially on a country’s relative trade shares between agriculture and industry and on the relative elasticity of import demand and export supply.

Trade shares of primary agriculture in Tanzania are quite low and there is a bias toward imports. Agriculture’s use of imported inputs is also relatively low. Industry’s trade shares, by contrast, are high, especially when mega projects are included, and industry’s use of imported inputs is high. Accordingly, real appreciation of the metical would be expected to improve (or have very little impact on) relative price incentives in agriculture and real depreciation to worsen them. Real appreciation generally works to lower the terms of trade for exports and lower input costs for sectors using imported inputs. Thus, in Tanzania because of the low aggregate trade shares of primary agriculture, imported-input cost effects of appreciation dominate terms of trade effects, leading to improved relative agricultural price incentives.

But this aggregate impact of exchange rates on relative agricultural price incentives conceals differences in outcome across specific products. Individual agricultural
commodities differ significantly in their trade shares and use of imported inputs. As a consequence, exchange rate impacts on producer price incentives within agriculture differ product by product. Primary food crops, which dominate value-added in the sector, have low trade shares and imported input use is generally low. Export crops, on the other hand, such as cotton, tobacco, and cashew, have much larger trade shares than staples. Accordingly, real exchange rate shocks have a more substantial impact on the export terms of trade for these commodities. Real appreciation, in the case of these tradable, worsens relative producer price incentives and real depreciation improves them, as negative export terms-of-trade effects will dominate positive imported-input effects. We found support for this outcome with regards to cotton, as noted above. Since it is these tradable agricultural products that provide the majority of cash income for rural smallholders, any extended episode of real exchange rate appreciation can have adverse consequences for the livelihoods of a large segment of society, including the poorest segments of the populace who are part of this smallholder cohort.

For domestic import-substitution investments in staple foods, particularly in crops such as rice and wheat with large import shares in consumption, appreciation will tend to reduce producer price incentives, as competitive effects from falling import prices of these staples out-weight any positive effects from lower costs of imported inputs. The impact of exchange rate swings on the competitiveness of these investments is important because it influences Tanzania’s ability to deal with rising world food prices, which is becoming an ever more pressing problem, considering the country’s large requirements for imported staples to feed a low-income, growing population. Focusing on domestic rice production, this study shows that competitive margins in import-substitution investments are thin; hence, exchange rate appreciation can have serious consequences for investor returns, reducing domestic production capacity and food security.

The fourth transmission channel through which exchange rates affect the economy is via valuation affects. Exchange rate fluctuations affect the prices of Tanzania’s assets and liabilities, thereby causing changes in portfolios and generating potentially large
wealth effects that can influence the spending decisions of consumers and firms. Accounting for these changes in valuations of Tanzania’s assets and liabilities is summed up in balance sheet levels called the net international investment position (NIIP). NIIP shows the stocks of a country’s international assets and foreign liabilities at a point in time. We examine Tanzania’s NIIP for the years 2007-10 to see the impact of exchange rate changes on the country’s net asset position.

Tanzania is shown to be a debtor country with a net liability position of 91 percent of GDP in 2010. This reflected an accumulated increase in net liabilities over the period of almost 40 percentage points since 2007. Changes in this international investment position are explained by three basic factors: revaluations owing to changes in asset prices and exchange rates; changes due to net financial transactions involved in movements in the current account and capital account in the balance of payments; and changes due to —other adjustments . Given that Tanzania runs a large balance of payments deficit (averaging about 11 percent of GDP after grants), which requires transactions to finance this shortfall, net financial transactions in the balance of payments had the largest impact on the NIIP over the period. Revaluations due to exchange rates and prices played a significant but smaller part. Price and exchange rate revaluations to Tanzania’s external debt position, which represents a large portion of NIIP liabilities (roughly 60 percent of GDP in each year during the 2007-10 period), were significant in every year. In 2007-08, when the real exchange rate appreciated, there were substantial downward revaluations to external debt of -3 percent and -8.7 percent of GDP. In 2009-10, when the exchange rate depreciated, there were important upward revaluations of +3 and +5.5 percent of GDP. Over the whole period, revaluations due to prices and exchange rates netted out to be a downward revaluation of external debt of -3.3 percent of GDP or about -$265mn.

The fifth effect of exchange rate movements on the economy is through their impact on economic growth. The effect on economic growth results from the cumulative effects of exchange rates on prices, trade flows, firm earnings, and asset and liability valuations discussed above. Exchange rate-induced changes in prices and valuations influence incentives, which, in turn, lead to the structural shifts in resource allocation.
that drive changes economic growth. The key element in this chain of events is the relative price of tradable to non-tradable (the real exchange rate) which shapes incentives in the growth process. Countries have been shown to achieve higher growth when they are able to increase incentives for investment in tradable by means of an appropriately valued real exchange rate. We examined the growth-exchange rate link in Tanzania, but we were unable to find an association between our computed index of exchange rate undervaluation and growth over the 1995-2011 period. The correlation coefficient shows that the undervaluation index is positively correlated with growth per capita, but it is not significant. As other researchers have noted, statistical evidence in studies of the growth-exchange rate link has not always been conclusive because the real exchange rate is a facilitating condition not a direct growth driver.

Avoiding excessive overvaluation and excessive volatility enable a country to exploit its capacity for growth and development. Without a well-functioning infrastructure, a disciplined labor force, a high savings rate, and a good investment climate, an appropriately aligned real exchange rate will have little impact on growth.

**Policy Implications**

The implications of these findings for policy can be stated as follows. Policymakers have done a good job in Tanzania over the last decade managing macroeconomic variables to bring the real effective exchange rate back into rough PPP equilibrium. This has substantially improved incentives for investment in tradable activities over the 1995-2010 periods. So far, in 2011, however, the real exchange rate has become misaligned again to the point where tradable investments are now being disadvantaged and exporters of primary agricultural products and import substitution activities are feeling the pinch.

As a policy matter, the real exchange rate is best thought of as a facilitating condition: maintaining it at competitive levels and avoiding excessive volatility facilitate efforts to capitalize on opportunities for growth. In particular, the real
exchange rate can be critical for jump-starting growth, as it shapes incentives that encourage the redeployment of resources into tradable, which can produce immediate productivity gains. However, policymakers should be mindful that exchange rate policy cannot substitute for the absence of other fundamental growth drivers – infrastructure, adequate labor force, good business environment and so on. In addition, the real exchange rate is a relative price and therefore is not under direct control of the authorities. It can, however, be influenced by policy. Hassan and Simione (2010), for example, find in their study of exchange rate policy that nominal exchange rates in Mozambique are driven by macroeconomic fundamentals (such as money supply), which are clearly under the influence of policymakers.

Exchange rate volatility is high in Tanzania, but it is not abnormal for a low-income, developing country that exports primary products. The implications of high exchange rate volatility for financial stability and growth depends on the presence or absence of relevant hedging markets—and on the depth and general level of development of the financial sector. Tanzania has been improving in this area, but there is good reason to believe from research in other countries that, where financial markets are underdeveloped, a more variable exchange rate is negatively associated with growth, particularly productivity growth. The central reason is that firms and households lack the instruments needed to manage volatility. Thus, there is a need for the authorities to avoid excessive volatility (realizing that Tanzanians volatility will normally be higher than in other countries) by prioritizing stable monetary and fiscal policies and intervening in the foreign exchange market as needed to prevent spikes (excessive volatility) in the nominal and hence the real exchange rate.

It is clear from the study that the exchange rate has important effects on Tanzania’s economy, in terms of domestic price determination, competitiveness of exports and import substitution investments, and asset valuations. These impacts highlight some difficulties for policymakers. On the one hand, to keep down domestic inflation and to keep urban consumers of staple foods happy, exchange rate appreciation has some desirable short-run benefits. Extremely high pass-through of exchange rate changes in Tanzania makes imports of consumer goods and staple foods cheaper, which is
especially important for urban household budgets. On the other hand, overvaluation of the real exchange rate hurts long-run growth prospects by reducing incentives for investment in tradable activities, including important import substitution investments for food security. This tension between short-run political necessities and long-run growth prospects is going to become even more strained in the future as mega-investment trade flows put upward pressure on the exchange rate. The authorities will have to play close attention to this policy trade-off in the future, and keep in mind that development experience – highlighted by the high-growth economies of Asia, but also development experience more generally, tells us that keeping the real exchange rate at competitive levels can be critical for growth prospects, particularly in low-income countries.

Furthermore the government of Tanzania has contribution to the management of currency fluctuation in the economy so as to create conducive business environment for both public and private import/export oriented businesses through fiscal and monetary policies formulated and implemented by Bank od Tanzania (BOT) as government central bank, for this case BOT to be up to date and solve some currency issues negative affect import/export businesses has to review his rules, regulations ,by laws and procedures for international trade and amend accordingly based on the current status and prevailing business situation so as to protect Tanzania economy. Also put restriction on the and monitor effectively foreign money transfer outside the country for business purpose and reduce restrictions on exportation especially to commercial agriculture products such as sisal,cotton,cloves so as to reduce balance of balance of payment deficit. External debt of the country or from international commercial bank to local companies must be well managed so as to avoid overburden of the local financial project development otherwise will discourage Foreign Direct Investment due to high inflation and interest rates in the economy.
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Hello, my name is James Simika; I’m a student at Mzumbe University Dar es Salaam Business School studying a Master’s of Science in Account and Finance. I’m doing a research on the impact of currency fluctuation on the export and import oriented businesses in Tanzania as part of the researcher’s studies so as to fulfill the requirement of the University. The main goal of the study is to find out the effects of currency instability. In order to get the information am seeking the views of stakeholder on the International companies in Tanzania. Your responses will be totally anonymous and the highest degree of confidentiality will be maintained. Therefore, I request you to answer the following questions honestly and as openly as you can. It is my sincere hope that I will receive maximum cooperation.

1. How long have you been working with International company? (circle the answer/s)
   a) 1-3 years
   b) 3-5 years
   c) 5-10 years
   d) Above 10 years
   e) Others (please specify) ..............................................

2. In which department do you work? .................................

3. In what capacity/position? .................................................

4. What is your age?
   18 – 25 ii. 26 – 35 iii. 36 – 45 iv. Above 45
5. What is your sex?
   i) Male  ii. Female
6. What is your Marital Status?
   i) Married  ii. Single  iii. Others
7. What is your education level?
   i) Primary School  ii. Vocational  iii. Secondary  iv. College  v. Non of the above
8. What is your Occupation?
9. What is the role of public sector in Tanzania in promoting International business and (please provide one or more examples and, if relevant, please specifies the different roles of central and authorities local)

10. Are there new or planned initiatives in Tanzania that differ from what was done in the past five years, in terms of type of initiative or main target (please provide one or more examples)?

11. To what extent do you consider that risk of currency instability and education messages delivery used are usefully?

12. What is the role of BOT in provision of awareness of effects of currency fluctuations and its importance?
How would you rate government efforts in stabilizing the currency instability in Tanzania?

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<th>Excellent</th>
<th>Very Good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
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<td>Your Overall Experience:</td>
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<td>The Value of their service:</td>
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<td>The Courtesy of their staff:</td>
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13. Any comments or suggestions:

Thank you,
Interviewer:...............................................  
Date/time:...............................................  

1. What is the source of foreign currency quotations  
   (a) Interbank Market?  
   (b) Forex bureau Market?  
   (c) Both?  
   (d) Inter-bank and Parall?  

2. Is there difficult to get foreign currency in Tanzania?  
   (a) Yes  
   (b) No  

3. Is there relationship between currency fluctuations and cash flow of export/import oriented business?  
   (a) Yes  
   (b) No  

4. Is there relationship between currency fluctuations and productions?  
   (a) Yes  
   (b) No  

5. Are the companies adjusting price with currency fluctuations?  
   (a) Yes  
   (b) No  

6. Any comments or suggestions:  
   .................................................................................................................................  
   .................................................................................................................................  

Thank you,