



A Survey of Foreign Currency Risk Awareness and Management Practices in Tanzania

By

Mussa J. ASSAD

University of Dar es Salaam

ICBE-RF Research Report No. 09/11

Investment Climate and Business Environment Research Fund
(ICBE-RF)

www.trustafrica.org/icbe

Dakar, May 2011

Table of Content

Table of content.....	ii
List of tables	iii
1. Introduction	4
2. The problem	5
3. Objectives of the study	6
4. Significance of the study	6
5. Literature review	6
5.1 Foreign exchange risk management	6
5.2 The relevance of foreign currency risk management	7
6. Research design and methodology	10
7. Research findings	11
7.1 Response rates	11
7.2 Respondent profiles	12
7.3 Perceptions on foreign exchange risk in tanzania – firms.....	14
7.4 Knowledge and competencies in foreign currency risk management	15
7.5 Availability of foreign currency management products in the market	23
7.6 Respondent profiles - recent graduates	23
7.7 Perceptions on foreign currency exchange risk in tanzania – recent graduates	24
7.8 Knowledge and competencies in foreign currency risk management	25
8. Conclusions	28
9. Recommendations	29
References	31
Annex:	32

List of Tables

<i>Table 1: Sample and Response</i>	11
<i>Table 2: Major Business Line of Respondent</i>	12
<i>Table 3: Job Positions of Respondents</i>	13
<i>Table 4: Respondents' Educational Qualifications</i>	13
<i>Table 5: Respondents' Work Experience</i>	14
<i>Table 6: Extent of the Foreign Currency Risk Problem</i>	14
<i>Table 7: Views on Capacity to Manage Foreign Currency Risk</i>	14
<i>Table 8: Existence of Policies on Foreign Currency Risk Management</i>	15
<i>Table 9: Knowledge and Competencies of Internal Hedging Techniques</i>	16
<i>Table 10: Knowledge and Competencies of External Hedging Techniques</i>	18
<i>Table 11: Graduates Profile – Academic Qualifications and Institutional Affiliation</i>	23
<i>Table 12: Graduates Profile – Year of Graduation</i>	24
<i>Table 13: Extent of the Foreign Currency Risk Problem</i>	24
<i>Table 14: Views on Capacity to Manage Foreign Currency Risk</i>	24
<i>Table 15: Views of Managing Foreign Currency Risk</i>	25
<i>Table 16: Knowledge and Competencies of Internal Hedging Techniques</i>	26
<i>Table 17: Cross tabulation Results of Foreign Currency Risk Awareness in Training Institutions</i>	27
<i>Table 18: Knowledge and Competencies of External Hedging Techniques</i>	28

1. Introduction

Background to the Study:

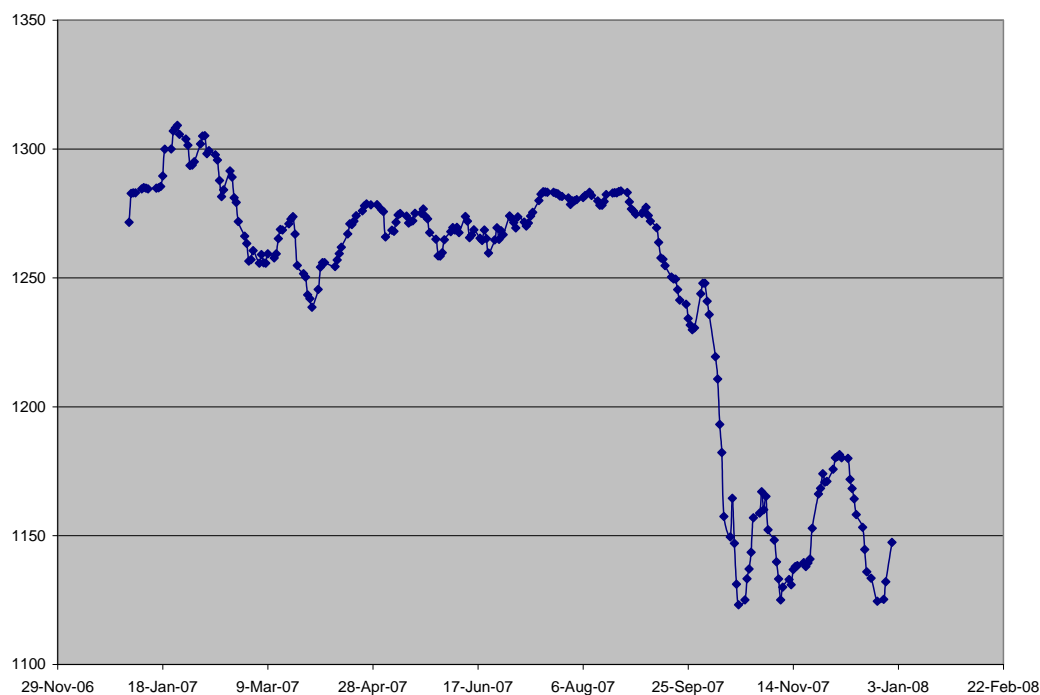
Since mid-1970's fixed foreign currency exchange regimes have been disbanded in many countries. With the support of the Bretton-Woods institutions and other leading financial institutions there has been since the 80's and much more recently disbanding of fixed foreign exchange regimes in Africa, Asia and in Eastern Europe. Countries with diverse economic and financial structures have adopted market - determined foreign exchange rate systems. In an environment of floating foreign exchange rates, unimpeded capital flow is envisaged. During the era of fixed foreign exchange regimes, firms faced little exchange risk as exchange rates were determined by some central authority and moved within very narrow bands. Liberalized currency markets have changed that, firms now are exposed to exchange risks arising from exchange rate fluctuations. Consequently, management of foreign currency exchange risks is seen as an important activity.

Tanzania, until recently, has had a fixed foreign exchange regime. Foreign currency risk therefore, was not an issue of relevance to domestic businesses. Since foreign currency market has been decontrolled and liberalized, together with the rest of financial markets foreign currency risk and its management have become matters of interest not only to banking institutions and businesses but also to other players in the financial markets.

Figure below illustrates the movement of the US\$ to the Tanzanian shilling exchange rate from January to December 2007¹ and it is clearly evident that the level of exposure to foreign exchange rate fluctuations is significant.

¹Data sourced from http://www.bot-tz.org/FinancialMarkets/IFEMsummaries/ifem_summaries2007.htm

Trend of the US dollar to TAS in 2007



2. The Problem

Foreign currency risk ought to be a matter of importance for any sizeable firm. Managers in these firms, as a minimum, need to be aware of the existence of such risk. An understanding of techniques which can be employed to minimize foreign currency risk, subsequently, becomes indispensable. Financial market operators (banks, financial consultants, potential brokers, etc.) must be prepared to offer financial products and services to enable customers and clients manage foreign currency risk effectively.

Management training institutions also need to have appropriate courses and topics in their programs to ensure graduates are equipped with the knowledge and tools to manage foreign currency risk.

However, little is known of readiness of firms, financial market operators and management training institutions to face up to foreign currency risk and its management. Are these parties aware of the existence of foreign currency risk to their operations? How are they prepared to manage such risk? And what attributes determine variability in degree of awareness and readiness to manage foreign currency risk among the individuals/firms? These are the principal research questions pursued in this study.

3. Objectives of the Study

The objectives of this study are to:

- i.] take an inventory of capacity to manage foreign exchange risk among businesses and existing or potential players in the financial markets, and to identify the attributes which explain divergence among individuals/firms.
- ii.] assess the adequacy of contents of programs in third level business training institutions in preparing graduates to manage effectively foreign currency risk.

4. Significance of the Study

Since this study assesses the existing capacity in the country for foreign currency risk management, its findings generate knowledge in this area hitherto unknown. Findings of this study indicate inadequate capacity among individuals/firms to manage foreign exchange risk. Consequently, this study proposes remedial measures to enhance foreign currency risk management capacity through training. Improved foreign currency risk management shall, it is argued, minimize losses and increase the value of firms.

5. Literature Review

5.1 Foreign exchange risk management

Foreign currency exchange risk is the additional riskiness or variance of a firm's cash flows that may be attributed to currency fluctuations (Giddy, 1977, Brigham and Ehrhardt, 2005). Normally, foreign currency risk exists in three forms; translation, transaction and economic exposures.

Foreign currency risk management involves taking decisions which aim at minimizing or eliminating the negative effects of currency fluctuations on balance sheet and income statement values, a firm's receipts and payments arising out of current transactions, and on long term future cash flows of a firm.

Creativity by managers and innovations in financial instruments have, over the years, made available to firms a number of avenues that can be followed in managing the impact of foreign currency rate fluctuations. These avenues are known more commonly as hedging techniques. A hedge is a means of defense against possible loss. Hedging is the process of reducing exposure, and consists of a number of techniques intended to offset or minimize the exchange risk of loss

on assets or liabilities which are denominated in a foreign currency. Some hedging techniques can be implemented within the firm, i.e. without involving any market-based financial instruments. These are known as internal hedging techniques. All other techniques necessitate taking recourse to market - based financial instruments. These are external hedging techniques.

5.2 The Relevance of Foreign Currency Risk Management

Usefulness of hedging activity as a tool of foreign currency risk management in increasing a firm's value has been a subject of some argument in literature. Critics of foreign currency risk hedging activity argue that it is ill conceived and has little or no effect on the value of the firm. It is, they propound, at best irrelevant and at worst costly (Logue and Oldfield, 1977). This is because foreign currency fluctuations defy explanations (Van Horne, 1998). The argument against foreign currency risk management rests on the efficient market hypothesis as it relates to foreign exchange markets. Empirical findings have supported a "weak form" of efficiency in foreign currency markets. It was found that existing foreign exchange rates reflect all economically relevant information contained in past price changes (Giddy, 1977; Giddy and Dufey, 1975). As such, there is no opportunity for one to forecast accurately future exchange rates and systematically profit by looking at past exchange rates. In a world of free exchange rates, movements follow a random walk and one cannot consistently beat the market.

Movements in exchange rates tend to be influenced by two important variables; the relative prices of goods in two countries and relative interest rates. The Purchasing Power Parity (PPP) theorem explains the relationship between relative prices of goods and exchange rates. The PPP theorem propounds that under a floating exchange regime, a relative change in purchasing power parity for any pair of currency calculated as a price ratio of traded goods would tend to be approximated by a change in the equilibrium rate of exchange between these two currencies (Shapiro and Rutenberg, 1976).

The relationship between relative interest rates and foreign exchange rates is explained within the interest rate theory of exchange rate expectations. Nominal interest rate differentials between two countries tend to reflect exchange rate fluctuations. Giddy (1977) called this the international Fisher effect, a close relationship to the Fisher effect, a phenomenon observed by Irving Fisher in 1896. If the international Fisher effect holds, interest rates in appreciating currencies tend to be low enough, and in depreciating currencies high enough, to offset expected currency gains and losses.

If foreign exchange markets are efficient, then the two theorems must hold. Therefore, foreign exchange rates take into account all expected interest rate and purchasing power differentials. As such, critics of foreign currency risk management, argue, there is no exchange risk to justify risk management activity.

In further support of the argument of irrelevancy of foreign exchange risk management, critics also bring in the Capital Asset Pricing Model (CAPM). The logic being, even if foreign exchange risk existed, it would be either systematic or unsystematic risk. Unsystematic risk can be diversified away by investors themselves in accordance with portfolio theory by adding low-risk, low- return securities to the portfolio. Systematic risk, on the other hand, is already discounted in asset pricing. Therefore, if foreign exchange pricing is in line with CAPM, then a firm cannot increase its value through hedging. Movement of its share price will be along the Security Market Line (SML) only, which takes account of the systematic risk (Adler, 1982; Logue & Oldfield, 1977).

Feiger and Jacquillat (1981) also argued, with some proof, using the Modigliani Miller (MM) theorem that corporate exchange risk hedging is a superfluous activity. What a firm does an individual shareholder can do on his own account through "homemade hedging". Consequently, a well-diversified shareholder does not need firms to seek reduction of exchange risk. It is a duplication of efforts, a costly exercise that detracts management from the pure value - adding activities.

Criticisms of foreign currency risk management all rest on efficient market operating conditions. Proponents of foreign currency risk management argue their case pointing at limitations in assumptions and caveats inherent in conditions necessary for foreign exchange markets to operate efficiently. Studies have indicated that, in the long term PPP theorem holds, in that, long term exchange rates are approximated by relative price differentials. However, short term adjustment between price changes and exchange rates are not immediate. Studies have shown poor correlation between exchange rate changes and relative price changes and interest rates in the short run (Giddy, 1977; Aliber and Stickney, 1975). As long as adjustment between exchange rates and relative price changes and interest rates is not immediate, firms are exposed to exchange risk.

Moreover, PPP holds for weighted average prices of two countries, it does not necessarily hold for relative prices of specific commodities. At the level of individual commodities losses can be

suffered as a result of unexpected exchange rates and this must be viewed as exchange risk. A firm therefore, cannot rely solely on macroeconomic relationship of PPP and relinquish its responsibility to manage exposure.

Proponents of currency risk management argue that contrary to the CAPM position, risk management activity can add value to a firm. CAPM assumes away market imperfections like transaction costs and default risk. If transaction costs and default risk are taken into account, there is an argument for a firm to manage variability of its cash flows and profitability so as to reduce its default risk status (Dufey and Srinivasulu, 1983). This reduction could translate into increased ability to raise funds and at lower cost. This would, other things being equal, contribute to increase in a firm's value. Other empirical studies subsequently supported this thesis (Eun and Resnick, 1988; Ma and Kao, 1990; Jorion, 1990, 1991; Choi and Prasad, 1994; Bartov and Bordnar, 1994; Prasad and Rajan, 1995; Levich, Hayt and Ripston, 1999). A survey of 298 fiduciary institutions in the US in 1998 found that at least 80 percent permitted use of derivatives to manage risk and held the view that exposure to currency risk should be managed (Levich et al 1999). A recent study of Swedish firms (Hagelin and Pramborg, 2004) also concluded that hedging reduced a firm's foreign currency exposure.

The MM theorem-based argument against risk management contended that the individual investor is a sufficient foreign exchange hedger by himself without having to involve intermediaries in hedging activity. This argument also assumes that foreign currency markets are efficient. Two main imperfections prevent the individual investor from being an efficient hedger when compared to the firm. These are entry barriers and information gaps (Dufey and Srinivasulu, 1983).

Entry barriers are in the form of size and structural barriers. Minimum size requirements in financial and commodity markets tend to be too large for individual investors. They cannot, as a result, enter and efficiently operate in these markets. Moreover, internal hedging techniques are firm-structured. They are tailored along operations of a firm and are hardly available to individual investors. Structurally, the individual investor is limited in making use of these hedging avenues.

The individual investor, in order to engage in efficient "homemade hedging" must have up to date information on the extent and timing of exchange exposure for all firms in his portfolio. On a practical level, this type of information is internal to the firm and not easily accessed by

individual investors. Without such information "homemade hedging" becomes a purely adventurous undertaking.

Therefore, finally, in a practical non-idealized world where market imperfections are abound, firms should undertake foreign currency risk management because it provides a valuable service that investors cannot undertake individually. Firms that hedge and can contain the negative impact of foreign exchange risks gain a better competitive position in business than those that don't hedge (Graham and Rogers, 2002).

The bulk of work in the area of foreign currency risk management has been undertaken in environments with well-developed financial markets and large reserves of trained business and finance professionals. Tanzania, like most developing countries, does not have a well-developed financial market and a large reserve of trained business professionals. These environmental differences have a major impact on a nation's capacity to manage foreign exchange risk. This research study is warranted in that context.

6. Research Design and Methodology

This research was conducted mainly in the form of a survey. It captured individuals' opinions and assessment of foreign currency risk management awareness, practices and competencies. In training institutions, assessment of foreign currency risk management training was made by appraising contents of course outlines. The objective of appraising course outlines was to gauge the adequacy of course syllabi in these institutions in preparing trained graduates who are able to function, among others, in the area of foreign currency risk management.

The survey focused on firms and professionals within firms as well as recent graduates of the leading two business schools in Tanzania.

Interviews were also held with bank officers with the specific interest of appraising the availability of products and services to mitigate the effect foreign currency risk on businesses.

Data Collection and Analysis:

Data was collected through one basic survey questionnaire which was appropriately adapted to the two main categories of respondents. The basic questionnaire is provided as Appendix 2. Responses were sought to questions framed on a 5-point Likert scale. Limited open ended questions were included to capture the qualitative aspects or explanations for some responses.

70 firms operating in Dar es Salaam were randomly selected and included in the survey. Dar es Salaam is the commercial capital of the country and the largest import and export centre. A substantial volume of foreign currency related transactions are effected in Dar es Salaam.

Interviews were conducted of selected and willing respondents in institutions in order to obtain further insights on the challenges of managing foreign currency risk within organisations. Documentary review of course outlines was conducted for programmes of study at the University of Dar es Salaam and Mzumbe University.

Given the exploratory nature of the study data analysis was descriptive in terms of frequency tables and observing of general characteristics and relationships².

7. Research Findings

7.1 Response Rates

This study had identified two principal categories of study subjects, respondents in firms and recent graduates. In October 2007 80 questionnaires were administered to firms in Dar es Salaam and another 80 questionnaires were each sent to recent graduates of the two leading business schools in Tanzania. Respondents were informed that responses to the questionnaires were to be confidential and identities of respondents and their firms would not be revealed.

The response rates as summarized in Table 1 were relatively good in all categories of respondents.

Table 1: Sample and Response

Category	Administered	Response	Response Rate
Firms	80	50	62.50%
Recent Graduates:	160	103	64.38%
<i>University of Dar es Salaam</i>	80	50	62.50%
<i>Mzumbe University</i>	80	53	66.25%
Total	240	153	63.75%

Within firms research assistants were employed to follow up on questionnaires while in training institutions assistance was requested and obtained from the Deans of Business Schools and the career and placement coordinators. The response rate for this nature of

² Given the nature of the rank data collected second level analysis has been performed employing non parametric statistics. Since the specific interest was differences in perceptions of risk and levels of awareness and competencies the test of means for two groups is executed using the Mann-Whitney t test. The additional insights will be in the subsequent draft of this report.

research is good and most of the responses to individual questions were usable. There were a number of incidents where the respondent chose not to respond to a specific question which reflects in the totals of frequency tables. Our interpretation of results was based on usable responses to individual questions.

7.2 Respondent profiles

7.2.1 Firms

The profile of respondent firms by line of business covered a range of activities as summarized in Table 2.

Table 2: Major Business Line of Respondent

Business Line	Frequency	Percent
Banking	4	10.0%
Accounting and Assurance Services	6	15.0%
Security Exchange Dealing	2	5.0%
Motor Vehicle Import and Sales	2	5.0%
Services	12	30.0%
Marketing of Petroleum Products	2	5.0%
Petroleum	4	10.0%
Manufacturing	4	10.0%
Management Consultancy	4	10.0%
Total	40	100.0%

The range of businesses represented in the sample of respondents was wide and covered the key areas targeted for the study.

Whether or not a firm was local or a subsidiary of an overseas holding company was considered important for this study in that foreign exchange risk management strategies would have been perhaps different between local firms and subsidiaries of foreign firms. In the sample of respondents 10 of the respondent firms were subsidiaries of foreign companies domiciled in the United Kingdom and Holland, France and USA.

As summarized in Table 3 in terms of job positions of respondents there were overwhelmingly in Finance or Treasury positions which was anticipated given the nature of the study.

Table 3: Job Positions of Respondents

Position	Frequency	Percent
Director of Treasury	2	4.2
Partner/Chief Auditor	4	8.3
Finance Manager	8	16.7
Financial Controller	2	4.2
Senior Auditor	2	4.2
Principal Auditor	2	4.2
Management Accountant	2	4.2
Managing Partner	2	4.2
Chief Financial Officer	2	4.2
Assistant Accountant	2	4.2
Cost Analyst	2	4.2
Accountant	4	8.3
Senior Manager	2	4.2
Senior Partner	4	8.3
Treasury Manager	2	4.2
Director	2	4.2
Auditor	2	4.2
Senior Consultant	2	4.2
Total	48	100

As for academic qualifications as summarized in Table 4 all respondents had, as a minimum, a first degree or equivalent. Moreover, 29% had a second degree. In addition 17 of the respondents had a professional accounting qualification. Professionals with accounting training therefore dominate positions that were relevant for foreign currency risk management.

Table 4: Respondents' Educational Qualifications

Educational qualification	Frequency	Percent
First Degree	28	58%
Master's Degree	14	29%
Professional	6	13%
Total	48	100%

The average work experience of the respondents was 15 years with 3 years being the least experienced and 30 years being the most experienced. 32 respondents trained locally while 16 trained overseas. This attribute was considered important in order to demonstrate whether or not overseas training had impact on foreign exchange risk awareness and management practices. This aspect is explored further in the results where cross-tabulations are undertaken.

The large majority of respondents completed their education more than 10 years prior to the administration of the survey instrument. Half of the respondents studied in the 90's followed by a large batch in the 70's (25%). Very few respondents (6) had graduated between 2000 and 2004.

Table 5: Respondents' Work Experience

Job Experience in Years	Frequency	Percent
3	2	4.2
4	6	12.5
5	6	12.5
6	4	8.3
7	4	8.3
10	6	12.5
15	4	8.3
18	2	4.2
22	2	4.2
27	4	8.3
29	2	4.2
30	6	12.5
Total	48	100

7.3 Perceptions on Foreign exchange risk in Tanzania – Firms

Respondents were asked on their perceptions of the nature of foreign exchange risk to Tanzania business and all ranked the risk as very big (36%), big (12%) or potentially big (52%).

Table 6: Extent of the Foreign Currency Risk Problem

	Frequency	Percent
Very Big	18	36
Big	6	12
Potentially Big	26	52
Total	50	100

Table 7: Views on Capacity to Manage Foreign Currency Risk

	Frequency	Percent
Capacity is very adequate	2	4
Capacity is somewhat adequate but needs strengthening	16	32
Capacity is weak or mostly non-existent and needs to be developed	28	56
I cannot make such assessment	4	8
Total	50	100

Consequently 96% of the respondents recommended or strongly recommended that foreign exchange risk management be undertaken by Tanzanian Businesses. Nevertheless, again the majority of respondents expressed the view that capacities among Tanzanian businesses to manage foreign exchange risks were weak or non-existent (56%) or where it existed it needed strengthening (32%).

In the specific institutions where respondents worked the study was interested to establish if policies or guidelines existed on how to manage foreign exchange risk. Surprisingly as demonstrated in Table 8 only half had a policy or guidelines in place and the remainder has

either no policy or guidelines (29%) or it was under consideration (17%). All subsidiaries of overseas holding companies had a policy document in existence on management of foreign currency risk. There was therefore a distinction in this respect between domestic firms and subsidiaries of overseas firms.

Table 8: Existence of Policies on Foreign Currency Risk Management

	Frequency	Percent
Yes there is policy in place	24	50
No but a policy is currently under consideration	8	16.7
No a policy is not considered necessary at the moment	14	29.2
No foreign currency risk mgt is handed by parent company	2	4.2
Total	48	100

7.4 Knowledge and Competencies in Foreign Currency Risk Management

As elaborated in the literature review section there are two main groups of foreign currency risk management techniques; internal hedging techniques and external hedging techniques. Internal hedging techniques are able to be executed within a firm by managerial operational arrangements. External hedging techniques on the other hand involve an instrument that can only be bought or sold through market intermediaries. External hedging techniques therefore require higher competencies to execute successfully when contrasted to internal hedging techniques.

This study sought to measure the degree of knowledge or general information as well as competencies on the part of respondents on the use of specific hedging techniques. A summary of responses from firms on knowledge, and competencies of employing internal and external hedging techniques is summarized in Table 9 and Table 10. Three kinds of responses were sought; whether the respondent was aware and informed about a specific hedging technique; whether he was aware and informed about the technique but was not able to use it and finally whether the respondent was adequately competent and able to use the specific hedging technique.

7.4.1 Internal hedging techniques

It was expected that respondents would have been more aware and competent to use internal hedging techniques but perhaps challenged in using the more complex external hedging techniques. However, as illustrated in Table 9 there are very limited competencies on the part

of respondents even with respect to internal hedging techniques.

Table 9: Knowledge and Competencies of Internal Hedging Techniques

Sn	Internal Hedging Techniques	Not Informed	Informed, unable to use	Able to use
1	Matching of balance sheet assets/liabilities against liabilities/assets in the same foreign currency.	8.7	43.5	47.8
2	Matching of foreign currency trade payments/receipts against receipts/payments in the same foreign currency.	19.0	42.9	38.1
3	Negotiating a local currency (TAS) price for imports.	15.8	42.1	42.1
4	Invoicing exports in US\$ or EURO.	13.0	26.1	60.9
5	Foreign exchange adjustment clauses in contracts.	28.6	38.1	33.3
6	Switching to a local or regional supplier.	21.1	36.8	42.1
7	Adjustment of inter-company accounts through leading/lagging.	45.0	45.0	10.0
8	Adjustment of inter-company accounts through transfer pricing.	36.8	57.9	5.3
9	Leading/lagging of payments to/receipts from third parties.	35.0	30.0	35.0

Only ‘invoicing exports in US\$ or EURO’ was comfortably able to be used by the majority of respondents (60.9%). And even this there was a small proportion of respondents. (13%) who were not aware of this technique?

47.8 percent of respondents were also able to use ‘Matching of balance sheet assets/liabilities against liabilities/assets in the same foreign currency’ and 43.5 percent were informed about this technique but still unable to use it while 8.7 percent were not even informed about the technique.

38.1 percent of respondents were also able to use ‘Matching of foreign currency trade payments/receipts against receipts/payments in the same foreign currency’ and 42.9 percent were informed about this technique but still unable to use it while 19.0 percent were not even informed about the technique.

42.1 percent of respondents were also able to use ‘Negotiating a local currency (TAS) price for imports’ and 42.1 percent were informed about this technique but still unable to use it while 15.8 percent were not even informed about the technique.

33.3 percent of respondents were also able to use ‘Foreign exchange adjustment clauses in contracts’ and 38.1 percent were informed about this technique but still unable to use it while 28.6 percent were not even informed about the technique.

42.1 percent of respondents were also able to use ‘Switching to a local or regional supplier’

and 36.8 percent were informed about this technique but still unable to use it while 21.1 percent were not even informed about the technique.

10.0 percent of respondents were also able to use 'Adjustment of inter-company accounts through leading/lagging' and 45.0 percent were informed about this technique but still unable to use it while 45.0 percent were not even informed about the technique.

5.3 percent of respondents were also able to use 'Adjustment of inter-company accounts through transfer pricing' and 57.9 percent were informed about this technique but still unable to use it while 36.8 percent were not even informed about the technique.

35.0 percent of respondents were also able to use 'Leading/lagging of payments to/receipts from third parties' and 30.0 percent were informed about this technique but still unable to use it while 35.0 percent were not even informed about the technique.

Clearly there is a major challenge with respect to transfer of skills and appropriate competencies among firms to, at least, make them able appreciate and use internal hedging techniques that are practical to the business environment of firms in Tanzania.

The last five hedging techniques were techniques in which respondents were least competent and uninformed about. Clearly some of the techniques may have no practical significance to firms in which respondents works such as transfer pricing opportunities. However, it was still expected that respondents given their academic backgrounds would have good awareness of the techniques.

7.4.2 External hedging techniques

External hedging techniques are more complex to majority of business operatives and results illustrate the expected pattern of responses.

As illustrated in Table 10 the majority of respondents were either not informed about the techniques or were informed but not competent to use the techniques. For example, not a single respondent was able to use 'Forward foreign currency hedge contracts' or 'forward foreign currency option contracts'.

Table 10: Knowledge and Competencies of External Hedging Techniques

Sn	External Hedging Techniques	Not Informed	Informed, unable to use	Able to use
1	Forward foreign contracts against the TAS.	15.0	55.0	30.0
2	Forward foreign contracts between to foreign currencies.	28.6	47.6	23.8
3	Forward foreign currency borrowing.	19.0	42.9	38.1
4	Forward foreign currency hedge contracts.	28.6	71.4	0.0
5	Forward foreign currency option contracts.	31.8	68.2	0.0
6	Forward financial futures contracts.	35.0	60.0	5.0
7	Forward future rate agreements.	23.8	61.9	14.3
8	Forward interest rate swaps.	30.0	50.0	20.0
9	Forward foreign currency swaps.	22.7	50.0	27.3
10	Forward foreign currency hold accounts.	26.3	42.1	31.6
11	Forward interest rate option.	23.8	61.9	14.3

35 percent of respondents acknowledged not to be informed about ‘forward financial futures contracts’, 60 percent were informed but unable to use this technique with only 5 percent being able to use the technique. This scenario is repeated for all the external hedging techniques. There are however, notable differences with respect to three techniques; forward foreign currency borrowing, forward foreign currency hold accounts and forward foreign contracts against the TAS. In all these three techniques at least 30 percent of respondents were able to use them. ‘Forward foreign currency borrowing’ was a hedging technique that was most able to be used by respondents (38.1%) followed by ‘forward foreign currency hold accounts’ (31.6) and finally ‘forward foreign contracts against the TAS’ (30%).

7.4.3 Explaining Variations in Foreign Currency Risk Management Competencies

It had been considered important at the design phase of this research to capture information of nature education and training as well as country of training of respondents. The tentative hypothesis was the nature and country of training would have provided different exposures in appreciation and competencies of foreign currency risk and its management.

Cross tabulations were performed pairing responses on awareness of internal and external foreign currency risk management techniques with country of training. Cross tabulation results do not support the view that country of training offered different exposure in foreign currency risk management practices. This may have more to do with the period in which the training was undertaken as the majority of candidates had graduated in the 90’s – some even earlier than that [25 percent in the 70’s]. Skills transferred in those times broadly may have broadly lacked the emphasis on some of the techniques this study was interested in. It could also be that old graduates got rusty and whatever was covered in no longer in memory –

sometimes because the knowledge was not relevant and employed routinely in the post-graduation work situations.

7.4.4 Mini Cases and Follow up Interviews

These results were followed up by interviews in order to obtain insights on the challenges faced by firms in managing foreign currency risks. Extended interviews were conducted in July 2008 with 3 entrepreneurs in Dar es Salaam who engaged in the import trade [used households from the UK, motor vehicle parts from Japan via Dubai and used motor vehicles from Japan]. From these extended interviews 3 mini cases are presented. Moreover, 11 other interviews were conducted between November 2007 and January 2008 with officials responsible for foreign currency management.

Mini Case 1: A Large Telecom Company with a Dollar Denominated Loan

Illustrating the scale of the problem of foreign currency risk one large telecom company incurred a loss of TAS 6 billion shillings (\$4,615,000) in the financial year ended June 2007 from foreign currency exposures on US\$ denominated loans. Only after this event had occurred did the Director of Finance contact a local subsidiary of a US bank to explore the purchase of a facility that could minimize such losses in the future.

It was suggested in an interview with a bank official that perhaps individuals who occupy positions of Finance but with an accounting training and work experience are more concerned with proper accounting and reporting and may not have sufficient interest and appreciation of foreign currency risk. This view was not tested and perhaps might of interest to pursue in future.

Another respondent who came across as being very knowledgeable provided an interesting perspective to the problem of foreign currency risk management. He suggested that even when competencies existed as in his case, it is the chief executive who, if uncomfortable in the area of foreign currency risk management that tended to delay or even resist making the appropriate decisions to hedge against foreign currency fluctuations.

Mini Case 2: The Bank with a forthcoming Commitment in South African Rands

One local bank with a growing branch network in major trading centers of Tanzania was undertaking a major expansion plan. This plan included purchase of Automatic Teller Machines and other equipment from a South African company and would have therefore been financed and paid for through the South African Rand. The total value of the equipment was TAS. 14 billion. Since the expansion plan was to take a whole year to implement and would cost a lot of money it was suggested to lock in the South African rand, through a currency forward contract, to the extent of the value of equipment that were to be imported from South Africa.

Although a reasonable course of action, the chief executive resisted the proposal for 6 months until the impact of the exposure and losses were unbearable and very clear for all to see. In the first six months, with only a quarter of the equipment supplied, the loss incurred had reached TAS. 28 million.

These two cases involved fairly large companies by Tanzanian standards. The implications for the small and medium scale import-export businesses, it is argued, would be worrying. In most of these all small and medium scale import-export businesses the foreign currency risk management avenue of choice is to convert sales collections into US dollars at the earliest opportunity in order to accumulate sufficient currency to pay for the subsequent consignment. Although somewhat helpful this is a very rudimentary approach to managing foreign currency risk. The following 2 mini cases illustrate this challenge for small local import traders.

Mini Case 3: Amani – The Used Household Items Importer

Amani is a 28-year old enterprising young man with secondary education only but a very astute business person. Before coming back to Dar es Salaam he had spent 7 in Milton Keynes, England as a failed ‘Somali’ asylum seeker. While in England he figured out that with reliable sourcing, export of used household items to Tanzania was a lucrative business. He established good collecting points in suburbs and towns across London and Essex. One of his key sources for quality products were retail chains that delivered to him defective or reject new items. When they arrived in Dar es Salaam these were seen as ‘new’.

His operations in Dar es Salaam are run from a rented former residential house at Msasani – a middle class suburb, which he has turned into a show room and warehouse. Amani imports 5 40-foot containers with mainly fridges and freezers. A single container would take 145 mixed units of freezers/fridges and would cost him £ 9,000 sterling to buy and £ 3,000 sterling to ship from Felixstowe to Dar es Salaam. Shipping to Dar es Salaam takes 3-4 weeks. It takes about 2 months to clear his stocks and this is therefore a 3-month business cycle.

The £ 60,000 sterling pounds investment in stocks is therefore continuously exposed to foreign currency fluctuations and Amani recognizes that risk very well because he stated ‘If I did nothing, my investment in stocks would be eroding every time I replenished my stocks’. So how did he manage the foreign currency risk?

He has a crude but effective way of managing foreign currency fluctuations. He simply tries to generate extra cash flows with each consignment by filling in pockets of spaces in his containers with small household items and refrigerant compressors which he buys very cheap but sells in Dar at handsome profits. Proceeds from sale of these items always ensure he is able to generate sufficient local currency to maintain his stock levels.

Secondly, he offloads contents of 4 of his 5 containers on a wholesale basis and immediately buys sterling pounds. This ensures that he is covered for 4 of his 5 containers while waiting for the last container which sells retail at his showroom.

Has his bankers been of help? Yes, his bankers offer him a special customer rate when he buys currency. For example, when the TAS/£ rate was TAS. 2,400 recently he bought sterling at the bank for TAS. 2,340.

In the case of Amani, with almost a fixed sum of £ that he needed for stocks it would have been possible for a bank to offer a product for a fee that would guarantee lock him at a certain rate for a fixed duration at a fee that would be less than the exposure he currently manages rudimentarily.

Mini Case 4: Ayubu – The Japanese Vehicle Parts Importer

Ayubu is a 46-year old entrepreneur who trained as a civil engineer at the University of Dar es Salaam. He runs a Japanese vehicle spare parts business and owns currently 3 outlets in the Dar es Salaam central business district. He is a pious person who has built his business on trusting relationships with his customers and he therefore commands a large customer base. He has recently branched off into civil engineering and construction.

Daily turnover is about TAS. 6 million [US\$ 5,000] which generates a 'reasonable' margin according to him. Is he exposed to foreign currency risk? He understands his exposure very well, especially for his slow moving items – such as large mechanical parts for Nissan Patrol. These sell very handsomely to Government departments but they take time to move. These slow moving stocks he estimates amount to about US \$ 80,000 at any one time.

How does he manage foreign currency risk on routine basis? He purchases US \$ on a daily basis through a connected Bureau de Change. That way he is only exposed in stocks but not in cash. Moreover, for stocks he would scan competitors' prices on a weekly basis and make price adjustments, especially if a competitor has landed a new consignment.

Although all his items are Japanese, he does not handle the Japanese Yen at any point in his transactions. He has observed the relationship of the Yen to TAS to be less stable than the Dubai dirham to US \$. He therefore routes all his trading through a wholesaler in Dubai who is willing to trade in US \$. He is convinced that he has a much stable trading platform in the dirham than in the Yen.

Has his bankers been of help? Not at all as he has never discussed currency trading with his bank.

Ayubu comes across as relatively, a much more aware trader but even he has not fully appreciated the avenues at his disposal to manage foreign currency risk exposure. Clearly in both cases the banks have not been as helpful as they could be. Perhaps this is because of the

volume of trade of the individual traders. However, if a window was made available for many of these traders perhaps a bigger volume in total could be generated.

7.5 Availability of Foreign Currency Management Products in the Market

A review of product offerings of the largest 4 banks in Tanzania was conducted in order to assess the availability of products that could mitigate and address foreign currency exposure for Tanzanian firms, especially using external hedging techniques. In all four institutions there was not a single readily available product. However, two of the banks would be able to arrange for a product to be made available by a related overseas supplier. A supply led initiative has the opportunity to create demand for a product and therefore absence of readily available products stunted development and growth of foreign currency management practices in Tanzania. Of course the other side of the explanation is the lack of explicit demand for these products which from results of this study is mostly accounted for by ignorance on the part of respondents.

7.6 Respondent Profiles - Recent Graduates

In order to obtain a current perspective of skills and competencies on managing foreign currency risk the study had also targeted recent graduates and administered a slightly modified survey questionnaire. The principal survey questionnaire was nevertheless, essentially the same.

Graduates from the two public universities in Tanzania with established business schools were surveyed. Table 11 summarises their profiles.

Table 11: Graduates Profile – Academic Qualifications and Institutional Affiliation

Highest Academic Qualification	Training Institution	Frequency	Percent
Bachelor of Commerce	University of Dar es Salaam	50	48.5%
Bachelor of Accountancy and Finance	Mzumbe University	53	51.5%
Total		103	100.0%

Except for 2 graduates of 1998 and 1999 the remainder graduated between 2003 and 2006 as illustrated in Table 12. Respondents were therefore fairly recent output of training institutions.

Table 12: Graduates Profile – Year of Graduation

Year of Graduation	Frequency	Percent
1998	1	1
1999	1	1
2003	1	1
2004	42	40.8
2005	54	52.4
2006	4	3.9
Total	103	100

7.7 Perceptions on Foreign Currency Exchange Risk in Tanzania – Recent Graduates

Recent graduate respondents were asked their perceptions of the nature of foreign exchange risk to Tanzanian businesses and all ranked the risk as very big (27.6%), big (48.6%) or potentially big (21.9%). Only 2 (2%) had a view that it was of small or no consequence – clearly this was an outlying perception.

Table 13: Extent of the Foreign Currency Risk Problem

	Frequency	Percent
Very Big	29	27.6
Big	51	48.6
Potentially Big	23	21.9
Small and of no Consequence	2	1.9
Total	105	100

With respect to capacities that existed to manage foreign currency risk exposures only 3 (2.9%) were of the view that capacity is very adequate and the remainder believed that capacity was somewhat adequate but needs strengthening (56.2%) or weak and mostly nonexistent needing to be developed (35.2%).

Table 14: Views on Capacity to Manage Foreign Currency Risk

	Frequency	Percent
Capacity is Very Adequate	3	2.9
Capacity is Somewhat Adequate but Needs Strengthening	59	56.2
Capacity is Weak and Mostly Non-Existent and Needs to be Developed	37	35.2
I can't Make Such an Assessment	6	5.7
Total	105	100

Consequently, all but 4 recommended foreign currency risk management as important for Tanzanian businesses as illustrated in Table 15.

Table 15: Views of Managing Foreign Currency Risk

	Frequency	Percent
Strongly Recommended	54	51.9
Recommended	46	44.2
Undecided	4	3.8
Total	104	100

These views on the extent of foreign currency risk as a business problem in Tanzania and the existent capacities to manage it are convergent with those of respondents from firms. All two groups of respondents concur that foreign currency risk exposure is a significant challenge to Tanzanian businesses that warrants special attention.

7.8 Knowledge and Competencies in Foreign Currency Risk Management

Similar to respondents from firms this study also sought to measure the degree of knowledge or general information as well as competencies on the part of recent graduate respondents on the use of specific hedging techniques. A summary of responses from recent graduates on knowledge, and competencies of employing internal and external hedging techniques is a summarized in Table 16 and Table 17. The same three kinds of responses were sought; whether the respondent was aware and informed about a specific hedging technique; whether he was aware and informed about the technique but was not able to use it and finally whether the respondent was adequately competent and able to use the specific hedging technique.

7.8.1 Internal Hedging Techniques

It was expected that recent graduate respondents would have been more aware and competent to use internal hedging techniques but perhaps challenged in using the more complex external hedging techniques. However, as illustrated in Table 16 there are still limited competencies on the part of respondents even with respect to internal hedging techniques. However, the scale of lack of awareness and competencies to use techniques is generally better for recent graduate respondents than that of respondents from firms.

Table 16: Knowledge and Competencies of Internal Hedging Techniques

Sn	Internal Hedging Techniques	Not Informed	Informed, unable to use	Able to use
1	Matching of balance sheet assets/liabilities against liabilities/assets in the same foreign currency.	19.4	13.6	67.0
2	Matching of foreign currency trade payments/receipts against receipts/payments in the same foreign currency.	18.6	13.7	67.6
3	Negotiating a local currency (TAS) price for imports.	48	10.2	41.8
4	Invoicing exports in US\$ or EURO.	36.3	10.8	52.9
5	Foreign exchange adjustment clauses in contracts.	39.4	13.1	47.5
6	Switching to a local or regional supplier.	47.4	9.3	43.3
7	Adjustment of inter-company accounts through leading/lagging.	31.4	13.7	54.9
8	Adjustment of inter-company accounts through transfer pricing.	29.4	23.5	47.1
9	Leading/lagging of payments to/receipts from third parties.	26.9	19.2	53.8

In contrast to respondents from firms recent graduates were most comfortable with the first two internal hedging techniques – ‘matching of balance sheet assets/liabilities against liabilities/assets in the same foreign currency’ and ‘Matching of foreign currency trade payments/receipts against receipts/payments in the same foreign currency’. 67 percent of recent graduates were able to use these techniques as compared to 18 to 19 percent who were not informed about these techniques.

At an aggregate level there were however, mixed results with respect to the remaining internal hedging techniques. For example, while 52.9 percent were able to use ‘invoicing exports in US\$ or EURO’ an equally significant proportion (36.3%) were not informed about the technique. Similarly while 47.5 percent were able to use ‘Foreign exchange adjustment clauses in contracts’ an equally significant proportion (39.4%) were not informed about the technique.

7.8.2 Variation in Foreign Currency Risk Management Awareness in Training Institutions

Cross tabulation of results by institution of training revealed that one of the institutions – the University of Dar es Salaam of Dar es Salaam actually accounted for a larger proportion of those who were not informed about specific internal and external hedging techniques. The difference of proportions of those who were informed and able to use internal and external hedging techniques was statistically significant across the two training institutions.

Table 17: Cross tabulation Results of Foreign Currency Risk Awareness in Training Institutions

	Levene's Test F	Sig.	t-test t	df	Sig. (2-tailed)	Std. Error Difference	95% CI of the Difference Lower	Upper
proportion of not informed of Internal Hedging Techniques [Q13]	0.001	0.97	3.251	16	0.0050	0.05811	0.06571	0.31207
proportion of able to use Internal Hedging Techniques [Q13]	2.515	0.13	-4.397	16	0.0000	0.0508	-0.33102	-0.1157
proportion of not informed External Hedging Techniques [Q17]	1.097	0.31	6.73	20	0.0000	0.04701	0.21831	0.41442
proportion of able to use External Hedging Techniques [Q17]	5.486	0.03	-8.285	20	0.0000	0.04806	-0.49844	-0.2979

This is an interesting observation especially because the review of course structure and course outlines shows that the University of Dar es Salaam has more courses at undergraduate level which includes content on foreign currency risk management. Mzumbe University had only one course in International Finance that had the relevant content. Perhaps this is to do with coverage of course content or other reasons not captured in this study.

Nevertheless, there are significant challenges represented by these results with respect to transfer of skills and appropriate competencies within training institutions in Tanzania. Certainly the level of appreciation and understanding to the level of competent use of internal hedging techniques can and should be enhanced.

7.8.3 External Hedging Techniques

As illustrated in Table 17 the majority of recent graduate respondents were able to use 6 of the 11 external hedging techniques. These techniques are ‘forward foreign currency borrowing’ (71.3%), ‘forward foreign currency hedge contracts’ (64.7%), ‘forward foreign currency option contracts’ (62.7%), ‘forward financial futures contracts’ (59.8%), ‘forward foreign contracts between to foreign currencies’ (58.8%), ‘forward interest rate option’

(58.4%) and ‘forward future rate agreements’ (57.4%).

This is a major variance from the respondents from firms who were fairly weak in these techniques. Two reasons are feasible – one is that course content as well as delivery has improved to much better levels within training institutions compared to older graduates. But it is also possible that the responses are exaggerated to inflate competencies of recent graduates. This is a normal hazard in self-administered surveys of this nature. Perhaps an instrument accompanied with a small problem solving case would have captured better both appreciation and competency levels. This is an area for improvement in future research of this nature in this area.

Table 18: Knowledge and Competencies of External Hedging Techniques

Sn	External Hedging Techniques	Not Informed	Covered, unable to use	Able to use
1	Forward foreign contracts against the TAS.	36.5	14.5	49.0
2	Forward foreign contracts between to foreign currencies.	28.4	12.7	58.8
3	Forward foreign currency borrowing.	17.8	10.9	71.3
4	Forward foreign currency hedge contracts.	24.5	10.8	64.7
5	Forward foreign currency option contracts.	25.5	11.8	62.7
6	Forward financial futures contracts.	24.5	15.7	59.8
7	Forward future rate agreements.	29.7	12.9	57.4
8	Forward interest rate swaps.	33	20	47
9	Forward foreign currency swaps.	33	19	48
10	Forward foreign currency hold accounts.	51.6	15.8	32.6
11	Forward interest rate option.	22.8	18.8	58.4

8. Conclusions

The objectives of this study were to evaluate the capacity to manage foreign exchange risk among businesses and existing or potential players in the financial markets, and assess the adequacy of contents of programs in third level business training institutions in preparing graduates to manage effectively foreign currency risk.

In the first place this study concludes that foreign currency risk is perceived to be a significant challenge by the overwhelming majority of both categories of respondents and that there must be avenues in place to be able to manage such risk. However, there is a perception that the capacity within the country to manage foreign currency risk is either weak or mostly nonexistent or where it is somewhat in existence there is a need to strengthen that capacity.

One major lead towards better foreign currency risk management is the existence of a policy document that guides practice with respect to foreign currency risk management. It emerged from the study that it was not normal practice for local firms to have a policy in place. A

divergent view was however observed in subsidiaries of overseas holding companies which evidently had a document in place to guide practice.

In self-assessment of capacities and competencies for managing foreign currency risk through hedging techniques it was evident from results that awareness of foreign currency risk management techniques as well as competencies to put them to use were significant challenges among respondents – both in firms and to a lesser extent recent graduates. Further analysis of self-evaluations of recent graduates revealed interesting variances between the two leading business schools in Tanzania. Both have course structures and course outlines with content that cover foreign currency risk management as part of portfolio management or international finance. However recent graduates from one of the institutions (University of Dar es Salaam) had higher incidences of respondents who were not informed about hedging techniques than the other institution (Mzumbe University). The variance may have to do with course content coverage in different batches of graduates or perhaps other reasons not captured by this study.

Respondents in firms were less informed and less able to use foreign currency hedging techniques and this was the case for both internal hedging techniques as well as external hedging techniques.

The fact that financial intermediaries did not have readily available instruments and products for managing foreign currency risk did not help in enhancing the practices in place within firms. The history of development and use of financial instruments has in many instances been supply led.

9. Recommendations

Given the results of this study one apparent recommendation from the conclusions of this study is to explore avenues for Tanzania to enhance capacities within firms for managing foreign currency risk exposure. Two specific avenues need to be pursued. One is the route of continued education for those in workplaces through short term training that is very practical oriented. Perhaps this could involve professional organizations for finance specialists, bankers, accountants, consultants, etc. Such training should ideally be out of site because of the need to collect participants from diverse businesses and orientations for 3 days of training and assessment. Perhaps rather than cover foreign currency risk alone it could be preceded by introductory content on the Import-Export Trade.

In so far as small and medium enterprises are concerned special emphasis may have to be placed on skills transfer to BDS providers who could be prepared to become conversant in practice oriented formats of training entrepreneurs who may not themselves be educated at high levels but who are nevertheless, astute business people. This may involve collecting mini cases of real encounters with foreign currency risk exposure and using such cases to train others. Perhaps through such training more cases may be offered and documented. Since entrepreneurs may find it challenging to devote long continuous periods of time for training a weekend clinic format of training may be more appropriate. This could be limited to 3 to 4 hours a session running for 4 weeks at a fixed location.

The second avenue would be addressing the transfer of skills and competencies within training institutions. This may start with comprehensive review of the relevant courses within institutions, evaluation of instruction and content delivery and finally perhaps preparation of simple locally contextualized supplementary course materials. Instructors may need to be attended to as these may themselves not be comfortable with teaching foreign currency risk management a consequence of which is observed downstream among graduates.

REFERENCES

- Adler, M (1982)"Translation Methods and Operational Foreign Exchange Risk Management," in G. Bergendahl (Ed) International Financial Management, Stockholm, Norstedts.
- Adler, M and B. Dumas (1984)"Exposure to Currency Risk: Definition and Measurement," Financial Management, Summer, pp 41-50.
- Aliber, R and C. Stickney (1975)"Accounting Measures of Foreign Exchange Exposure" The Accounting Review, January pp 44-47.
- Bartov, E and Bordnar, G.M (1994) "Firm Valuation, Earnings Expectations, and the Exchange Rate Exposure Effect, Journal of Finance, Vol. 49, December.
- Brigham, E. and M. Ehrhardt (2005) Financial Management: Theory and practice. 11th Ed. Mason, OH: South-Western
- Choi, J.J and Prasad, A (1984)"Exchange Risk Sensitivity and its Determinants: A Firm and Industry Analysis of US Multinationals, Financial Management.
- Clark, P, L. Bartolini, T. Bayoumi and S. Symanski (1994) "Exchange Rates and Economic Fundamentals: A Framework for Analysis", Occasional Paper 115, International Monetary Fund,
- Dufey, G and S. Srinivasulu (1983)"The Case for Corporate Management of Foreign Exchange Risk," Financial Management, Winter, pp 54-62.
- Eun, C.S and Resnick, B (1988)"Exchange Rate Uncertainty, Forward Contracts, and International Portfolio Selection, Journal of Finance, Vol. 43, March.
- Feiger, G and B. Jacquillat (1981) International Finance: Text and Cases, Boston, Allyn & Bacon.
- Giddy I.H. (1977)"Exchange Risk Whose view?", Financial Management, Summer, pp 23-33.
- Giddy, I.H and G. Dufey (1975)"The Random Behaviour of Flexible Exchange Rates," Journal of International Business Studies, Spring pp 1-32.
- Graham, J and Rogers, D; Do Firms Hedge in Response to Tax Incentives? The Journal of Finance, Vol. 57, No. 2. (Apr., 2002), pp 815-839.
- Hagelin, N. and B. Pramborg. (2004) Hedging Foreign Exchange Exposure: Risk Reduction from Transaction and Translation Hedging, Journal of International Financial Management and Accounting, Vol. 15, Issue 1, pp
- Jorion, P (1990)"The Exchange Rate Exposure of US Multinationals, Journal of Business, Vol. 63, July.
- Jorion, P (1991)"The Pricing of Exchange Rate Risk in Stock Market, Journal of Financial and Quantitative Analysis, Sept.
- Levich, R, G. Hayt and B. Ripston, 1998 Survey of Derivatives and Risk Management Practices by US Institutional Investors, New York University Stern Graduate School of Business, CIBC World Markets and KPMG Consulting Group, 1999
- Logue, D and G. Oldfield (1977)"Managing Foreign Currency Asset when Foreign Exchange Markets are Efficient," Financial Management, Summer pp 16-22.
- Ma, C.K and Kao, G.W (1990)"On Exchange Rate Changes and Stock Price Reactions, Journal of Business Finance and Accounting, Vol. 17, Summer.
- Prasad, A.M and Rajan, M (1995)"The Role of Exchange and Interest Risk in Equity Valuation: A Comparative Study of International Stock Markets, Journal of Economics and Business, Vol. 47, pp 457-472.
- Redhead, K and S. Hughes (1988) Financial Risk Management, Gower Publishing, Hants.
- Shapiro, A and D. Rutenberg (1976)"Managing Exchange Risks in a Floating World," Financial Management, Summer, pp 48-58.
- Van Horne J. (1998) Financial Market Rates and Flows, 5th edition, Prentice Hall

Annex:



UNIVERSITY OF DAR ES SALAAM
FACULTY OF COMMERCE AND MANAGEMENT

DEPARTMENT OF ACCOUNTING
P.O. Box 35046, Dar es Salaam
TANZANIA

Telephone: 0255-22-
2410257

Fax: 0255-22-
2410510

E-mail: assad@fcm.udsm.ac.tz

Dear Respondent,

This research initiative titled *Foreign Currency Risk: Awareness and Management Practices in Tanzania* is undertaken by members of the Faculty of Commerce and Management of the University of Dar es Salaam.

Foreign currency risk, it is suggested, should be a matter of importance for any sizeable firm. Managers in these firms, as a minimum, ought to be aware of the existence of such risk. An understanding of techniques which can be employed to minimize foreign currency risk, subsequently, becomes indispensable. Financial market operators (banks, financial analysts, management consultants, potential brokers, etc.) must be prepared to offer financial products and services to enable customers and clients manage foreign currency risk effectively.

Management training institutions also need to have appropriate courses and topics in their programs to ensure graduates are equipped with the knowledge and tools to manage foreign currency risk.

However, little is known of readiness of firms, financial market operators and management training institutions to face up to foreign currency risk and its management. Are these parties aware of the existence of foreign currency risk to their operations? How are they prepared to manage such risk? These are the two principal research questions to be pursued.

This research will, with your expected cooperation, provide insight into this important concept of foreign currency risk and how it is managed. This insight will definitely be useful to a broad spectrum of players and may stimulate valuable suggestions to be made for future improvements. The dissemination of research results may also encourage discussion at different levels.

I therefore request your cooperation in this research initiative such that you to take some of your precious time to fill the attached 3-page questionnaire and return it to the person administering it to you. Alternatively contact details are on the letterhead at the top of this page in the event you need to deliver it to us by alternative means.

Yours Sincerely,

Mussa J. Assad, Ph.D, ACPA[T]
Senior Lecturer

Questionnaire to Assess Awareness and Practices in Foreign Currency Risk Management in Tanzania

Date of Administration of the Instrument [dd/mm/yyyy]: 2004

Name of Respondent [optional]:

SECTION A: General Information

- 1 Name of firm [optional]: _____
Major business line [e.g. export, service,
- 2 manufacturing, mining, etc.]: _____
- 3 Country of residence: _____
If a subsidiary name the holding company
- 4 [optional]: _____
- 4.1 In which country is the holding company registered: _____
- 5 Annual turnover[indicate currency]: _____
- 6 Position or title of the respondent: _____
- 7 Respondent's highest academic qualification: _____
- 8 Respondent's highest professional qualification: _____
- 9 Respondent's job experience in years: _____
Which institution did you graduate from and when? [provide details on the table
- 10 below:]

	Name of Institution	Country	Year of graduation
i]			
ii]			
iii]			

SECTION B: Views on Foreign Currency Risk

11 How big a problem do you believe Foreign Exchange Risk is to Tanzanian businesses?

- Very big
- Big
- Potentially big
- Small and of no consequence

12 Is Foreign Exchange Risk Management therefore, an activity you believe businesses should undertake?

- Strongly recommended
- Recommended
- Undecided

Not recommended

13 What is your general assessment of capacities of businesses in Tanzania to undertake Foreign Exchange Risk Management?

- Capacity is very adequate
 Capacity is somewhat adequate but needs strengthening
 Capacity is weak or mostly non-existent and needs to be developed
 I cant make such an assessment

14 Is there a policy in your institution or firm to guide management and staff or clients in the foreign exchange risk management task?

- Yes, there is a policy in place
 No, but a policy is currently under consideration
 No, a policy is not considered necessary at the moment
 No, foreign currency risk management is handled by the parent company

15 What is the level of your firm's current direct or indirect [advisory capacity] involvement in Foreign Exchange Risk Management activity?

- High involvement
 Occasional involvement
 Not involved at all

16 Who do you think should be the most responsible officer for foreign currency risk management in your firm or your client?

- The Chief Executive
 Director of Finance or similar position or rank
 Finance Manager or similar position or rank
 Financial or Management Accountant
 Cash and Bank Accountant
 Other, please specify.

SECTION C: Internal hedging techniques

16 Following are some time-tested internal hedging techniques and we would like you to indicate if:

- You have regularly or occasionally made use of the technique
- You have evaluated but never had the opportunity to use the technique
- You are not informed of the technique and have therefore not evaluated or thought of the technique as relevant to your environment.

For each technique tick as appropriate in one of the cells on the following table your most accurate response:

Hedging technique	tick <input checked="" type="checkbox"/> Response		
	Not informed of it	Used it regularly	Evaluated but not used it
Matching of balance sheet assets/liabilities against liabilities/assets in the same foreign currency			
Matching of foreign currency trade payments/receipts against receipts/payments in the same currency			
Negotiating a local currency [TAS.] price for imports			
Invoicing exports in US \$, the Euro or other hard currency			
Foreign exchange adjustment clauses in contracts			
Switching to a local or regional supplier			
Adjustment of inter-company accounts through leading/lagging			
Adjustment of inter-company accounts through transfer pricing			
Leading/lagging of payments to/receipts from third parties			

SECTION D: External Hedging Techniques

- 17 Following are some rather common external hedging techniques and again we would like you to indicate if.
- You have regularly or occasionally made use of the technique
 - You have evaluated but never had the opportunity to use the technique
 - You are not informed of the technique and have therefore not evaluated or thought of the technique as relevant to your environment.

For each technique tick as appropriate in one of the cells on the following table your most accurate response:

Hedging technique	tick <input checked="" type="checkbox"/> Response		
	Not informed of it	Used it Regularly	Evaluated but not used it
Forward foreign exchange contracts against the TAS.			
Forward foreign exchange contracts between two foreign currencies			
Foreign currency borrowing			
Foreign currency hedge contracts			
Foreign currency option contracts			

Hedging technique	tick <input checked="" type="checkbox"/> Response		
	Not informed of it	Used it Regularly	Evaluated but not used it
Financial futures contracts			
Future rate agreements			
Interest rate swaps			
Foreign currency swaps			
Foreign currency hold accounts			
Interest rate options			