TITLE: MICRO INSURANCE IN TANZANIA: DEMAND PERSPECTIVES.

By: Abdallah Naniyo Saqware

A Thesis Submitted in the Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy at the University of Central Lancashire

University of Central Lancashire

July, 2012.

STUDENT DECLARATION

*I declare that while registered as a candidate for the research degree, I have not been a registered candidate or enrolled student for another award of the University or other academic or professional institution.

MATERIAL SUBMITTED FOR ANOTHER AWARD

*****I declare that no material contained in the thesis has been used in any other submission for an academic award and is solely my own work.

Signature of Candidate: Abdallah Naniyo Saqware.

Type of Award: Doctor of Philosophy

School: University of Central Lancashire-Business School.

CERTIFICATION

The undersigned certify that they have read and hereby recommend for acceptance by the University of Central Lancashire a thesis entitled "**Micro insurance in Tanzania: Demand perspectives**". In fulfillment of the requirements for the degree of Doctor of Philosophy at the University of Central Lancashire

.....

Prof. Thankom G. Arun (Supervisor)

Date: _____

……

Dr. Philip Kostov (Supervisor)

Date: _____

STATEMENT OF ORIGINALITY

I, Abdallah Naniyo Saqware, declare that this thesis is my own original work and that it has not been presented for PhD or any Degree in any University. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference in thesis itself.

Signature_____Date_____

Abdallah Naniyo Saqware

ABSTRACT:

This study addresses three distinct but interrelated areas in the micro insurance sector in Tanzania a) demand perspectives of micro insurance in the informal sector b) examining strengths and weakness of current risk coping strategies in the informal sector c) examining household's characteristics that influence demand for micro insurance. The study analyses data from a primary survey and focus group discussion derived from informal sector households' members of the *VIBINDO*[1] society in three districts of *Ilala, Kinondoni* and *Temeke* in Dar es Salaam. The analysis involves three steps; first, household's major risk exposures were analysed, secondly risk coping strategies which were in place were examined and thirdly, a probit regression analysis was conducted to establish the relationship between households' characteristics and demand for micro insurance in the informal sector.

There are three major findings from this study: Firstly, the results indicate that employment, marital status, use of financial services, education, risk exposure and insurance knowledge are significant determinants of micro-insurance demand. Insurance knowledge and trust of insurers were found to have a positive and significant impact on the demand for micro insurance. Contrary to expectations, the empirical analysis shows that income is a significant determinant with a negative impact on micro insurance demand.

Secondly, the findings suggest that demand for micro insurance in the informal sector depends on the competitive advantage between formal insurance services and available informal techniques. Informal techniques have important informational advantages due to their close physical proximity and frequent, repeated interactions. This implies that some inferences can be drawn from the design and development of micro insurance. The analysis highlights different approaches to be taken by insurers in designing micro insurance products.

Thirdly, there is evidence to suggest that pre-existing informal sharing networks affect demand for micro insurance. The low demand for micro insurance can be explained by available informal arrangements which are characterized by closely knit social networks and groups that provide security in exchange for loyalty to the group. Also, uncertainty avoidance culture is low within the households in Tanzania, hence households seem to be more tolerate to different situations. The

[1] VIBINDO stands for Viwanda na Biashara Ndogondogo- an umbrella organization of small and medium economic groups in the informal sector in Tanzania. VIBINDO represents group members from a variety of different economic sectors working in the informal sector in Tanzania. VIBINDO represents over 300 groups' members with over 500,000 individual members.

findings recommend strategies for micro insurance expansion in the informal sector, which is therefore useful for the expansion of financial services.

Keywords: Micro insurance, Financial Services Inclusion, Insurance Demand, Social Protection.

TABLE OF CONTENTS

LIST OF TABLES, GRAPHS AND FIGURES

List of Tables

List of Graphs

List of Figures

ACKNOWLEDGEMENT

In the course of undertaking this study, I have received intellectual, financial and moral support from various individuals and organizations to whom/which I wish to register my deep heartfelt appreciation. I would therefore like to express my sincere thanks to all individual and institutions that made the accomplishment of this work possible. While I am thankful to all in equal proportion, I am obliged to mention few by names. Firstly, my supervisors Prof. Thankom G. Arun and Dr. Philip Kostov who, their comments, guidance and constant encouragement were important in the realization of this final output. Their high research standard and constructive criticism greatly shaped my ideas and increases my research skills. Equally, I wish to register my great appreciation to Dr. Chitalu Kabwe and Dr. Kassim Hussein for their willingness to comment on some draft chapters and excellent ideas during doctorial seminar presentations held at various occasions. I am also very grateful to the members of staffs at Central Lancashire Business School for their information support that assisted me to focus on my thesis even during difficult times. Their constant reminder on academic matters including annual progress reports and useful courses at UClan facilitate smooth completion of the study.

Secondly, the completion of this study was made possible through financial support provided by my employer. I therefore, wish to register my appreciation to the Institute of Finance Management (IFM) especially Prof. Joshua Doriye and later Prof. Godwin Mjema for their moral, financial and administrative support during the study. It was through this sponsorship and generous research grant which made my field research activities possible. In the field I am very much indebted to all those who facilitated access to data and information. I am deeply thankful to the VIBINDO Society chairman Mr. Gaston Kikuwi for allowing access to member's information at no cost. I also wish to register my appreciation to Mr. Ancelmy Mushi and Frank Kitende for their assistance in conducting the interviews, compiling and transcribing data at minimum payment.

Thirdly, the very important persons who deserve my innermost heartfelt gratitude are my wife Susu Ally Nau, my mother Siima Bahhi Tenga, and my children Sagillo, Alilonda and Sarai for their moral support. The entire family has been a constant source of comfort and inspiration throughout my studies. Indeed no amount of words can adequately convey my gratitude to them. Their patience and understanding during research and writing of the thesis as they missed the love and affection they needed most and therefore this report is dedicated to my family and in particular to my beloved mother who sacrifices a lot towards realization of my education in the early age of my life. Finally, verily a PhD work is a result of contributions from many people and institutions. However, I personally remain solely responsible for the contents; facts and for any shortcoming in this piece of work.

LIST OF ABBREVIATIONS

BAFIA- Banking and Financial Institutions Act

BoT- Bank of Tanzania

BRELA – Business Registration and Licensing Agency

CGAP – Consultative Group to Assist the Poor

CHF – Community Health Funds

CREW –Credit for Women

ERP –Economic Recovery Program

ESAP –Economic and Social Action Program

FGD –Focus Group Discussion

FINCA- Foundation for International Community Assistance

FSRP –Financial Sector Reform Program

GDP –Gross Domestic Product

GEPF –Government Employees Pension Fund

IAIS- International Associations of Insurers Supervision

ICRI- International Crops Research Institute

IIT – Insurance Technical Team

ILO – International Labour Organization

IFM- Institute of Finance Management (TZ)

ILO- SAAT- ILO-South Asia Advisory Team (New Delhi)

IMF – International Monetary Fund

LAPF – Local Authority Pension Fund

MFI –Micro Finance Institutions

NGO- Non- Governmental Organization

NHIF – National Health Insurance Fund

NIC – National Insurance Cooperation

NSSF – National Social Security Fund

PPF –Parastatal Pension Fund

PRIDE- Promotion of Rural Development Enterprise

PSPF –Public Service Pension Fund

PTF –The Presidential Trust Fund

ROSCAs – Rotating Savings and Credit Associations

SACCOs- Saving and Credit Cooperatives Organizations

SELF – Small Enterprises Loan Facility

SIDO- Small Industries Development Organizations

SME –Small and Medium Enterprise

TASISO –Tanzania Small Industries Organization

TIB –Tanzania Institute of Bankers

TIRA –Tanzania Insurance Regulatory Authority

VIBINDO – Viwanda na Biashara Ndogo Ndogo

URT- United Republic of Tanzania

WB- World Bank

WEDTF- Women Entrepreneurship Development Trust Fund

YOSEFO-Youth Self Employment Foundation

CHAPTER ONE: INTRODUCTION

This study focuses on micro insurance demand perspectives in the informal sector within the context of Tanzania. Understanding of demand enhances the design of appropriate products and improves uptake of micro insurance services in the informal sector (see for example, Prahalad, 2005; Churchill, 2006; McCord, 2008). Indeed, putting micro insurance in place without thorough assessments of its demand may cause a limited impact or sometimes even wasting the insurer's scarce resources.

This research is an effort to illuminate, how micro insurance can be used in the context of poverty reduction strategies in developing countries. The present study examines risk exposures and existing coping strategies in the informal sector, and identifies positive attributes that can be incorporated into the design of micro insurance products. This chapter presents the motivations for the study in section 1.1, background to the research in section 1.2, aims and objectives of the research in section 1.3, and finally the structure of the thesis is presented in section 1.4.

1.1 MOTIVATION FOR STUDYING MICRO INSURANCE DEMAND

My interest in the topic area of micro insurance began in 2004; I was involved in the feasibility study conducted by the Ministry of Health on the implementation of a rural health financing scheme in the Muheza district in Tanzania. The feasibility study was aimed at assessing the impact of the health financing scheme for the poor households. In an effort to carry out this study, we examined the present state of the financial services including practice and challenges in Tanzania. With this regards, there was evidence in the literature to show that households requires financial services including insurance (see for example, McCord, 2001; Leftley and Mapfumo, 2006; URT, 2003). Indeed, using scenario mapping, the access to financial services in the informal sector was a critical challenge that financial institutions particularly in developing countries are currently facing.

Further, my interest in the area of micro insurance was enriched by my appointment to the Insurance Technical Team. The Insurance Technical Team consists of members from different stakeholders of the insurance industry and financial sector. The main task of the team among other things is to advise and make recommendations to the Bank of Tanzania on issues related to access to insurance services in Tanzania. In undertaking these tasks I experienced the nature of the challenges facing the insurance industry in Tanzania which were calling for a solution. This motivated me to undertake this PhD project, to contribute to the body of knowledge on micro insurance in Tanzania. The next section gives the background to the research.

1.2 BACKGROUND TO THE RESEARCH

The present study seeks to describe and analyse access to financial instruments in the informal sector in Tanzania with particular interest focusing on micro insurance services. Several studies show that there has been low demand for micro insurance services within the informal sector households in Tanzania (see for example, Monique, *et al.* 2003; Cohen, *et al.* 2005). Low access to financial instruments can be traced since *Arusha Declaration (1967*) when Tanzania had nationalized all financial institutions and economic system was fully controlled and owned by the state.

The current investigation derived its rationale from the outcome of financial sector reforms discussed in chapter two of this thesis. The financial sector reforms carried out in Tanzania finds its theoretical support from McKinnon (1991) who argued that financial controls discourages saving and investment efficiency and thus reduces the growth of the economy. McKinnon's theory supports liberalization of the financial sector which in turn reduces disintermediation and increases investments. Indeed, recent studies by Beck, *et al.* (2000) argued that countries with better developed financial markets and institutions effectively channel society's savings to its most productive use and tend to experience faster economic growth compared to those with less developed financial systems. This is because financial sector development helps economic growth through more efficient resource allocation and productivity growth. In addition, Demirguc-Kunt and Maksimovic (1998) and Rajan and Zingales (1995) argued that availability of financial services helps to foster economic development by widening access to external financial services.

Several empirical studies have found that better developed financial systems ease the financing constraints faced by enterprises, particularly small firms. Hence, there is evidence that financial sector development has a causal effect in stimulating economic and productivity growth (see for example, Moore, *et al*. 2006; Das and Ghosh, 2006; Iimi, 2004; Spiegel and Yamori, 2003; Honda, 2003). Indeed, there is a further set of empirical evidences to support the effect of financial sector liberalization on savings, investments and access to financial services in the literature (see for example, Bandiera, *et al.* 2000; Arestis *et al.* 2002; Chinn and Ito, 2002).

In line with these studies, the impacts of financial sector reforms in Tanzania were realized through the increase in the number of financial institutions[2] and aggregate economic growth from 1.7 percent during the 1980s to an average of 5.8 percent during the 1990s (BoT, 1990). Furthermore, the size of financial deepening measured through the currency to deposit ratio of monetary assets (M1, M2, and M3)[3] to GDP that is M2/GDP and the ratio of extended money to GDP which is M3/GDP indicates

[2] Before the reforms, the banking and insurance sector of Tanzania was made up of three and two insurance companies. However, after the reforms, by the end of 2010 there were 38 commercial banks, 6 regional banks, 24 insurance companies and 6 pensions' funds.
[3] M1-refers to narrow money (currency in circulation outside banks demand deposits), M2-refers to broad money (M1 +Time deposit + Saving deposit and M3-refers to Extended money (M2 + Foreign Currency Deposit)

the increase after reforms. The higher the ratios are, the more developed the financial sector deepening, suggesting that individuals will prefer to hold monetary assets and feel it is convenient to keep their wealth in monetary instruments. According to the Bank of Tanzania quarterly reports of 2005, there were also declines of M1 to M2 ratios from an average of 71.1 percent to an average of 67.2 percent after reforms, suggesting improvements in the ability of banks to stimulate long-term savings. Moreover, the commercial banks credit increased considerably following reforms, total banking lending rose to about 1425 billion (Tsh) in 2005 from 209 billion (Tsh) recorded in 1991s.

These reforms have also reshaped the insurance markets[4]; the insurance industry grew in size, and by June 2010, there were 24 registered commercial insurers, 80 broking firms, 488 licensed agents and 36 private health insurance schemes (TIRA, 2010). Furthermore, the insurance penetration, that is premium as a percentage of GDP increased to 1.02 as per 2010 reports from 0.08 prior to the reforms, suggesting that the deregulations of the financial services markets has positively affected insurance markets. As will be made clear at a later point, it appears that the financial reforms have less effect in the informal sector as there is poor access to insurance services and in particular to micro insurance. The focus on micro insurance emerged because the concept represents a useful financial instrument for low income households but remains largely under researched.

Previous studies related to micro insurance raises four major issues which prompt to undertake current study; Firstly, Cohen and Sebstad (2005) indicate that insurance market penetration is largely driven by supply and not demand. Secondly, despite some progress being achieved in the formal sector, insurance services to informal households have been slow to develop and the access to insurance products has remained stunted. Thirdly, economic reforms pursued in the 1990s amounts to substantial government cutbacks in public expenditure which in turn incapacitated public sector provision of social protection needed by informal households. Thus, in seeking to address these variations and imbalances, several studies and government policy are in favor of micro insurance (see for example, Wangwe and Tibandebage, 1999; URT, 2005; Steinwachs; 2002). However, a fundamental gap exists on micro insurance demand perspectives in the informal sector to realize the intended objectives, hence the focus of this PhD study.

Fourthly, most studies that have examined micro insurance demand in the informal sector have been undertaken on East Asia (see for example, Jim, *et al.* 2007; Churchill, 2006; Dror, *et al.* 2007; Morduch and Sharma; 2001) and the main focus appears to be on micro finance clients (see for example, Cohen and Sebstad, 2005; Sestad, *et al*. 2006; Gine, *et al.* 2008). This empirical deficit is important when one considers the size and key role of the informal sector to the economy in the

[4] These radical financial sector reforms had affected the insurance industry during the last 20 years. As part of the reforms, the Government enacted the Insurance Act No.18 of 1996 (since repealed and replaced by Act No. 10 of 2009) which opened up the local market to local and foreign private insurers as well as insurance intermediaries.

developing countries. These core gaps provide the backdrop for this thesis. Based on the theoretical and empirical literature and the gaps identified therein, this thesis explores the micro insurance demand perspectives in the informal sector in Tanzania.

1.3 AIMS AND OBJECTIVES OF THE STUDY

The main objective of this study was to investigate micro insurance demand perspectives in the informal sector in Tanzania. Thus understanding the household behaviour concerning the desired micro insurance can play an important role in anticipating both private and social insurance demands. In order to accomplish this objective, this research intended to provide answers to the four specific research questions:

i. What are the most important risks facing informal sector households in Tanzania?

This question seeks to examine the risks faced by informal households and determine their characteristics. The objective is to generate information that can be useful in identifying insurable and non-insurable risks.

ii. What are the risk coping strategies in place for the informal sector households in Tanzania?

The research seeks to examine the existing risk coping mechanisms that can help identify attributes of informal insurance systems which could be incorporated into the design of micro insurance products. The objective is to generate information that can be useful in identifying appropriate product attributes.

iii. What are the biggest gaps in the existing coping strategy that can be replaced by micro insurance?

The question seeks to understand the weakness of the coping systems in place and quantify its impact, compare the costs implications of each mechanism, and finally to analyse the strengths and weaknesses to determine the role of micro insurance as a risk management instrument in the informal sector.

iv. How do household characteristics affect micro insurance demand?

This question seeks to derive how opinions differ as per household characteristics. Among other things, the study will examine household characteristics and determine the nature of the relationship that exists between household characteristics and micro insurance demand. The question explores factors which may explain variation with respect to demand for micro insurance. This can play a crucial role in designing micro insurance products.

1.4 STRUCTURE OF THE THESIS

This thesis is composed of nine chapters; they are structured as follows, Chapters 1; presents introduction to the study. The background to the research, aims and objectives of the study were presented.

Chapter 2; focuses on the provision of financial services in Tanzania including insurance services. The developments of financial services were tracked, documented and the main challenges are identified. The chapter discusses the access to financial services within the population, challenges and its linkages to the demand for micro insurance. Further, certain characteristics of the financial sector industry that are related to subsequent analyses are discussed. This chapter establishes the basis and rationale for carrying out this study.

Chapter 3; reviews the literature on micro insurance demand and discusses gaps in literature which warrant the current study. It provides a conceptual reference to construe the demand for different types of insurance in the informal sector.

Chapter 4; theoretical and conceptual frameworks were developed. The chapter critically revisits insurance demand theories perspectives discussed in the existing literature. Discussion includes expected utility theories and effects of short term income risk, long term trajectories associated with the life cycle and bequests. This chapter explains and justifies the conceptual framework adopted. The framework depicts the unique process of understanding micro insurance demand perspectives in the informal sector.

Chapter 5; discusses the philosophical position of the research, and research design and methodology are presented. Further, the detailed descriptive information on sampling framework and sampling techniques, research instruments, measurement of variables and statistical software used are provided.

Chapter 6; provides documentation on the statistical analyses that were conducted in the study. The chapter examines the risk exposures in the informal sector and identifies the impacts of such risks. It further explores various understanding of risk events from respondents. A key contribution of this chapter is an attempt to answer the first research question and identifies potential risks which are insurable. This chapter also provides a description of data and a framework for analysis.

Chapter 7; discusses the findings related to risk coping strategies used in the informal sector in Tanzania. The chapter focuses on the second and third objectives of the research by examining the

strengths and weaknesses of risk management techniques in place. A key contribution of this chapter is to highlight the gaps and establish the attributes of the informal techniques that can be applied in micro insurance product design.

Chapter 8; the empirical findings on the relationship between household characteristics vis. micro insurance demand were elaborated in detail. The chapter targets the fourth objective of the study by examining household's understanding and perceptions of insurance products. The main contribution of this chapter is to highlight factors that influence demand in the informal sector.

Finally, Chapter 9; this chapter provides the summary of the major findings and conclusions drawn from the data. It discusses the major policy implications and recommendations of the research. The chapter also provides the major contributions and limitations of the study. Finally areas for further research were established.

CHAPTER TWO: THE REVIEW OF TANZANIA'S FINANCIAL AND INSURANCE SECTOR

This chapter assesses the status of the financial sector in Tanzania. It focuses on the provision of financial services including insurance services. Investigation on micro insurance demand requires a review on the status of the financial sector in Tanzania, its development and the main challenges facing the sector. The purpose of the financial sector review was to explore the level of access to financial instruments in Tanzania. In this context, the research problem and rationale for research were addressed. Further, certain characteristics of the industry that are linked to the demand for micro insurance were analysed.

The chapter is divided into five sections. Section 2.1 is devoted to an overview of the current state of the economy. Section 2.2 provides a description of the financial sector and formal financial institutions in Tanzania. Section 3.3 provides a description of micro finance services in Tanzania followed by section 2.4 which discusses provision of insurance and social protection services; finally, section 2.5 provides the rationale of the study and summarizes the chapter.

2.1 STATE OF THE ECONOMY: AN OVERVIEW

Tanzania adopted a socialist development strategy through the *Arusha Declaration (1967);* this strategy treats the state as a key agency of direct economic planning and management, and allocates resources according to priorities established by the state rather than through mechanisms provided by the market. Hence, it allows the state to control all economic sectors. As a result of the state controlled nature of the economy, Reinhart and Tokatlidis (2003) and Maxwell (2007) find out that Tanzania's economy was characterized by extensive administrative controls and suffered from severe internal and external imbalances, and the economy experienced negative growth of GDP as production and exports declined and capacity utilization fell[5].

Thus, these critical economic circumstances in the 1980s gave rise to the adoption of structural adjustment programs supported by the World Bank and the International Monetary Fund (IMF). Hence, in close cooperation with the World Bank and the International Monetary Fund, a three year Economic Recovery Program (ERP) was launched. The ERP was followed by a sister program, the Economic and Social Action Program (ESAP) launched in 1989. The World Bank and the IMF were instrumental in the preparation and actual financing of this program. The ESAP carried over all the policies introduced under the ERP with the following objectives i) to improve the quality and

[5] Further, these studies show that inflation was high, averaging over 30 per cent per year, the balance of payment registered large deficits and the country faced a severe shortage of foreign exchange reserves leading to an accumulation of external payments arrears. Per capital income growth dropped steadily from 2.09 per cent in 1968 to -5.55 per cent in 1983.

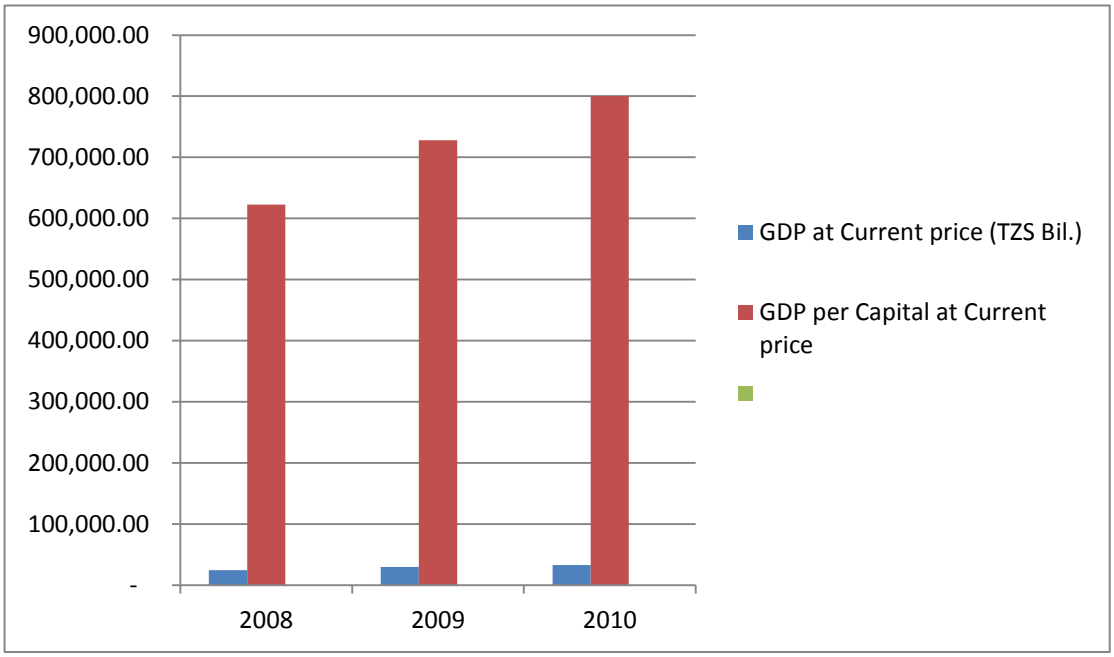
quantity of social services; ii)The restructuring of the publicly owned banks and insurance institutions and iii) establishment of new financial institutions.

As a result of the reforms outlined above, the BoT (1995) report indicates that significant progress was made to create a more stable economy. Indeed, Bardhan and Udry (1999) indicated that reorienting the economy to a market-based operation creates space for exploiting the potential of private sector initiatives. Hence, according to the IMF 2011 country report[6], Tanzania's GDP per capita 2010 (est.) fall at US$1423 was the second largest economy among five East African countries after Kenya. The GDP's composition by sector 2010 (est.) indicates that agriculture comprises 28.4%, industry 24% and services 47.6% and that GDP growth rates in 2010 (est.) indicated that the economy grew at 7.3%, 6.7% and 6.5% in 2008, 2009 and 2010 respectively.

It can be argued that the improvement in the policy environment and a market-friendly institutional framework established in Tanzania resulted in the increase of GDP. For example since 2008, the GDP at the current price has been on the rise as indicated in graph 2.1 below. Tanzania's real GDP grew at an annual average rate of 7.2 percent with good performance being recorded in construction and services, and particularly in real estate and business services (IMF, 2010 est.). Nevertheless, in 2009 Tanzania experienced a slowdown in annual economic growth to 5.4 percent on account of the global financial crisis. Despite the slowdown in growth as a result of the global financial crisis, the fundamentals of macroeconomic stability have been well preserved, and the gains from two decades of strong reform measures were not eroded. The external position of the Tanzanian economy remains strong, and the level of reserves for June 2010 was enough to cover about 5.6 months of import of goods and services (BoT, 2010). The current account deficit is projected to remain at 13% of GDP due to higher imports as a result of strong economic activities and a construction boom. For Tanzania's economic performance indicators see *Appendix A.*

[6] http://www.africaneconomicoutlook.org/en/countries/east-africa/tanzania/

Graph 2.1: Tanzania's GDP increase over time



Source: Ministry of Finance (Tanzania)

According to the Ministry of Finance's economic review bulletin 2010, Tanzania's political stability, sound macroeconomic management and considerable resources are major strength to achieve sustainable growth. Despite these gains, the troubling part of Tanzania's growth performance is the widespread corruption and bureaucratic barriers to investment, with a rudimentary physical infrastructure. New investments on roads, railways and harbour redevelopment are necessary for immediate growth. The performance can be weakened by pressure from energy and food prices.

2.1.1 Challenges to the Tanzanian Economy

The Tanzanian economy challenges are indicated in the URT (2010) economic survey. The survey indicates that administrative capacity to use public resources more efficiently by removing corruption and bureaucratic barriers are major economic challenges. Over the medium-term, the main policy challenge is to raise living conditions and improve public infrastructure such as roads, schools and wages. This will require high per-capita economic growth over a long period, which in turn will require ensuring both sound macroeconomic policies and raising potential output growth. Hence, substantial improvements in human capital over the longer term are of paramount importance. Indeed, Lipumba and Ndullu (1989) suggest that structural reforms to product markets and financial pressure for social insurance schemes to cover informal sector households are major economic challenges. Generally by enlarge a combination of appropriate economic policies, financial sector reforms and improvements in risk management within the population can reduce poverty.

2.2 FINANCIAL SECTOR

2.2.1 Outcome of financial sector reforms

The social contract philosophy which governed the Tanzanian economic structure prior to the reforms mentioned in section 2.1, undermined growth of the financial sector. Prior to these reforms there were three state-owned banks, which were the National Bank Cooperation, the CRDB bank and Zanzibar People's Bank and two insurance companies which were the National Insurance Cooperation and Zanzibar Insurance Cooperation. These state institutions were charged with the task of providing regular financial services to the business (public) sector, often with an administratively set agenda. Other financial institutions such as development, housing and pension funds carried out specialized business activities. Generally, all financial institutions operated as fiscal agents of the government for all practical purposes, rather than as providers of services to clients. As a result, the quality of financial services provided was poor and largely based on non-commercial criteria. This restricted financial sector activity, undermined competition, efficiency and access to financial services.

To improve the access to financial services, the financial reforms governed by the Banking and Financial Institutions Act (BAFIA) of 2006 were introduced. This Act regulates financial institutions in Tanzania and emphasizes private participation, with the main purpose being to increase savings-, and improve the allocation and operational efficiency of the financial system which was characterized by state-owned financial institutions. Since then, the financial sector in Tanzania had been transformed, with the banking and insurance industry leading this dynamism through an expanded branch network, scope of operations and number of institutions. Detailed information on the outcome of the reforms is presented in sections 2.2.2 and 2.2.3 below.

The liberalization of the financial sector finds its theoretical support from McKinnon (1991) and several empirical studies have found that financial sector development has a causal effect in stimulating economic and productivity growth (see for example, Moore, *et al*. 2006; Das and Ghosh, 2006; Iimi, 2004; Spiegel and Yamori, 2003; Honda, 2003 Beck, *et al.* 2000; Demirguc-Kunt and Maksimovic, 1998; Rajan and Zingales, 1995; Bandiera, *et al.* 2000; Arestis *et al.* 2002; Chin and Ito, 2003). The outcome of the financial sector reforms elsewhere demonstrated a similar trend, for example, Das and Ghosh (2006) investigated the performance of the Indian commercial banking sector during the post reform period of 1992–2002. The results of their study showed that medium-sized public sector banks performed reasonably well and were more likely to operate at higher levels of technical efficiency. Also, Reinhart and Tokatlidis's (2003) study revealed that financial liberalization had delivered on realizing higher real interest rates, financial deepening and savings

mobilization in Sub-Saharan Africa countries. However, this study could be criticized on account of 'fallacy of composition' in that what may be true for the whole may not be true for the parts.

2.2.2 Formal Financial Institutions

Formal financial institutions discussed in this section are commercial banks and non-banking financial institutions regulated by the Financial Institution Act of 2006. Commercial banks are money deposit banks that incur liabilities in the form of deposits payable on demand and transferable cheques or otherwise in making payment. They lend and provide other banking services to the public. The financial sector reforms led to the transformation of the Tanzanian banking sector, placing it at the centre of economic policy management and private sector led growth. The banking sector has witnessed marked growth; the expansion in the number of banks, increased competition in the banking sector in particular the diversification of financial services and introduction of technological infrastructure. For instance, the number of private banks increased from zero in 1994 to 38 in 2010 (see BoT, 2010). By June 2010 there were 38 registered commercial banks[7], institutions authorized to receive money on current account subject to withdrawal by cheque, operating in over 395 branches in the country. There were 8 regional banks[8], institutions licensed to operate as a regional unit bank; they may receive money on current account, subject to withdrawal by cheque.

The non-bank financial institutions include thrift institutions, and medium and long-term finance institutions (development banks and other financial institutions). The thrift institutions are non-bank financial institutions which accept deposits (excluding demand deposits) from the public. They are made up of two categories: - a) Deposit taking institutions, which are deposit taking but occur in forms other than demand deposits, for example, time and savings deposits. They mobilize deposits offering various types of deposit schemes, providing banking services and participate in a money markets operation; there were four financial institutions[9] licensed and authorized to engage in banking business not involving the receipt of money on current account subject to withdrawal by cheque. b) Non-deposit taking financial institutions, which can be grouped excluding insurance and pension funds[10], as institutions offering lease hire purchase services and institution offering development finance. They provide long term finance to the public and private sectors in the form of

[7] National Microfinance Bank (132), National Bank of Commerce (56), CRDB Bank 56), Barclays Bank (31), Standard Chartered Bank (7), KCB Bank (7), Akiba Commercial Bank (10), Stanbic Bank (10), Citibank (1), FBME Bank (4), Bank of Africa (7), Diamond Trust Bank (8), Exim Bank (20), The people's Bank of Zanzibar (3), International Commerce Bank (5), Habib African Bank (2), Banc ABC (2), Commercial Bank of Africa (6), I & M Bank (3), NIC bank (3), Azania Bancorp (7), Bank of Baroda (2), Bank M (4), Access Bank (4), Bank of India (1), United Bank of Africa (1), Mkombozi Commercial Bank (1), Ecobank (2), Advans Bank (1), Amana Islamic Bank (1).
[8] Kilimanjaro Cooperative Bank (1), Dar es Salaam Community Bank (2), Mbinga Community Bank (1), Kagera Farmers Community Bank (1), Uchumi Commercial Bank (1), Tandhimba Community Bank (1) and Njombe Community Bank (1), Mwanga Community Bank (1)
[9] Tanzania Postal Bank, Tanzania Investment Bank, Efatha Bank, Tanzania Women Bank
[10] Insurance and pension funds are discussed exclusively in section 2.4 of this chapter.

loans for medium and large scale investments. According to the Bank of Tanzania, by June 2010 there were eight [11]non-bank financial institutions operating in Tanzania.

2.2.3 Access to formal financial services

The financial services access survey held by IMF (2009) indicates that developed countries had an average of 45 bank branches per 100,000 adults, compared to an average of 6 banks branches per 100,000 adults in low-income countries. In addition, the Fin-Scope Survey which was conducted in 2006 in Tanzania indicates that the proportion of the adult population who use banks and other formal financial institutions was 12.4 percent; the survey projected a growth to 14 percent in 2010. This survey shows that about two million adults out of the estimated twenty million have access to financial services. Efforts to improve financial literacy in order to enhance financial inclusion are part of the Second Generation of Financial Sector Reforms spearheaded by the Bank of Tanzania. The financial literacy program aims at empowering more individuals to make informed financial choices, which in turn contributes to the demand for financial services and facilitates more efficient allocation of resources and risk management in the financial system.

Hence, in the Tanzanian context, it can be argued that financial reforms have improved access to formal financial services; with a total of 38 banks and a reasonable number of non-banking financial institutions, and the market is characterized by a few big players and several small banks. Indeed, the BoT (2000) annual report measuring banking efficiency by collecting data on bank interest rate spreads before and after financial sector reform, indicates that reforms have led to the reduction of interest rate spreads between lending and deposit rates. A decrease in bank spreads encourages a greater mobilization of financial savings and demand for credit or loans for investment and growth. The liberalization of the financial sector has led to some reduction in gross interest rate spread for the largest borrowers and a fall in the lending interest rates from 20 percent in early 2000-01 to 13.8 percent in 2003-04.

Meanwhile, there has been a substantial increase in bank credit to the private sector, from about 2.5 percent of GDP in 1996 to about 12 percent at the end of 2010. Although the percentages are low, they represent a marked improvement in the Tanzanian context in view of the non-market economy conditions that prevailed prior to the reform period. These by enlarge have increased banking penetration and bank account holders in Tanzania as indicated in table 2.1. The bank branches are concentrated in the economic heartland of the country, mainly in the capital Dar-es-Salaam and in the regional centres of Mwanza, Arusha, and Mbeya.

[11] National Development Credit Agency, Diamond Jubilee Investment Trust, Tanganyika Development Finance, National Development Corporation, Mwananchi Development Corporation, Industrial Promotion Services, Tanzania Finance Company, National Housing Corporation.

Table 2.1: Banking penetration in Tanzania

Year	2008	2009	2010
Number of Banks	31	35	38
Bank Account holders Increased	9%	12.4%	14%
Bank Loans Provided (bil. at CP)	5,98,460.06	6,014,436.10	7,735,639.2
Banks Assets (bil. at CP)	15,337,510	18,234,058.9	22,093,22.1
Bank Cust. Deposits (bil. at CP)	9,585,085.4	11,660,612.4	20,399,834.3
Borrowers frm CB per 1,000 adults	23.96	29.73	-
Outstanding loans frm CB (% of GDP)	16.54	15.78	-
No. of depstrs with CBs per 1,000 adult	122.27	130.93	-
Outsts. deposits with CB (% of GDP)	25.23	27.03	-
No. of CB Branches per 1,000km^2	0.45	0.49	-
No. of CB branches per 100,000 adults	1.68	1.81	-
Number of ATMs per 1,000km^2	0.67	0.97	-
Number of ATMs per 100,000 adults	2.51	3.3	-

Source: Bank Scope and authors calculations

However, the major limitations for household's access to formal financial services seem to be related to Beck, *et al.*'s (2008) survey which documented barriers associated with deposit, credit and payment services. The survey shows huge cross-country variations in hurdles associated with physical access (services being delivered in fewer and less convenient ways), eligibility (documents and other requirements to process services), and affordability (minimum balance requirements and fees). This survey suggests that hurdles are hard to overcome for large parts of the population in the developing world.

The main problem lies in the concept of adverse selection which occurs when banks are unable to ascertain the types of borrower prior to providing the loan. Saving propensities are too low and few households have much to put up as collateral. In this sense, lenders or banks are unable to distinguish between 'risky' and 'safe' borrowers. In the case of lending to informal households, this problem becomes even greater, in that the households are not susceptible to the usual measures of risk assessment used by banks, for example if households have never before received a loan it is impossible to assess their previous default rate. Formal lenders overcome the problem of adverse selection by lending only to people who have sufficient assets to act as collateral on the loan. This way, only 'safe' borrowers or investors will take the loan, since they will not be willing to lose their assets should they be unable to repay the loan. Therefore, borrowers sort themselves, with only attractive candidates taking on the loan. Since informal household have limited or no assets, the lender must shoulder all of the risk of the possibility of involuntary default on behalf of the

borrower. This becomes costly if many borrowers default on the loan, a very possible outcome for those very poor borrowers.

Also, the moral hazard problem needs to be considered, which refers to any unattractive actions partaken by the borrower after the loan has been provided. Since informal households have limited or no assets to put up as collateral, which is they suffer from limited liability; their costs in choosing to partake in risky endeavours with their loan are low, since failure costs nothing. Predicting this lack of incentive to repay, formal banking institutions will not want to lend to the informal population. On the other hand, wealthy borrowers who are able to put up satisfactory collateral against their loan will not wish to act in a dishonest or 'risky' fashion, since failure on their behalf will cost them in the form of the withdrawal of their collateral. In this sense, there is a prejudice against the informal sector; formal lending institutions find it unprofitable to lend to informal households due to the problems of asymmetric information and limited liability.

2.3 MICRO FINANCE SERVICES

Micro finance services in Tanzania continued to grow with the increased success of micro finance internationally. Micro finance services are linked to poverty alleviation (Hossain and Rahman, 2001). The services include provision of small loans usually provided to informal households, to help them purchase capital, to purchase durable goods or to smooth consumption. These loans are formulated exclusively to serve clients that have been excluded from the formal financial institutions discussed in section 2.2.2 above. Households with limited or no assets, mostly those working in the informal sector, access micro credit from lenders who use innovative methods in order to secure repayment as opposed to the formal forms of collateral as required by formal banking institutions. In essence the objective of lending to the household is that it allows them to use the money to partake in some productive activity that should lift them out of poverty, or else allows them to smooth consumption in the presence of hard times.

Islam and Mammun (2006) argued that the availability of micro finance has demonstrated that it is possible to provide cost-effective financial services to the poor. Indeed, Hossain and Knight (2008) indicate that micro finance has undeniable relevance to poverty reduction. In Tanzania, the expansion of financial services to the informal sector was done through an established micro finance policy. The implementation of the National Micro finance Policy in 2001 has significantly improved the operations of micro finance in Tanzania[12]. Micro finance was officially recognized as a tool for

[12] The micro finance policy 2001 provides an enabling environment for access to different schemes in the informal sector. The policy encourages the establishment of SACCOs at ward level in Tanzania. The government has approved the National Micro finance Bank and

poverty eradication and with its increased use and exposure in the country:- banks have taken an interest in offering micro finance. There are basically four types of MFI's service providers in Tanzania; Banks and Non- Bank financial institutions, Government credit schemes, NGO's and member based schemes. Each of these schemes is discussed hereunder.

2.3.1 Financial institution's micro finance schemes

These institutions are the only ones, subject to licensing, regulation and supervision under the provision of the Bank of Tanzania Act (1995) and Banking and Financial Institutions Act (2006). There are four major commercial banks which provide micro finance services[13]. These banks have successfully developed individual and group lending methodologies and have special departments providing services to Small and Medium Enterprises (SMEs). Among other rules, individual micro finance use chattel mortgages as collateral for loans and have strict rules on management of delinquency. Regional and rural bank units such as Mufindi Community Bank, Kilimanjaro Cooperative Bank and Mbinga Community Bank continue to mobilize deposits from the informal households through savings passbooks. On the savings mobilization side, Tanzania Postal Bank (TPB) has a strong outreach to informal household's clients through their network of 76 functional branches and more than 170 deposit taking outlets. TPB is working in conjunction with Micro Save Africa in new product development and improvement of customer service. Table 2.2 below shows the micro finance services provided by financial institutions.

Table 2.2: Financial Institution micro finance penetration in Tanzania

Commercial Bank	NMB	CRDB	Akiba	TPB	other
No of Branches /Units	132	56	10	76	50
No of inst/group. Clients	450	270	150	240	80
No of indiv. Clients/customers	200,000+	140,000+	15,000	1690	100,000+
Total outst. loans (Mil.Tsh)	90+	70+	40+	50+	100+
Total of MFI clients (inst.)	***	270	***	***	***
Total MFI Indiv. beneficiaries	***	140,000	***	***	***

*Source: Extracted from MFI Reports (note: *** refuse to disclose)*

CRDB Bank as its agents to channel the funds to individuals through SACCOs. Records by BoT indicate that by 2010 Tanzania has a total of 2899 micro finance institutions. This includes 8 banks, 6 non-bank institutions, 53 NGO's, 1 financial service association, 105 government programmes, 2635 SACCOs, 93 member based schemes.

[13] Which includes: Akiba Commercial Bank, National Microfinance Bank, CRDB Bank and Tanzania Postal Bank

2.3.2 Government micro finance schemes

These are government initiatives to support the micro finance program, and they provide loans to SME's in the informal sector that constituted the majority of the active population of the country. Government credit scheme's main objectives are to promote the small industries sector[14] in Tanzania. They are involved in supporting the micro finance sector to better reach the informal households and empower them for increased income generating opportunities. These schemes plan, coordinate, promote and offer every form of service to small industries. They provide opportunities to access loans and participate in economic activities so as to increase income and eradicate poverty. Moreover, in collaboration with other stakeholders they support the establishment of SME associations to empower the private sector. Some of those associations include the Tanzania Small Industries Organization (TASISO) and '*Vikundi vya Biashara Ndogo'* (VIBINDO). These associations have been useful in involving the members in issues related to advocacy, accessibility to market, information, and raw materials, packaging and micro credit services. All types of SMEs can be supported by government's schemes if compliance criteria are met with borrowing limit of Tshs 6,000,000 (£3000). Types of disbursement employed normally comply with their lending and borrowing criteria. Credit payment is based on the contract loan repayment schedule. The major government micro finance schemes includes: the Small Industries Development Organization (SIDO), Small Entrepreneurs Loan Facility (SELF), and Presidential Trust Fund (PTF).

2.3.3 Non-Governmental Organization micro finance schemes

These are registered but unregulated and unsupervised providers of micro finance services. The financial NGOs are the pioneers of the development of the micro finance sector in Tanzania. They are able to reach a segment of the market which banks failed to reach. They fall into two categories:- based on the micro lending methodology employed: (i) individual lending, and (ii) solidarity or group-based lending. Operations are generally centered on regions selected by the institutions or their donor-supporters. None of the NGOs take voluntary savings; some take mandatory savings as security for microloans extended. All are dependent on donor support[15] for loan capital and technical assistance in operations. Most of the NGO's MFI's have taken a lead in addressing access to finance for both the rural and urban population. The NGO-MFIs are not subject to any regulation with respect to the micro finance services they provide which mainly focuses on

[14] The first major attempt was undertaken in 1966 by establishing National Small Industries cooperation's which later set up the Small Industries Development Organization (SIDO) in 1973. SIDO remains the main government arm for promoting SMEs in the country. Apart from financial services, these schemes involve construction of small industries, offer skill based training, hire and purchase of machines and working tools, rendering advice on setting up new industries, new technology and marketing SME's products. These schemes have a mandate to operate throughout Tanzania.

[15] None of the financial NGOs have entered the threshold for being fully financially self-sufficient. The major players include Promotion of Rural Development Enterprises (PRIDE), Foundation for International Community Assistance (FINCA), Small Enterprise Development Agency (SEDA), BRAC Tanzania, Easy Finance, Youth Self Employment Foundation (YOSEFO), and Credit for Productivity activities for Women (CREW), Women Entrepreneurship Development Trust Fund (WEDTF), Poverty Africa, SELFINA, and Mennonite Development Associates (MEDA).

credit and compulsory saving, even though a number of governmental authorities are involved in the registration of both international and local NGOs like:- The Registrar of Societies under the Societies Ordinance; the Administrative General under the Trustees Incorporation Ordinance; the Registrar of Companies (the Business Registration and Licensing Agency, (BRELA) for companies limited by guarantee, under the Companies Ordinance (Cap 212).

2.3.4 Member Based Micro finance Schemes

Member based financial systems dominate the financial sector particularly among the informal sector households. Informal financial systems practices reflect the diversity of landscape and population density in Tanzania. These forms of financing can be registered under the Cooperative Act or Associations Ordinance. There are three major players in this category of financing: - Rotating Saving and Credit Associations (ROSCAs), Savings and Credit Societies (SACCOS)[16] and Village Community Bank (VICOBA). The theory behind member based schemes is a sense of ownership and solidarity among the community. They provide a wide range of savings and loan products to their members and these schemes are self-sustainable. The loan repayment methods are decided on at the member's meetings (Besley, *et al.* 1983). They commonly require compulsory savings, but also offer individual or group saving products and deposits. The defaults on loans are found extremely rarely (Chiteji, 2002) because each member has sufficient information on each other member's financial constraints, circumstances and characteristics, in particular their honesty. Morduch (1999) indicates that members based schemes combine the scale advantages of a standard bank with mechanisms long used in traditional, group based modes of informal finance. Apart from building their business and escaping poverty through credits: - households have the opportunity to learn how to manage money and how best to make a living.

2.3.5 Access to Micro finance Services in Tanzania

Steel, *et al.* (1997) indicates that several years after the implementation of financial sector reforms, the informal financial services remain an important financing mechanism for households; the rationale for the existence of the large informal financial sector in Tanzania was the repressive financial system that prevailed. The Finscope survey held in 2006 shows the urban households have more access to MFI's and by enlarge households use informal financial systems. Table 2.3 below depicts the picture.

[16] There are over 2635 Saving and Credit Cooperative Societies country wide; most of them are weak in capacity, they have limited range of products and always run out of cash for lending.

Table 2.3: Micro finance penetration in Tanzania

Institution	G-MFI		NGO-MFI		MBO-MFI	
Year	2009	2010	2009	2010	2009	2010
Nos. of schemes	99	105	50	53	2550	2728
Nos. of borrower	344,000	410,000	345,000	489,000	560,000	1,067,000
G. loans	99,000,000	178,000,000	100,890,000	112,000,000	222,000,000	590,000,000

Source: Micro finance reports and authors calculations

Beck, *et al.* (2008) suggest that the continued importance of informal finance may be explained by push and pull factors. The collateral requirements, minimum balance and other operational procedures hinder access of informal households to the formal financial institutions. In addition to constraints on physical access because of limited geographical coverage, there is also the issue of economic access to banks. TIB (2010) report provides further evidence to explain why a large proportion of the population may not have access to banks even when physical distance is not a problem. The report suggests that the minimum amount needed to open a bank account and operational procedures required are beyond the reach of poor households.

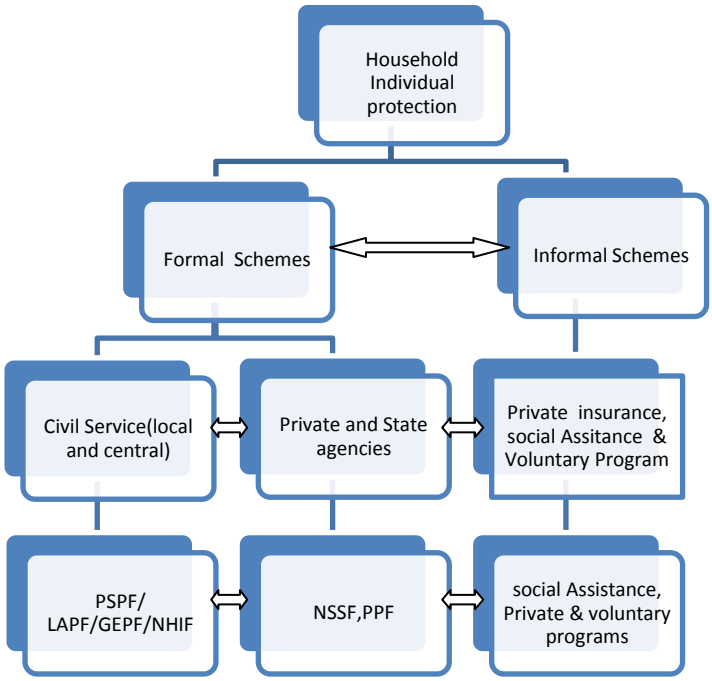
2.4 INSURANCE AND SOCIA PROTECTION SERVICES

Our approach understands insurance as a form of financial service incorporating both elements of financial services and social protection. The point of intercept is protection against risks. They manifest basically in two forms; social insurance (government schemes) or private initiatives towards risks.

2.4.1 Social Protection Services

Tanzania's social protection provisions are structured on three pillars which are a) Mandatory Social Insurance b) Social Assistance and c) Private insurance and voluntary Community schemes. This system implies that an individual safety net can be obtained by one or a combination of three schemes as illustrated in figure 2.1 below:-

Figure 2.1: Social Protection Services provision in Tanzania



Source: Author Individual Household Risk Protection System in Tanzania

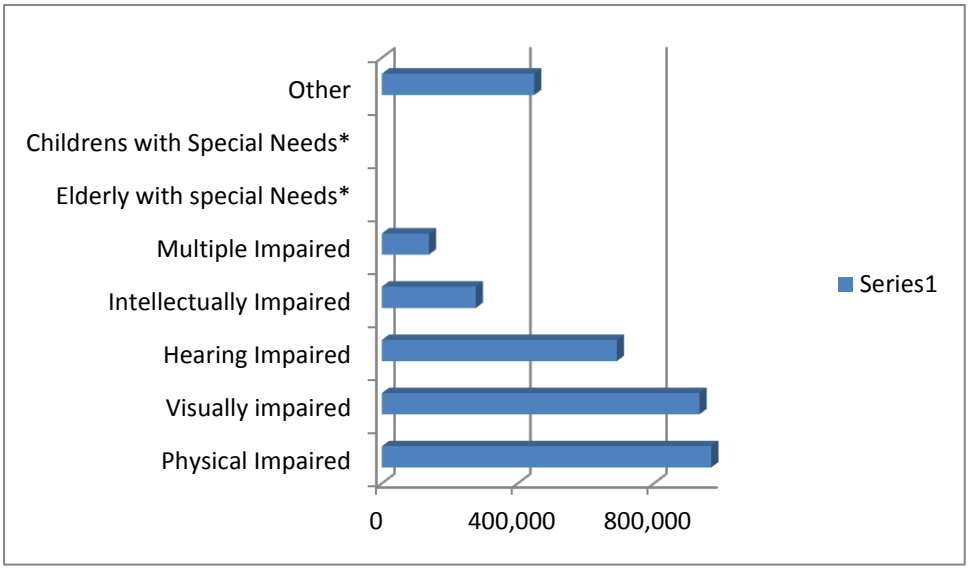
The first pillar, Mandatory Social Insurance, covers the workers under formal employment with compulsory membership. There are six schemes[17] which operate concurrently, covering different categories of employees and providing different types of benefits. The unique characteristic is that they both cover formal workers and a limited number of informal households. The major membership base comes from the formal private sector, civil servants, non-pensionable government employees, parastatal organization employees and workers working in government agencies. The law allows voluntary membership for informal sector households for all schemes. However, there is still a very limited number of informal sector households joining the program due to high contribution rates of twenty percent of monthly earnings. The schemes are financed by a tripartite system that includes state subsidies, and employers' and employees' contributions. Schemes are allowed to maintain and manage their surpluses: - and to operate as a self-funded system. The major benefits provided are based on International Labour Organization (ILO) provision of social security benefits standards, which are retirement pensions, maternity, health, death, survivors, employment injury and invalidity.

The second pillar is the social assistance system; this program is coordinated and administered by the Prime Minister's Office Disaster Interventions Department and Social Welfare Service Department under the ministry of youth, labour, culture and sports. These departments, in

[17] This includes the National Social Security Fund , 34% target market, Parastatal Pension Fund, 7% of target market, Public Service Pension Fund, 25% of target market, Local Authority Pension Fund, 5% of the target market, Government Employees Provident Fund, 2% of the target market, and National Health Insurance Fund, 27% of the target market.

collaboration with other stakeholders including domestic and foreign NGO provide services to very needy and vulnerable groups in the society. The level of services and support ranges from capacity building in knowledge and skills, to direct material support such as food aid, access to basics and essential needs, as well as small scale emergency aid, to start income generating activities. The available statistics under the ministry of labour shows the social assistance is provided primarily to persons with disability and over 900,000 persons are beneficiaries, as shown in graph 2.2 below.

Graph 2.2: Social Assistance Services Provision in Tanzania



Source: Social Welfare Department (SWD) 2009/10 Report

The third pillar, in addition to mandatory and direct government assistance, is solidarity mechanisms within the society that reduces risk for the people. In this aspect, the basic unit of risk share and diversification is the family, complemented by friends and helps from relations other non-family members. Traditional protections rooted in culture, custom and tradition are still stronger in rural areas than urban areas, though the latter have evolved new forms of mutual aid adapted to urban conditions. Table 2.4 indicates the general characteristics of a voluntary community organized in Tanzania.

Table 2.4: Voluntary Social Insurance Schemes Characteristics in Tanzania

Membership	Founding members plus those who joined by application, payment of membership fees, some group have membership restrictions e.g. women, religion, etc.
Insurance schedule	Benefit payment is conditional on relationship of the deceased to a member
Forms of pay out	In cash, In kind (food, capital goods and labour)
Rules and regulation	Written rules, and book keeping, fines for non or late payment or no show in case of labour contributions
Governance structure	Elected committee
Spread	Large numbers of groups per community with some people belonging to several groups

Source: Social security policy report (URT 2003)

2.4.2 Access to social protection services

Social protection in Tanzania is primarily focused on workers in the formal economy, even though within the formal sector, considerable disparities exist between public workers and private sector workers in terms of benefit packages. Social assistance schemes have a number of shortcomings, as described in the ILO report of 2002; many of the potential beneficiaries were not aware of the schemes and the constraints seem to be related more to implementation and control mechanisms than to the basic concept. Schemes provide inadequate benefits because they were under budgeted; community grants or loans were faulted, the objectives were not well understood, the government lacked an adequate administrative network; as a consequence, many target groups did not receive the benefits of the social assistance system. Closer attention to targeting, administrative control and good governance (including better coordination between ministries) could improve delivery and enable better access to benefits and services.

Informal households do not access any formal work-related measures of social protection. These suggest that the informal sector offers an important opportunity for micro insurance product demand. Many small informal organizations are already trying to provide cover for their members, although this is often insufficient to cover the costs. Informal workers, whether self-employed or waged are excluded from contributory schemes; they may be included in social assistance schemes, such as cash transfers but these are usually designed to go to target groups of a non-working age, such as younger children, and elderly people, or those who cannot work, such as people with severe disabilities.

2.4.3 The insurance services

Insurance practice in Tanzania entails the involvement of many key players; like other financial services there are commercial insurance companies, micro finance institutions and NGO's. There are four categories of insurance service providers in Tanzania as shown in table 2.5 below:-

Table 2.5: Categories of Private Insurance Services in Tanzania

C:1	Organization regulated under insurance law	Commercial Insurers, Brokers/Agents and Private Health Insurance providers
C:2	Organization licensed under laws other than insurance	Micro Finance Institutions, SACCO's, NGO's, Provider based health schemes, Health insurance schemes under health authorities, Cooperative or mutual insurers (member-based) under the cooperatives authority. Banks under banking act
C:3	Informal groups (entirely unregulated)	Funeral Associations, Informal groups, Community associations
C:4	Government scheme	Voluntary Community Health Funds

Source: Compiled from National Insurance Reports

In the first category, the country has over 24 registered commercial insurers[18], 80 broking firms, 488 licensed agents and over 36 registered loss adjusters and private health insurance providers. With the exception of one insurance company, this category does not serve informal sector households. The number of insurance service providers under this category has grown over the past five years of liberalization, as shown in *Appendix B.*

In the second and third categories, insurance service provision is dominated by micro finance institutions (MFI's), Non- Government organizations (NGO's) and Savings and Credit Cooperative Societies (SACCOS). MFI's occupy a large percentage of the provision of micro insurance, as they have extensive networks and are already offering financial services to informal household clients. Most of the customers fall into the base of current micro finance borrowers, organized religious groups, informal communities and associations. The benefits payable to members in most cases are health and life insurance.

In category four, the Community Health Funds (CHF) were established as an alternative to access health services through being prepaid rather than out of pocket. Currently, only 29 districts out 72 have access to this program. Membership is voluntary; schemes are based on a prepaid amount

[18] Zanzibar Insurance Corporation Ltd, Jubilee Insurance Co. Ltd, Tanzidia Insurance Co. Ltd, Tanzania Reinsurance Corporation, Strategies Insurance Ltd, Star General Insurance Ltd, Reliance Insurance Co. Ltd, Real Insurance (T) Ltd, Phoenix of Tanzania Assurance Ltd, Niko Insurance Co. Ltd, National Insurance Corporation, Milembe Insurance Co. Ltd, Mgen Tanzania Insurance Ltd, Maxinsure Tanzania Co. Ltd, Lion of Tanzania Insurance Co. Ltd, Insurance Group of Tanzania, Heritage Insurance Co. Ltd, Golden Crescent Assurance Ltd, Century Insurance Co. Ltd, Bumaco Insurance Co. Ltd, Alliance Life Insurance Co. Ltd, Alliance Insurance Corporation, African Life Assurance Co. Ltd, AAR Insurance Co. Ltd.

which is determined by the local government authority. The funds are deposited in a CHF account administered by the Council Health Board. Members' benefits are limited to health services at the government dispensary level and are defined or are selected services at the government district level in cases of referral.

Table 2.5: Distribution of Different Micro-Insurance Schemes in Tanzania

Type of scheme	No. of schemes	Distribution
Health	306	7.9%
Life	1832	47.2%
Business loan	1743	44.8%
Livestock	2	***
Property loss	1	***
Total	3884	100

Source: (NIC 2006)

2.4.4 Access to insurance services

The TIRA[19] annual report (2010) indicates that private insurance demand is growing in the formal economy, fuelled by a combination of factors, including: macroeconomic growth, on-going mineral and gas exploration which involves large investments in infrastructure, and growing trade internationally and across the region which ultimately creates demand for insurance coverage. Government policy that obliged insurance of property served as a catalyst for the development of the insurance sector, since entities that were formerly self-insured were required to purchase insurance coverage. Furthermore, the growth of financial services, asset-based financing, such as housing and auto motors loans, leads to an increase in the demand for insurance products to mitigate the risks associated with the underlying assets. However, the report indicates that there was low access to insurance for informal households in Tanzania. The report suggests that low access was the result of delay in adopting new distribution methods and lack of public awareness.

2.5 RATIONALE OF THE STUDY

The review of the financial sector in Tanzania reveals challenges facing mainstreaming informal households into the formal financial system. Three issues manifest themselves from the review; firstly, access to formal financial services in the form of banking, social protection and private

[19] TIRA stands for Tanzania Insurance Regulatory Authority

insurance is limited to households in the formal sector, suggesting informal household's access to financial services is poor.

Secondly, effectiveness of traditional and informal social protection has been impaired by economic and political changes that have taken place since the colonial period (Mchomvu, *et al.* 2002). In addition, informal risk management strategies applied offer limited protection: - a low return to households and are ineffective during emergencies (see for example, Battamishra and Barret, 2008; Maleika and Kuriakose, 2008). Indeed, World Bank (2000) poverty studies acknowledge that economic and political liberalization, and globalization among other forces, increases informal household's vulnerability to facing more risks in developing countries. To address the problems, several studies and government policy are in favour of micro insurance (see for example, Wangwe and Tibandebage, 1999; URT, 2005; Steinwachs; 2002). In view of these facts it is worth investigating the micro insurance demand perspectives in the informal sector in Tanzania.

Thirdly, though the concept of insurance is a formalization of the mutual help which exists in all cultures, the use of micro insurance can improve well-being of informal households by enabling them to manage risks. Furthermore, the insurance market in Tanzania is generally small and much of the untapped markets are in the informal sector. The development of micro insurance may also support insurance industry stability since the insurance sector depends on a few commercial policies which serve small groups. Given the size of their markets, insurers lack critical mass and typically have to place most of the risk with reinsurer.

Undeniably, the review indicates that micro finance institutions provide a valuable link to mainstream informal households into formal financial services, including provision of micro insurance. Most micro insurance products that are available are mandatory. If a client takes out a loan, they are also required to pay an extra fee (the premium) for insurance protection. This works to the advantage of the MFI. Presumably, the availability of insurance reduces loan losses. However, it is hard to know: - if people would voluntarily choose to use these services and whether they are designed to meet the customers' needs. Hence, a customer-centered insurer need to conduct market research to understand what types of insurance customers might want (if any) and what product features are important to them (Cohen, *et al.* 2005). Therefore, to improve access to micro insurance services the investigation on demand perspectives is important. Now that the basis and rationale for the research have been explained, the next chapter reviews the literature and identifies the gaps that this study intends to fill.

CHAPTER THREE: LITERATURE REVIEW

This chapter is devoted to the literature review and gaps that this research attempts to fill. The purpose of which is to disentangle what is currently known about insurance demand and underscore unresolved issues on micro insurance demand in the informal sector which calls for further investigation. The chapter conceptualizes issues related to financial services access in the informal sector. Section 3.1 addresses the conceptual analysis on demand for financial services: - through review of the pertinent theories related to access to financial services. It critically analyses theories that explain low demand for financial services. Section 3.2 examines the insurance services in the informal sector, and this section explores the meaning of micro insurance and examines the importance of micro insurance services in the informal sector. Understanding the importance of micro insurance provides the basis for addressing the problem. Section 3.3 establishes the gaps in the literature on micro insurance demand in the informal sector by highlighting key areas of exploration in the present research. Finally, section 3.4 summarizes the chapter.

3.1 THEORIES INFLUENCING DEMAND FOR FINANCIAL SERVICES

The demand for financial services is the function of economic and financial sector growth. Theories related to economic growth suggest that poor access to financial services generates income inequality and poverty. They argued that access to financial services promotes growth, reduces poverty and makes redistribution more effective and sustainable. Indeed, Aghion and Bolton (1997), Banerjee and Newman (1993), Galor and Zeira (1993), Aghion (*et al.* 1999), and Rajan and Zingales (2003) indicate that given financial market imperfections, poor households who have high marginal productivity of investment cannot invest in their education and their occupational choices are limited because choices are determined by their initial endowments. The policy conclusion drawn by economic growth theories was to address financial market imperfections, without causing adverse incentive effects. They argue for financial sector reforms that promote financial service inclusion are the core for households' development and poverty reduction.

On the other hand, Robinson (1952) argued that financial sector growth occurs when financial markets and financial institutions improve the effect of information, enforcement and transaction. Thus, the well-developed financial sector may be reflected through its efficiency and competitiveness, the range of financial services that are available, the diversity of institutions operating in the financial sector, the amount of money that is intermediated through the sector and the number of people having access to financial services. Studies by Lucas (1988) and McKinnon (1991) defined Robinson's view as a "growth-led finance" hypothesis. The hypothesis states that high economic growth creates demand for certain financial instruments and financial markets

effectively respond to these demands and changes. In the demand following pattern, economic growth establishes demands for financial services, which is passively satisfied by a growing financial sector. Hence, rapid economic growth should increase the demand for financial services. According to this view the more rapid the growth of national income, the greater will be the demand by enterprises for external funds and other financial services. As the economy moves from traditional subsistence production; - and grows more complex, demands for financial services are generated. However, the impact on financial sector growth is not equally the same for the informal sector households (Beck *et al.* 2004; McCord, 2008; Rajan and Zingales, 1998).

Financial services inclusion in insurance or any other financial service is achieved when all consumers, particularly informal households, can access and on a sustainable basis use financial services that are appropriate to their needs. The aim of financial inclusion is not only to ensure that users are not excluded from the formal sector, but that they actively use financial services. The empirical evidence which suggests a robust relationship between access to financial services and economic growth can be seen in Levine (1997, 1998 and 2005), Demirguc-Kunt and Maksimovic (1998), Rajan and Zingales (1998), Beck, *et al.* (2000), Townsend and Ueda (2006). Several other studies have shown that access to financial services is beneficial for poor households; it reduces income inequality (Beck, *et al.* 2004; Demirguc-Kunt, *et al.* 2008; Honohan, 2004).

While theory focuses on the importance of broader access to financial services, there is relatively limited empirical evidence linking access to micro insurance in the informal sector and little guidance for policies on how best to promote access. Understanding micro insurance demand perspectives in the informal sector will fill the gap. Recently, Wachtel (2001) indicates that financial services promote economic growth through an efficient allocation of resources. First, the financial services act as fund-transferring mechanisms to channel the excess funds from surplus units to deficit units. Second, financial services encourage the mobilization of savings, which in turn promotes higher saving rates. Finally, financial services provide risk management instruments that enable risk-sharing.

3.1.1 Role of financial services to the household wellbeing

The attempt to establish inclusive financial services access was conducted by Beck, *et al.* (2008) and the results show that access is correlated with financial depth, but this correlation is not perfect, suggesting that there is no a one to one relationship between depth and access. In a parallel effort, Peachey and Roe (2006), CGAP (2005) and Honohan (2005) collect information on the penetration of saving accounts on banks and MFIs across countries and present estimates of the share of households with access to financial services for over 150 countries. The study helps to produce

cross-country aggregate indicators for financial services access by households and document barriers that prevent expansion of this access. The results underline huge cross-country variations in hurdles associated with physical access, eligibility and affordability.

However, Demirguc-Kut, *et al.* (2008) suggests that there are important demand-side factors that determine whether people access formal financial services. This finding provides experimental evidence showing the high returns on investment for micro entrepreneurs in the informal sector, thus suggesting that informal households are potentially profitable customers of banks. Indeed, CGAP (2005) describes dispersed demand for financial services as a constraint for access to financial services in the informal sector. Hence, carefully conducted household surveys can provide in-depth information on access to specific financial services for specific groups and countries.

The lack of access to financial services for informal households is a fundamental flaw in the formal financial systems, since financial services play a significant role in efforts to reduce poverty. Rutherford (2000) argues that poor households need access to financial services, suggesting that households can benefit from credit savings, insurance services and money transfer facilities. In addition, Beck, *et al*. (2004) and Honohan (2004) show that countries with better developed financial systems experience faster reductions in income inequality and poverty levels. These studies indicate that even for the same average income, societies with deeper financial systems have lower levels of poverty. Micro insurance services help the poor manage their risks and improve their standards of living (ADB, 2005; Helms, 2006; United Nations, 2006). Thus, access to formal financial services can profoundly impact the quality of life of informal households (Rajan and Zingales, 2003; Yakub, 2002). However, a significant proportion of people are excluded from the formal financial service in the informal sector. Hence, the current investigation recommends design and policy interventions to build more inclusive micro insurance products in the informal sector.

3.1.2 Low access to formal financial services in the informal sector

This section highlights several issues regarding micro insurance demand in the informal sector. It is evident from the empirical studies (Preker, *et al.* 2002; McCord, 2008; ILO, 2002; Bendig and Arun, 2011; Churchill, 2002) that the households in the informal sector lack effective risk management strategies to avoid the seasonal fluctuations in their earning levels due to risks. There were significant variations in the provision of financial services and access barriers in the informal sector. The concept of the informal sector in developed and developing economies remains analytically distinct. ILO (1991) argues that the informality in developed economies is part of capitalist search for flexibility in the use of labour and stems from the need to reduce or avoid the costs associated with the employment of formal labour. This is because informal economic activity in developed economies mainly relates to evading government taxes, control and regulations.

However, the informal sector is a phenomenon associated with survival strategies of the poor in developing countries (ILO, 1972, 1996, 1998). This thesis adopted the broader definition of the informal sector as introduced by ILO (1999) which understood an informal households to be; enterprises or units that are engaged in the production of goods and services, which are not constituted as separate legal entities independent of the household or household members that own them. They do not have a complete set of accounts which would permit a clear distinction between the production activities of the enterprises and the other activities of their owners, or the identification of any flows of income and capital between the enterprises and owners. The informal sector comprises informal own-account enterprises (self-employed) and enterprises of informal employers (employing one or more employees).

The limited access to formal financial services in the informal sector is explained in terms of market failure. Firstly, the view that there is little profit in the informal sector; hence, market-based solutions cannot lead to improved financial services for informal households and that the private sector has no significant role in this market segment (Schrieder and Cuevas, 1992; Adams, 1992; Zeller, 1994). The same case has also been reported by surveys of credit markets in Kenya (Alila, 1991; Daniels *et al*., 1995; Meyer, 2002). Besley (1994), analyses the rationale for interventions in the presence of market failure. He argued that as constraints vary across countries and are influenced by a host of factors, country investigation provides useful information. Host factors include but not limited to, the stage of financial sector development, perceptions of dominant financial institutions regarding the business case for providing financial services in the informal sector, financial policy and regulatory systems, and the institutional composition of the financial system.

Secondly, established formal financial institutions seldom attempt to serve low-income households because the relative contribution that such a move can make to profit is smaller (Braverman and Guasch, 1986; Chipeta and Mkandawire, 1992; Aryeetey and Udry 1997). The long-held, deep-rooted presumption that low income households demand for financial services is the primary responsibility of the governments and charitable organizations seem to have reinforced this incentive asymmetry. However, Beck and Demirguc-Kut (2008) suggest that the existence of alternative informal finance systems in the informal sector, providing services to their clients indicates that households are potentially profitable customers.

Thirdly, the absence of formal financial institutions in close proximity to the informal households, hence households living in the areas where such facilities are not available within a reasonable

distance, tend to rely more on informal markets. Moreover, the available institutions which are in close proximity may not have a core business which includes products and services that low-income households demand. This suggests that formal institutions are not committed to serve the low income market, taking it as a business proposition. Empirical research by Aryeetey (1996) indicates that there are significant obstacles to the transformation of potential demand into revealed demand. The absence of supply creates a lack of demand expressed in low revealed demand. Again, due to market failure in the financial market, the transaction cost involved in obtaining a financial product is considered greater than the utility, prompting households to rely on informal systems as a way of financing working capital and managing risks.

Fourthly, the established formal financial institutions have not been established and organized to serve the informal households. They do not have access to low-cost information on the potential clients. Their organizational structures, cost structures, and products are geared to serve formal sector clients. Given the higher costs generally associated with serving low-income clients, these financial institutions find that the impetus to serve the formal sector market is more powerful than moving to the low income market. Bell (1990) demonstrates that financial markets are characterized by imperfect information and high costs of contract enforcement that generates access problems. This is displayed in the form of complicated application procedures and restrictions (Schmidt and Kropp, 1987). Schmidt and Kropp argued that the type of financial institution and its policies will often determine the access problem, for example where credit duration, terms of payment, required security and the provision of supplementary services do not fit the needs of the target group, potential customers will not apply for financial products even where they exists and when they do, they will be denied access.

Indeed, Eswaran and Kotwal (1990), Conning (1999) and Besley and Coate (1995) argued that incomplete markets could use partially functioning financial markets to provide insurance against income shocks mainly by trading insurance. However, due to incomplete information about the nature of the risk faced by each individual and possible change in the private behaviour of other individuals, insurance arrangements are only partial or are totally absent (Aryeetey, 1996; Aryeetey and Udry, 1997). Hence, managers of formal financial institutions who would like to introduce innovative products to serve poor clients for profit will often find it difficult to get their proposals through the resource allocation processes and systems within their institutions. The incompatibility of services and products offered by the suppliers with the requirements of those in the informal markets has aggravated the access problem. The incompatibility may stem from a number of factors,

for example; the products may have features that are not in line with the socioeconomic characteristics of clients.

This creates the fifth relevant issue that many households who belong to the informal sector tend to self-exclude from formal financial markets and rely on self-savings or reciprocal arrangements to meet their demand for financial services. Informal finance has been defined as referring to all financial services occurring outside the regulation of a central monetary authority, while the semiformal sector has the characteristics of both formal and informal sectors. It involves the operations of savings and credit associations, rotating savings and credit associations (ROSCAs), professional moneylenders, and employers, relatives and friends, as well as cooperative societies (see for example, Aryeetey, *et al.* 1997; Aryeetey and Udry, 1997). The types of informal financial units vary mainly because they are purpose oriented and mostly developed to meet the demand for specific financial services, responding to the demands of a client group, defined by their use of various socioeconomic criteria. These types of informal systems are savings mobilization units with little or no lending; lending units that do not engage in any savings; and those units that combine deposit mobilization and lending (Aryeetey and Udry, 1997). Institutions that combine both are relatively new. However; they respond to the need for direct financial intermediation and mostly fall under self-help organizations.

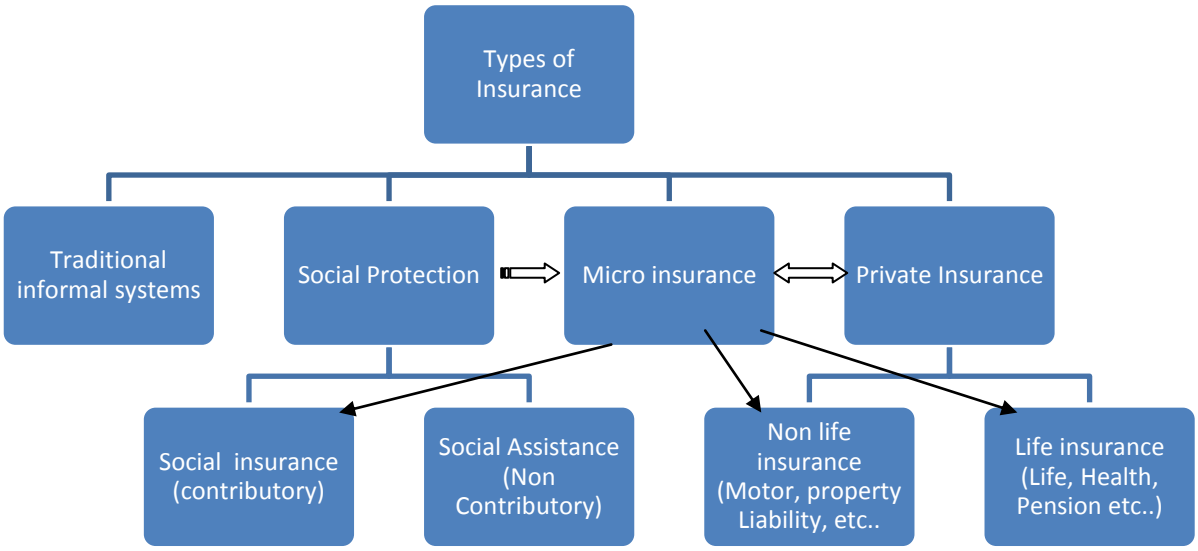
Rajan and Zingales (1998) recommended two measures towards improved access to financial services. Firstly, to recognize the importance of inclusive financial services, as such recognition significantly influences and encourages a more proactive set of measures than otherwise would be the case. Secondly, eliminate financial exclusion in order to reduce poverty. These measures suggest that it is important to define the problem for successful provision of financial services in the informal sector. They further argued that defining the problem and recognizing informal sector households as potential clients for market-based financial services plays a significant role. Risk-sharing occurs through all financial services, but most explicitly to those identified as insurance products. The usefulness of insurance instruments especially for a household's poverty reduction strategy is the aim of this research. Hence, the next section provides an insight to access for insurance services.

3.2 ACCESS TO INSURANCE SERVICES IN THE INFORMAL SECTOR

Insurance provision against uncertainties is present in several dimensions of people's lives, with such provisions being related to, inter alia, diseases, unemployment, accidents, robbery and death. Formal insurance provisions can be organized in different forms. Popular insurance products are commercial private insurance, social protection (Public/State insurance) and micro insurance. In

addition to these, there are traditional informal systems that act as important risk reducers for many people. In the latter form of insurance, the basic unit of risk share and diversification is the family, complemented by friends and help from relations and other non-family members. The various types of insurance are exemplified in more detail in figure 3.1 below;

Figure 3.1: Various types of insurance provision



Source: Author from availabe insurance services in Tanzania

3.2.1 Social Protection (Social insurance and social assistance)

Social protection is a term evolving with time, recently Holzmann and Jorgensen (2004) proposed the expanded view of social protection to emphasize the double role of risk management instruments protecting the livelihood as well as promoting risk taking. The World Bank (2001) defines social protection as a collection of measures to improve or protect human capital; it is the interventions that assist individuals, households and the community to better manage the income risks that leave people vulnerable. The social protection concept according to ILO (1997, 1998 and 2008), denotes any of the measures established by legislation to maintain and provide individuals' with income when some or all sources of income are disrupted, or terminated or when exceptionally heavy expenditure has to be incurred. Nevertheless, the ultimate and overall goal of social protection is to improve welfare and reduce poverty.

Social protection systems are a world-wide phenomenon usually in the form of social insurance and social assistance. The social protection goal can be achieved mainly in two ways; firstly measures

are directed at helping people escaping poverty and second measures aimed at providing a certain minimum income to those in poverty. These two measures are thought to belong to three conceptual areas; social assistance, social insurance and labour market institutions. Social assistance and social insurance (like health insurance, unemployment insurance, pension insurance) provide people with a minimum income. Some labour market regulations, for instance minimum wage and trade union activities have the same goal to provide people with a certain income above the minimum level or a level considered to be fair, but this is beyond our discussions. However, it is estimated that more than two billion people in the world are covered by any type of social protection, neither by a contribution-based social insurance scheme nor by tax-financed social assistance (van Ginneken, 1997, 1998). While state or state initiated organizations cover most of the labour force in the organized sectors of public and industrial employment, the vast majority of the unorganized rural population and people in the informal urban sector are left out (Jenkins, 1993; Singh, 1994; Mesa-Lago; 1991).

Different efforts were made to bridge gaps by exploring the possibility of providing insurance to the informal sector households through social assistance and social insurance schemes. Studies by Beattie (2000) and Midgley (1984) admit that there are problems that limit the usefulness of social assistance programs to manage risks in the informal sector in developing countries; these are a lack of government resources, lack of appropriate policy making and administrative capacity as well as stigmatization of claimants. With regard to access through social insurance, Mesa-lago (1994) challenged the use of social insurance schemes and argued that three main factors can hinder using this technique which includes the high cost of detecting, inspecting and collecting contributions from the large numbers of self-employed, both domestic workers and wage earners in micro enterprise and the fact that benefits available for them are irrelevant to their needs and are usually very small which reduces incentive for affiliation even more. Indeed, the latest studies by Bailey (1994), Van Ginneken (1997, 1999), Midgley and Tracey (1996) and ILO-SAAT (1996) confirm the difficulties in extending risk management options to the informal sector households in developing countries in the form of social insurance and social assistance.

Beside low coverage rates, social protection systems face serious financing and management challenges (Trecy, 1996). In most developing countries only a limited proportion of the population works in the modern sector in which employment contracts can be monitored and assessed for the purpose of contributions. The alternative, which is to use the tax base for personal enterprise income taxes and indirect taxes, is also limited, because it is difficult to collect direct taxes from informal-sector workers and indirect taxes are generally insufficient to fund a generalized social protection

system. In addition, the effectiveness and efficiency of the organizations, which are in charge of collecting contributions and paying benefits, are often criticized. The administration of social protection systems is highly complex; keeping the records, ensuring the compliance of employers and employees, organizing an effective control of the agencies and in terms of the regulatory structure demands a well-functioning administrative structure. As indicated in Gillion (1997) and Holzman and Jorgenesen (1999) in many developing countries these arrangements are far from functioning properly.

Economic and financial reforms in which several developing countries were found at the end of the 1980s[20] prompted governments to undertake strong measures to alleviate their budgetary difficulties. As a result, the proportion of the population which could be covered by social protection declined due to an expansion of the informal sector and the growth of public debt (Koptis, 1993). In this context there is a heated debate, as to whether a revision of the common social security type (as seen in Europe, for example a pay-as-you-go system) is adequate, or if one has to make a radical shift towards mandatory retirement saving schemes (World Bank 1994; Feldstein 1996; Diamond 1996; Siebert 1998). The overview of the tremendous problems of state based schemes clearly demonstrates the need to look for alternatives. This study therefore investigates, whether market based schemes can at least solve some of the problems raised above. As discussed in chapter 2;- literature in Tanzania suggests that compulsory social insurance coverage is limited to formal sector employees and they are fragmented with low benefits to its members (Tungaraza, 1994; URT, 2003; Wangwe and Tibandebage, 1999). They provide predetermined benefits to members of the schemes including formally employed households and a limited number of informal households. Social assistance is provided by central government to households affected by covariate risks on a one off basis, usually those affected by natural disasters like hunger, flooded and epidemic diseases, and benefits are provided using a means test method.

3.2.2 Traditional informal system

The second type of insurance service is a traditional informal system characterized by private savings and group arrangement provision. They raise money only when idiosyncratic risk occurs through support from relatives, friends, loans from informal systems and sales of assets in their possession. The literature on traditional informal systems on the organization and administrative structures suggest that over-time, socio-economic reforms have slowly resulted in the disintegration of family-based structures. For example Bossert (1988), Bakari (1988), Mataba (1983), Tungaraza (1994), and Benda-Beckmann, *et al.* (1988) have shown that social relations among the family, the kinships, and neighbourhood and community groups operate in both urban and rural areas however,

[20] See chapter two of this thesis for more detailed information.

they are decreasing due to socio-economic changes and in fact they have failed to promote equitable economic growth. Indeed, Morduch (1999a), Roth (2001) and Maleika and Kurikose (2008) indicate that households rely on informal mechanisms such as gifts or loans provided by family, friends or employers in times of crisis, nevertheless, most of this protection is inadequate. These schemes are characterized by their non-governmental, non-profit nature where often informal households voluntarily pool resources towards protection against one or more types of risk. They argued that informal risk management approaches available within the informal sector offer limited protection, low returns for households and are ineffective during emergencies.

3.2.3 Private insurance

As noted in 3.1.3, the studies highlighted that the protection available for informal households from the market based systems is marginal. However, risk protection based on market principles is gaining importance world-wide, especially in the health sector. A study by Berman (1998) shows that, in the case of health care provision, it is acknowledged that the private sector contributes to better access, efficiency and quality of services. Because neither the state nor the market can provide sufficient risk protection to informal households in developing countries, member based organizations and self-insurance act as complements or as substitutes for the government and the private sector (Lam 1996; Ostrom 1996; Uphoff 1993; Thorbecke 1993; Gurenko, 2004).

Recognizing the limited range of formal risk management arrangements in the informal sector, countries have instituted various types of insurance, price stabilization and safety net programs, often at great cost and with modest success. Such innovations focus overwhelmingly on covariate risks for example prices, drought, and floods. However, a growing body of empirical evidence suggests that idiosyncratic risk may be as important and dominant within informal households (see for example Udry, 1990; Townsend, 1995b; Deaton, 1997; Lybbert, *et al.* 2004; Morduch, 2005; Dercon, 2005; Kazianga and Udry, 2006). The high incidence of idiosyncratic shocks faced by households in the informal sector raises the possibility of untapped potential demand for micro insurance in developing countries.

3.2.4 Micro insurance

The preceding discussion suggests that, both state and market-based systems as well as member and private household-based systems have intrinsic - albeit different - strengths and weaknesses. The question arises as to what extent the provision of risk management instruments can be organized in a complementary way. The idea of organizing synergy, partnership and coproduction in the provision of insurance has for some time been a major component in the discussions of welfare reform in industrialized countries. Recently, the debate has been extended to apply to developing countries

(Robinson and White, 1997; UNCDF, 2000; URT, 2001) and micro insurance was the preferred option. Loewe, (2002, 2006) consider micro insurance as a social security instrument that improves wellbeing of the low-income households. In this case, micro insurance focuses on extending social protection to the informal sector households in the absence of appropriate government schemes. However, Churchill (2006) defines micro insurance as a risk management technique for households against specific risks in exchange for regular premium payments in proportion to the probability and cost of the risk involved.

It appears that there are two dimensions of the micro insurance concept derived from the definition, first the concept of micro insurance as a social protection instrument. The proponents of these arguments argued that informal households have little or no security of employment, and have low earnings and their incomes do fluctuate. Whenever they are unable to work for whatever reason they have no income security. A brief period of incapacity can leave the worker and her/his family without enough income to live on. The sickness of a family member can result in costs which destroy the delicate balance of the households' budget (Milinga, 2002; Cohen, *et al.* 2005; Cohen and Sebstand, 2005). To reduce poverty and vulnerability of low income households there is an emerging consensus among IADB (2000), ADB (2005), World Bank (2001), ILO (2000) and Holzmann (2001) to include micro insurance within the social protection framework.

The major motivation for social protection interest in micro insurance is that certain households have been excluded from existing insurance schemes because (i) formal insurers have done little to reach out to those segments which are outside the formal economy (for example low income households, informal sectors, rural households and some formal sector employees (ii) the excluded group lack the empowerment and capacity to access formal insurance (iii) there is the need to extend and strengthen risk and resource pooling at different levels to help excluded households take advantage of potential benefits of risk and resource pooling. Micro insurance is essentially a variety of strategies to overcome these obstacles. However, micro insurance demand perspectives has been limited by a small research base and much of the existing literature on micro insurance focuses on supply and institutional issues (McCord, 2001; McCord and Osinde, 2005).

Secondly, the concept of micro insurance focused on developing an appropriate business model that enables the poor to be a profitable (or sustainable) market segment for commercial or cooperative insurers. In this case insurance companies have to design a micro insurance product for households who are engaged in informal sector activities (Van Ginneken, 1997). This means that commercial insurers perceive micro insurance as a potential instrument to reach underserved markets. Arun and Steiner (2008) argued that commercial insurers in Ghana regard micro-insurance to be a way to expand their market reach and secure future profits, but not in Sri-Lanka. The definition of micro

insurance is essentially the same as private insurance except micro insurance is clearly for a prescribed target market. McCord and Churchill (2005) indicates a distinction between private insurance and micro insurance on six points i) clients ii) distribution models iii) policies iv) premium collection, v) control of insurance (moral hazards and adverse selection) and vi) claims handling.

Regardless of which dimension to view micro insurance, the intention is to provide protection to an uninsured population. In essence, micro insurance has the same purpose as conventional insurance, to allow the customer whether an individual or a business entity to transfer risk and purchase the security they need to grow their business. Micro insurance demand in the informal sector with the promise of profits and welfare gains to households has to find ways of balancing three competing objectives a) provide coverage to meet the needs of the target population b) minimize operational costs to the insurer c) minimize the price including the transaction costs for clients to enhance affordability and accessibility. For the present discussion we adopt a broad definition of micro insurance as an aspect of insurance for managing risks among low-income households in the informal sector. The study considers micro insurance to play a dual role that is both developing an ideal business model and a valuable social protection instrument for informal sector households.

3.2.4.1 Why are micro insurance services needed in the informal sector

The developments in insurance reforms (see discussion in chapter two), were found to have less effect in the informal sector. As a result Churchill (2002), Hess and Sykora (2005), and Hochrainer *et al.* (2007) pointed out that informal households throughout the world face twin disadvantages; first is the difficulty in generating regular income while the second is vulnerability to economic, political and physical downturns. Indeed, Ahuja and Jutting (2004), Hoeppe and Gurenko (2006) and Linnerooth-Bayer and Mechler (2006) argued that informal households are more vulnerable to risky events than the formal sector workers given their working environment, their economic activities, and these risks impede their efforts from breaking the vicious cycle of poverty. Thus, any risk management strategy will reduce poverty and improve the informal household's wellbeing.

Studies by Brown and Churchill (1999, 2000), CGAP (2003a, 2003b), CPRIC (2004) and MRF (2006) considered micro insurance as one of the financial risk management strategies that can help the low income household to deal with risk effectively. The presence of risks strongly influences household economic behaviour; they engage in low-productive activities because they are less risky and the potential consequences of failure are lower (Wood, 2003). In this way, households are frequently constrained to a basic livelihood or subsistence approach for survival which, in turn, promotes the development of poverty traps. An effective risk management tool is necessary for household development. The effects of access to micro insurance services are twofold; access to

insurance services increases the risk bearing capacity of the households. Insurance covering sickness or death of a working family member can help to avoid severe shortfall on household earned income, and also decreases the use of costly informal self-insurance techniques. Figure 3.2 illustrates the effect of micro insurance to the household wellbeing.

Figure 3.2: Effect of micro insurance to the household wellbeing

Source: Author synthesis of the effect of micro insurance service

This underscores the critical importance of micro insurance in the informal sector. Micro insurance reduces poverty by reducing income swings, fostering long-term investment in human capital and compensating against risk exposures. Studies by Young (2006), Besley (1995a), Townsend (1995), Morduch (1995; 1999b), Bardhan and Udry (1999), Dercon, (2002; 2005), Osgood and Warren, (2007) and De Waal, *et al.* (2004) argued that insurance reduces vulnerability as households replace the uncertain prospect of large losses with the certainty of making small, regular premium payments. It is within this context that Tanzania needs to extend micro insurance cover to informal sector households. To do so, there is a need to understand the micro insurance demand perspectives in the informal sector. The next section provides unresolved issues in the literature which warrant further investigation.

3.3 GAPS IN THE LITERATURE

Previous studies on micro insurance demand in the informal sector have their own limitations and challenges. Firstly, there is no study on the literature that comprehensively covers the micro

insurance demand perspectives in Tanzania. The evidence that micro insurance techniques can improve informal household well-being indicated by Wangwe and Tibandege (1999), URT (2005), and Steinwachs (2002) is a key starting point of this thesis. However, Brown (2000) and Brown and McCord (2000) argued that before developing micro insurance products, demand aspects must be well understood. Micro insurance demand studies undertaken by Dercon (2002), Brown (2001) and Hulme and Shepherd (2003) discuss the risk and vulnerability, and their link with poverty. These studies attempt to determine people's livings conditions and opportunities to escape poverty. The studies summarize effects of shocks to the household and suggest new strategies. However, these studies do not have sufficient quantitative data to support the argument. Indeed, Churchill's (2006) publication represents the most extensive analysis of micro insurance practices around the world. The book was prepared under the auspices of the Micro insurance Consultative Group to Assist the Poor (CGAP) initiated by the International Labour Organization (ILO). Generally this publication reveals that micro insurance is indeed viable and even profitable under certain circumstances, but argued that a number of difficulties must be overcome for it to succeed in any given country.

Park and Lemaire (2011) argued that factors linked to the culture of the nations are more important in explaining demand for insurance. In fact, Hofstede (1995; 2001) point out that the level of insurance within an economy depends on the national culture and the willingness of individuals to use insurance as a means of dealing with risk. In addition, Treerattanapun (2011) investigates the impact of culture on non-life insurance consumption and finds out that nations with a low degree of power distance, a high level of individualism, and a high degree of uncertainty avoidance tend to have a high level of non-life insurance consumption. The empirical results suggest that consumers may respond to insurance solicitations according to their cultural belief, not only according to economic rationality hence the need to investigate micro insurance demand in the context of Tanzania.

Moreover, Esho, *et al.* (2004) argued that increased national income influences insurance demand. The study tested the impact of national income on the demand for property and life insurance by analysing data from developed and developing nations. They detect a strong positive relationship between national income and non-life insurance demand. Similarly, Enz, (2000) developed a logistic model to describe the relationship between insurance penetration and GDP per capita. Under these growth models, the regression curves for insurance depict an S-shaped relationship and have been referred to as the S-curve model. The insurance penetration rises with the GDP per capita, but different levels of GDP are assumed to be accompanied by different growth rates of penetration. After the GDP reaches a certain level, the insurance penetration tends to plateau. This hypothesis

cannot easily be visualized on a cross-section of countries, hence Enz emphasized that the estimation requires a very long time series and the model neglects all factors influencing the demand for insurance other than GDP per capita. In Tanzania, following economic reforms in the 1990s to-date, there are noticeable increases in national income as well as an expansion of the financial sector (as discussed in chapter two). Despite this, insurance penetration in the informal sector is at minimal level suggesting that national income alone cannot determine insurance consumption.

Secondly, there is evidence that previous studies have constantly shown variations in the results on micro insurance demand from country to country (Magnoni, and Zimmerman, 2011; McCord, *et al.* 2011; Sebstad, *et al.* 2006; Dalal and Morduch, 2010). It appears from the studies that some factors influencing the demand for insurance have been extensively studied, while some have not; there are also conflicting conclusions on how various factors affect the demand for micro insurance such as age, family size and education. These contradicting conclusions result from different datasets, variable measurements and methodology used; hence there is room for further investigation. Indeed, most studies that have examined micro insurance demand in the informal have been undertaken on East Asia (Churchill, 2006; Dror and Jacquir, 1999; Morduch and Sharma; 2001) and the main focus appears to be on micro finance clients (Dror, *et al.* 2007; Cohen and Sebstad, 2006; Sebstad *et al*. 2006; Gine *et al.* 2007). Cohen and Sebstad (2005) highlight the need to examine clients' insurance needs, specific products and the size of the potential market. Analysing demand studies from nine countries they found that the most prevalent risks relate to health or loss of the wage earner. However, despite these patterns, households' priorities regarding demand for insuring certain risks are nevertheless context specific and solid research is essential before entering any market. The study finds huge variations on clients' needs from one country to another. This thesis probes this matter with regard to Tanzania.

Garven (2003) explored the demand for insurance in the context of the logarithmic utility function. The result shows that the level of wealth, the probability of the occurrence of risk, the severity of loss due to the occurrence of risk, and the insurance premium determine the demand for insurance of an individual. However, in the case of the informal sector households, a disadvantaged sector in many societies, other demand factors are more compelling than the determinants outlined in this study. For example a study by Wagstaff (2009, 2010) and the World Bank (2000) which compiled literature on poverty, describe additional concepts that influence demand for insurance, and they suggest that households are increasingly risk averse as they move closer to poverty, as any further drop in income can push them below the survival point. According to these findings households with a higher value for future protection than current consumption are more likely to purchase insurance.

The work by Outreville (1996) emphasizes that education promotes an understanding of risk and hence insurance demand. In line with Baek and DeVaney (2004) who examined the effect of human capital bequest motives and risk on term and cash value life insurance purchased by households. The authors explained that higher educated people believe that inflation often decreases the cash value of insurance from a savings standpoint and hence decline their need for insurance. Indeed, Leftley and Mapfumo (2006) and McCord (2001, 2008) identified that lack of understanding of insurance products is a constraint in selling insurance to poor households. More educated households have been found to be the ones who are more likely to take up insurance (Chankova, *et. al,* 2008; Gine *et. al*, 2007) while Anderson and Nevin (1975) found a negative relationship between education and the amount of life insurance purchased by households. These contradicting results suggest the same factors may provide different results when applied to different countries. Radermacher, *et al.* (2006) argued that constraints in the uptake of insurance products relates to the issue of trust, as unlike micro credit where lenders have to trust the borrowers; in micro insurance, insurers have to be trusted by the client. Hence, McCord (2008) suggested that trust of individuals and communities can be built by education programs or through careful marketing and sales strategies.

Thirdly, the literature on micro insurance demand appears to have an overwhelming focus on micro finance clients (see for example, Morduch, 1999b, 1998; Morduch and Sharma, 2001; Siegel, *e al.* 2001; Cohen and Sebstad, 2006; Sebstad *et al*. 2006; Gine *et al.* 2007; Sebstad and Cohen, 1999). Micro finance introduces risk management products that can protect their clients and save their own interests. Household individual demand perspectives with respect to demand are not given much attention. This significant gap between need and want creates a number of issues for micro insurance providers. For example, they might estimate the need and likely resultant demand, for insurance by identifying a large population that lacks formal risk coping mechanisms and examine insurable risks faced by that population. Yet without developing a good understanding of the factors that influence a household's demand for micro insurance, these estimates commonly have no link to reality (McCord, *et al.* 2011). This study had gone one step further to analyse demand beyond micro finance clients and therefore include household survey for both members and non-members of MFI's.

Moreover, Cohen and Sebstad (2005) argued that market penetrations are largely driven by supply and not demand. This finding employs qualitative methods and primarily clients of micro finance institutions (MFI's) were interviewed. The team spent nearly two weeks in each country, studying demand through focus group discussions and interviews with key stakeholders. The findings have a

methodological inadequacy, and the number of people interviewed and time limits the outcome. Indeed, this study argued that effective demand is more subjective and many factors can influence a client's decision, these includes; the extent to which the needs are felt, self-evaluation of capacity to pay, preferences of specific product features, previous experience and altitude towards insurance. This research presented three generic micro insurance products to respondents which ultimately allowed the author to analyse the contribution of each of the decision making characteristics.

Fourthly, another problem inherent in the literature on micro insurance is the challenges related to mainstreaming the informal sector into the formal financial system. The available empirical studies are limited to banking services (Levine, 1997, 2005; Demirguc-Kunt and Maksimovic, 1998; Rajan and Zingales, 1998; Beck, *et al.* 2000; Wachtel, 2001). Indeed, literature on access to insurance services has looked at access through social insurance and social assistance schemes (Mchomvu, *et al*. 2002; Battamishra and Barret, 2008; Maleika and Kuriakose, 2008; World Bank, 2000). There is relatively little empirical evidence linking access to micro insurance in the informal sector and little guidance for policies on how best to promote access. This is a remarkable situation considering the importance of access to insurance services to the households' wellbeing as shown in several studies (see for example, Besley, 1995c; Townsend, 1995a; Morduch, 1995; 1999a; Bardhan and Udry, 1999; Dercon, 2002; 2005; Beck, *et al.* 2004; Honohan and Beck, 2007; Wangwe and Tibandege, 1999; URT, 2005; and Steinwachs, 2002). The current investigation fills the gap. Moreover, the literature has shown the insurers' view that there is little profit in the informal sector (Schrieder and Cuevas, 1992; Adams, 1992; Alila, 1991; Daniels *et al*., 1995; Besley, 1994; Braverman and Guasch 1986; Chipeta and Mkandawire, 1992; Aryeetey, *et al.* 1997). This dominant thinking has contributed to a business failure in serving this market problem. Hence, the need for a market-based empirical study that can lead to improved access to financial services in the informal sector.

Fifthly, the literature has identified inadequacy of informal strategies with significant gaps in full protection. For example, De Weerdt and Dercon (2005, 2006) and Mataba (1983) suggest that households devised a number of ways to mitigate their impact and cope with risk. These studies documented risk-coping strategies employed by households; they find that risk-sharing in the form of private gifts, labour transfers, loans and help through local community-based organizations are the main coping strategy. The dependence on informal arrangements to tide them through periods of hardship brought on by frequent and often severe risk exposure indicates the absence of appropriate formal insurance products and suggests the potential for micro insurance demand. Similarly, Zeller, *et al.* (1997) and Sebstad and Cohen (2001) indicate that micro insurance products can be appropriate to assist capital accumulation, to help smooth consumption, and improve risk-bearing in

the informal sector. However, Brown (2001) argued that it is important to consider the nature of the risk facing informal households, and compare and contrast risk management techniques in place and examine the demand for micro insurance services in the informal sector.

3.4 SUMMARY OF THE CHAPTER

The chapter has established the gaps in the literature on micro insurance demand, and different conceptual understanding of micro insurance and its importance in the informal sector were examined. The current study argues that previous empirical studies present with some important methodological gaps; most of the available empirical findings are based on qualitative information concerning possible solutions, through a simplified representation of the problem. This gap in literature on micro insurance demands inhibits informal household protection and goes untapped.

Recently, Msuya, *et al.* (2007) explicitly provides empirical evidence of the efficacy of micro insurance in Tanzania. In addition to the weaknesses of informal strategies to manage risks indicated in Mchomvu, *et al*. (2002), Battamishra and Barret (2008), Maleika and Kuriakose (2008) and the World Bank (2000). This evidence from the field validates further research on micro insurance. Indeed, the micro-insurance market is new and not well researched in Tanzania. As a result, insurers are often most interested in understanding the factors that may or may not influence micro insurance demand.

This PhD thesis on micro insurance demand perspectives in the informal sector has the potential to close the gap, as it addresses the important research questions; why people buy or do not buy micro insurance products, for which risks and for whom can micro insurance provide better value in terms of appropriateness (coverage demanded) and convenience compared to, or in combination with, other risk management options. The gaps in literature outlined in this chapter provide an important conceptual framework to be adopted. The next chapter discusses and rationalizes the conceptual framework used to analyse the findings.

CHAPTER FOUR: CONCEPTUAL FRAMEWORK

The main objective of this chapter is to explain and justify the conceptual framework adopted. The framework offers a re-conceptualization of the nature of micro insurance demand in the informal sector by critically revisiting the traditional insurance demand theories. This is a significant part of the research, as it brings about issues related to insurance demand. As observed by Morduch and Sharma (2001b), Siegel, *et al*. (2001) and Lee (1999) there is a growing recognition of the need for insurance in the informal sector.

The chapter is divided into three main sections. Section 4.1 addresses the pertinent theories related to insurance demand. Section 4.2 discusses and critically analyses the framework for understanding micro insurance demand; - In this section the conceptual framework is presented, the purpose of which is to properly contextualize the processes in understanding micro insurance demand. In section 4.3 a summary of the chapter is provided.

4.1 INDIVIDUAL DEMAND FOR INSURANCE

The theory underpinning the individual demand for insurance has received considerable scholarly attention. An extensive review goes beyond the aims of this research. Instead we touch on the more important works to establish the framework for this study. The purpose of this research is to suggest consideration of an alternative description of choice behaviour by informal households. Several studies have indicated that the individual purchase of insurance can be explained by three theoretical concepts.

Firstly, individual demand for insurance may come from bequest reasons. Studies by Ando and Modigliani (1963), Friedman (1957) and Modiglian (1992) shows that the consumption pattern of consumers is expected to fluctuate over their lifetime and income is expected to drop substantially during old age. Hence, precautionary savings occur in response to uncertainty regarding future income. This suggests that the demand for life insurance and annuities can further smooth consumption. Life insurance can absorb all fluctuations in lifetime income. Hence the same effective consumption pattern could be achieved through the appropriate use of life insurance as could be achieved if the time of death were known with certainty. If the primary bread earner dies prematurely, the insurer pays a lump sum (the death benefit) representing the present value of the human capital of the primary bread earner to the beneficiaries. Thus, it is reasonable to assume that the individual human capital, such as their education and employment status, would influence the demand for insurance. Moreover, Modiglian (1975, 1976) and Modigliani and Brumberg (1990) indicate that individual level of income motivates certain types of insurance products. An individual starts with a low income during the early years of one's working life, then income increases until it

reaches its highest point before retirement, and income during retirement is substantially lower. Therefore, young households with a lower income may desire a lower cost term life insurance. In contrast, older households may be less risk averse and want less life insurance because they have already accumulated a certain amount of wealth.

Secondly, individual demand for insurance can be explained by the impact of risk to individual wealth as indicated in expected utility theory (Yaari, 1965). Expected utility theory suggests that choices are coherently and consistently made by weighing outcomes (gains or losses) of actions (alternatives) by their probabilities (with payoffs assumed to be independent of probabilities). Expected utility theory is based on three fundamental tenets about the processes that occur during decisions made under risk and uncertainty; (1) consistency of preferences for alternatives; (2) linearity in assigning of decision weights to alternatives; and (3) judgment in reference to a fixed asset position. This theory indicates three elements; first the nature of utility which is directly related to the individual's degree of risk aversion, and the higher the degree of risk aversion, the greater the premium an individual will be willing to pay in excess of expected loss. Second are the size of the losses relative to initial wealth and the probability of loss. An individual will pay a larger risk premium to eliminate losses as a percentage of wealth than for small losses to cover a higher probability of loss. The third element is initial wealth, usually presented from the perspectives that wealthy people may be less willing to buy insurance as their utility curve is fairly flat at their level of wealth. It appears from expected utility theory that the choice to purchase insurance is associated with certainty and a higher level of expected utility.

Thirdly, individual demand for insurance can be explained by expected gain from use of insurance products as indicated by Tversky and Kahneman (1992). This study challenged expected utility theory, and states that the choice is about the prospect of gains or losses, and not the level of uncertainty. According to prospect theory, choice is a two-stage process. In its first phase (framing), alternatives are edited and values are attached to outcomes and weights to probabilities. Choices are adjusted to their current wealth from a personal reference point. They tend to be risk averse toward adjustments seen as gains, and risk seeking toward adjustments seen as losses from this point. In the second phase, similar to expected utility theory, the edited alternatives are evaluated. In this case decision makers tend to overweigh unlikely events and underweight likely events when assigning probabilities and they do not adequately distinguish between large numbers. When losses are at stake, however, individuals prefer uncertainty. That is, when given a choice between a certain loss and an uncertain loss of the same expected magnitude, individuals tend to prefer the uncertain loss. Indeed, prospect theory differs from expected utility theory because it replaces the notion of "utility" with "value." Whereas utility is usually defined only in terms of net wealth, value is defined in terms

of gains and losses (deviations from a reference point). Moreover, the value function for losses is different than the value function for gains.

These differences lead to several noteworthy results. For instance, a loss of £500 is felt more than a gain of £500. Unlike expected utility theory, prospect theory predicts that preferences will depend on how a problem is framed. If the reference point is defined such that an outcome is viewed as a gain, then the resulting value function will be concave and decision makers will tend to be risk averse. On the other hand, if the reference point is defined such that an outcome is viewed as a loss, then the value function will be convex and decision makers will be risk seeking. The point from which an individual perceives gains and losses to occur influences the choice, which means additional factors need to be included as insurance decisions may not only be affected by risk aversion but also by the access motive of insurance.

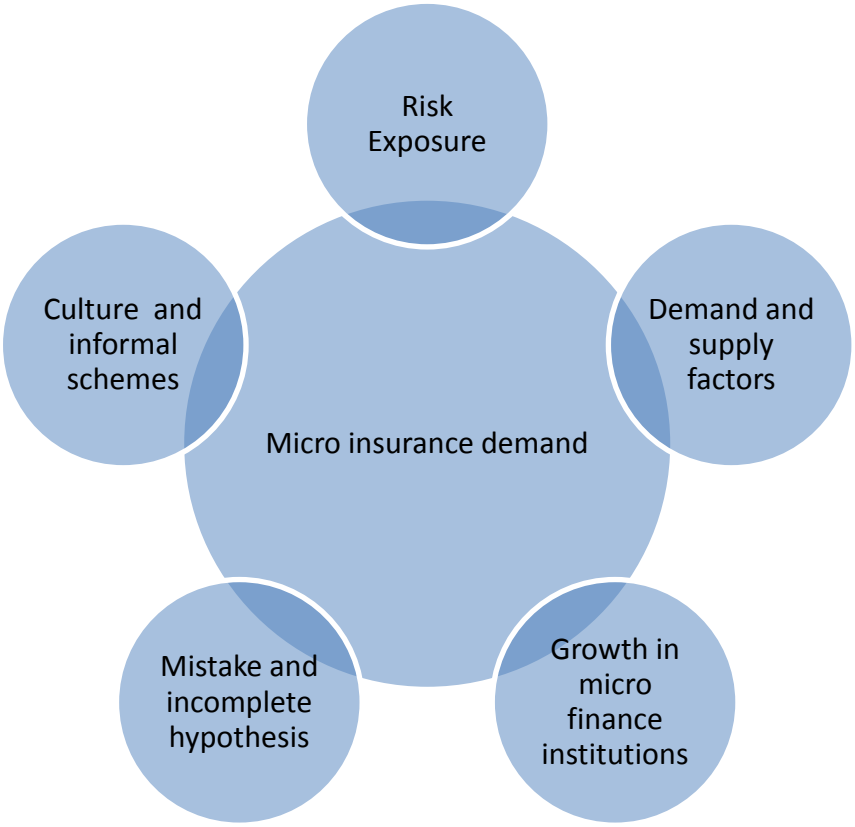
The risk management literature examining purchase of insurance assumes the underlying sources of individual demand for insurance is risk aversion. Although risk aversion is unquestionably at the heart of the demand for insurance by individuals, it provides an unsatisfactory basis for analysing the demand for micro insurance in the informal sector. As mentioned above, this assumption is frequently made by researchers who model the demand for insurance, (see for instance, Mayers and Smith 1983; Mossin, 1968; Borch, 1960; Doherty and Schlesinger, 1990; Kunreuther, 1996; Zietz, 2003). The literature is based on the assumption that those insured's form more accurate estimates of the probability of loss parameters than insurers (see for instance, Rothschild and Stiglitz, 1976; Wilson, 1977; Miyazaki, 1977; Pauly, 1974; Smith, 1968; Kunreuther, 1984). These models, while leading to different results in some aspects, all suggest that a low risk for those insured's will result in the purchase of less insurance in a market with adverse selection than in a market free of adversity.

4.2 UNDERSTANDING MICRO INSURANCE DEMAND IN THE INFORMAL SECTOR

The analysis of the demand for micro insurance by informal households becomes significantly more complicated than traditional insurance theory conveys (Islam and Mamun, 2005). The demand for micro insurance requires an analysis on the dynamics of the individual income process and an evaluation of the complementary and substitute institutions that determine their financial behaviour. The divergence from traditional insurance demand theory and practice results from five areas, the first on the supply and demand side, the second is risk exposures, culture and informal schemes in place, mistake and incomplete hypothesis and growth in micro finance schemes. The five areas identified are useful in developing a conceptual framework. This framework is a contribution to

theories for understanding of micro insurance demand. The framework is presented in figure 4.1 below.

Figure 4.1: Conceptual framework



Source: Author derived from various literature reviews

4.2.1 DEMAND AND SUPPLY FACTORS

Analytically, factors that influence micro insurance demand can be divided into supply-side and demand-side factors. Whether a households demands and is willing to buy insurance depends on the perceived difference between the level of expected utility with insurance and expected utility without insurance (Kirigia, *et al.* 2005). Moreover, consumer theory assumes that if consumers are perfectly informed, they maximize their utility as a function of consuming various goods, given relative prices, their income and preferences.

However, due to uncertainty about the unknown, future insurance choice is not made based on utility alone, but on consumers' socio-economic characteristics (Cameron, *et al.* 1988; Doherty and Eeckhoudt, 1995). A household's socio-economic factors include income level, age, marital status and family size. Most of the research indicates that there is a strong relationship regarding certain demographic characteristics of the household and use of micro insurance. For example, Bendig and Arun (2011), Browne and Kim (1993), Outreville (1996) and Giesbert, *et al.* (2011) studied the

relationship between demand for insurance and level of income; they claimed that the capacity to afford an insurance premium is directly connected to one's level of income. Demand for micro insurance is determined by the ability to pay membership contributions or premiums. They argued that lack of money is indeed a major reason why households do not purchase micro insurance products.

Indeed, Matul (2005) pointed out that education has a remarkable impact on the access to micro insurance. Households with a low level of education think that they do not require insurance, probably due to lack of confidence in insurers and poor understanding of the risk-pooling concept. In some cases, the views of poor people about insurance are negative. They see it as the reserve for the rich; something that is irrelevant, too expensive or even unfair (McCord and Osinde, 2005; Cohen and Sebstad, 2005; Churchill and Manje, 2002; Matul, 2005; McCord, 2008). These studies argued that people's limited understanding affects negatively the acceptance of the insurance rationale.

They further indicate that people join micro-insurance arrangements based on the principle of 'balanced reciprocity'. This means that members expect a roughly equal return from their contribution or payment, rather than being guided by a true logic of mutual insurance, with winners and losers through income redistribution being thought of as 'lucky' and 'unlucky' individuals. Moreover, Osei and Gemegah (2011) and Norton (2000) assert that problems of limited consumer rationality limit demand for insurance. For example, individuals may have difficulty understanding low-probability, high loss and/or simply avoid having to think about the unpleasant possibility of ending up with financial losses. This view argues that limited financial literacy serves as an important barrier to demand for services; if individuals are not familiar or comfortable with products, they will not demand them.

On the supply side, insurance product features encourages informal household demand for micro insurance. Indeed, Sinha (2002) and Sebstad, *et al.* (2006) argued that product characteristics are a crucial element for micro insurance demand. These features include but not limited to; proximity, household expectation and the flexible payments and collection of affordable premiums. Since most of the informal households do not have a regular income, providing insurance to them requires the proper structuring of its price (premiums) in terms of cost, flexibility of payments and ease of collection. Similarly, even if the potential benefit of micro insurance is seen, there is no utility in insurance if an informal sector household has no geographical access to health facilities. The non-availability of quality health care services (including lack of drugs and other quality deficits) negatively affects demand for health insurance (Carrin, *et al.* 2005; Blumberg, *et al.* 2001). Thus if

informal sector workers perceive quality of health care as a problem, health insurance membership will be less attractive to them. In addition, issues such as trust, including prompt payment of claims and the expected benefits or value of micro-insurance products, remains very important variable that influences the decision of households to subscribe to micro insurance. For instance, if low-income earners trust that insurers will honour their legal responsibilities by making prompt payments for claims when necessary, then they will be encouraged to buy micro-insurance products (McCord, 2008; McCord and Osinde, 2005). Therefore it can be argued that lack of credibility and trust in the insurance business negatively affects demand for micro insurance.

4.2.2 RISK EXPOSURE

Risk exposures are of first-order importance in the informal sector, particularly when its occurrence causes poverty or disrupts household's wellbeing. Riskier individuals are more likely to purchase the insurance given a premium and benefits (Rothschild and Stiglitz, 1976). The comprehensive review of development literature provides empirical and theoretical descriptions of risk exposure and its consequences to household's wellbeing. These include studies by Alderman and Paxson (1994, 1995), Besley (1995b), Townsend (1995), Morduch (1995; 1999a), Bardhan and Udry (1999), and Dercon (2002; 2005).

Indeed, Azariadis and Stachurski (2004) argued that the poverty traps hypothesis carries important implications for the study and management of risk exposures. The hypothesis increasingly draws attention as an explanation for persistent underdevelopment of households. It indicates that households below a certain income or wealth threshold may remain trapped in a low-level equilibrium. Thus, if this sort of poverty trap exists, the households may not recover quickly, or at all, from risk exposures. The empirical research finds considerable persistence in the effects of risk exposures, especially among the poor, (see for example, Alderman, *et al.* 2006; Carter, *et al.* 2007; Dercon, *et al.* 2006; Jalan and Ravallion, 2005; Dercon, 2005). These studies indicate that recovery from major risk exposures is commonly slow or non-existent. They argued that health risk exposures appear to have especially important effects; they are overwhelmingly the most frequent cause of descents into long-term poverty. Risk exposures and their effects create demand for micro insurance techniques to reduce poverty especially among informal sector households.

Studies by Bardhan, *et al.* (2000), Carter and Barrett (2006) indicate that there exist several distinct relationships between risk and poverty. They argue that if household's exhibit decreasing absolute risk aversion that is, if aversion to risk decreases as wealth increases, then households will pay a relatively greater premium to avoid risk than will wealthier people. In equilibrium, this leads to divergence in expected incomes as the poor households choose lower risk, and lower expected return portfolios than does those who begin with greater wealth. Due to the non-convex asset dynamics

that characterize systems with multiple equilibria, households may prefer to smooth assets rather than consumption in response to risk exposure (Barrett, *et al.* 2006; Carter, *et al.* 2007; Carter and Barret, 2006). In other words, households who are near the asset threshold may be unwilling to liquidate productive assets in order to smooth consumption, if doing so would push them below the threshold, resulting in further asset loss and a descent into a low-level asset (and income) trap. Multiple equilibria associated with non-convex asset dynamics could also lead to seemingly excessive risk-taking behaviour among a poor informal households subpopulation who might find it attractive to take chances when a safer strategy is unlikely to break them out of poverty.

Lybbert, *et al.* (2004) highlights the crucial distinction between asset risk and income risk. They emphasize the role of asset accumulation, as asset ownership determines income generation processes. When income is endogenous, asset risk can have a more permanent impact than income risk. In particular, uninsured asset risk has the potential to drive a household onto a path of sustained asset loss, as a result of which the household falls below a critical asset threshold from which it is unable to recover, suffering persistent income poverty thereafter.

Moreover, McPeak (2004) and Yakub (2002) demonstrate that households that face asset risk may be more vulnerable to falling into persistent poverty. Hence, households consciously trade off asset smoothing and consumption smoothing objectives when faced with correlated asset and income risk, as in the case of rainfall shocks that affect both herd mortality (i.e., asset risk) and productivity (i.e., income risk) among livestock producers in northern Kenya. Indeed, Adato, *et al.* (2006), Barrett, *et al. (*2006) and Lybbert, et *al.* (2004) found that risk exposure that depletes a household's asset stock leads to long-term poverty.

The distinction between idiosyncratic and covariate risk is important because micro insurance techniques can handle idiosyncratic risk while covariate risk makes a case for social protection measures. As Alderman and Paxson (1994) demonstrate with a full insurance model[21], covariate risk exposures cannot be insured by risk-sharing, as all members of the insurance pool would require payouts at the same time. Thus, the relative magnitude of covariate risk exposures is important to the design of appropriate social protection policy interventions. However, there is increasing evidence regarding the importance of idiosyncratic risk. Empirical studies have found that the idiosyncratic income risk is relatively large (see for example, Udry, 1993; Townsend, 1994; Deaton, 1997, 2005; Lybbert, *et al.* 2004; Dercon and Krishnan, 2000). These studies indicate that many risks have both

[21] Alderman and Paxson (1994) also however show that a full-insurance model can accommodate consumption smoothing in the aftermath of a covariate risk exposure. For example stocking behaviour can be used for inter-temporal consumption smoothing within the community.

idiosyncratic and covariate components but idiosyncratic risk dominates covariate asset risk among the households.

The evidence on the importance of idiosyncratic risk for households underscores the need for a continuing discussion on the efficacy of the strategies available for mitigating the impact of random risk exposures. Therefore, demand for micro insurance need to take into account the household's nature of risks; the household has multiple sources of risks each with its own distribution of losses and the ability to manage and insure differs greatly. This study is enriched by evaluating insurable and non-insurable risk exposures with their associated costs or impacts. These separations enlighten the individual ability to manage risks, possibly via informal or formal mechanisms.

4.2.3 CULTURE AND INFORMAL SCHEMES

The availability and dependability of informal schemes provided by individuals, the local community and social network determines demand for micro insurance. The access differs based on a household's social and economic background. The protection provided via the individual extended family or a community based system may create an expectation for some level of support in the event of loss. It is evident that the extension of traditional insurance theory to adjust for the existence of informal systems will reduce the maximum premium that those who are risk averse will be willing to pay. This will reduce demand for micro insurance. The insurer must understand the existence and vulnerability of informal systems if they are to design optimal policies for informal sector households. Pauly (1990) indicates a major factor that may limit demand for private insurance is the availability of imperfect but cheaper substitutes. He noted that these may come in the form of government assistance, financial transfers from children, or unpaid care provided directly by family members in lieu of formal paid care.

Indeed, not everyone is risk-averse, and there are many factors that lead to people taking up or not taking up insurance. For example, national culture can explain why in some countries there is a higher demand for insurance policies than others. Hofstede (1980) explained four dimensions of culture that explain individuals as (i) Individualism and collectivism, (ii) Uncertainty avoidance, (iii) Power distance (iv) Masculinity and femininity. Two relevant cultural dimensions to this study are individualism and collectivism, and uncertainty avoidance.

Individualism and Collectivism is a dimension that explains how individuals relate to each other. Individualism refers to the existence of loose knit social networks in which people focus primarily on taking care of themselves and their immediate families (Adler and Gundersen, 2008; Francesco and Gold, 2005). In an individualistic society everybody looks after his own interests, and may be the interests of his family, behaviour made possible by the large freedoms available to individuals. In

many western countries most people are happy to live away from members of their family (Dowling, *et al*. 2008). According to Adler and Gundersen (2008), one of the attributes of an individualist culture is that of free-will and self-determination. People with individualistic perspectives on life tend to rely more on insurance for protection than on informal agreements within their group to provide financial security. Therefore, countries with an individualism cultural behaviour will have high demand for insurance consumption.

In a collectivistic society ties between individuals are tight, and everyone needs to care for his extended family or group. Collectivism is characterized by closely knit social networks in which people strongly distinguish between their own groups, for example relatives, clans and organizations (Adler and Gundersen, 2008; Francesco and Gold, 2005; Hofstede, 2001). Collectivists hold common goals and objectives, therefore, people from collectivist cultures expect members of their groups to look after them and provide security in exchange for loyalty to the group (Adler and Gundersen, 2008).

Uncertainty avoidance evaluates how people react to the uncertainties of life, and tries to avoid ambiguous situations; it is the search for greater certainty and predictability (Adler and Gundersen, 2008; Hofstede, 1980). Cultures with a high uncertainty avoidance prefer more structure resulting in explicit rules of behavior, either written or unwritten. Countries with high uncertainty avoidance have a high degree of preference for well-structured situations and clear rules about ways to behave; they place considerable concern on strict laws with severe penalties for offenders, a high degree of security, and great respect for experts (Hofstede, 2001). However, countries with low uncertainty avoidance adopt fewer rules, individuals are more easy-going, tolerate different behaviors and opinions more easily, and avoid excessive laws and regulation. These allow individuals to have strong feelings of personal competency and entrepreneurial behaviour (Francesco and Gold, 2005; Adler and Gundersen, 2008; Hofstede, 2001).

Given the examples above, it is likely that cultural dimensions that are individualism, collectivism and uncertainty avoidance may impact on micro insurance demand in the informal sector. Also, households demand behaviours can be affected by an individually-motivated consumer and a community-motivated consumer. While an individually-motivated consumer is comfortable deciding to purchase insurance alone, community-motivated consumers rely on community input before making a final purchase decision. Undeniably, understanding of the concept of insurance can be explained by national cultures and the variations in insurance demand from country to country reveal significance in understanding micro insurance demand in Tanzania.

4.2.4 MISTAKE AND INCOMPLETENESS HYPOTHESIS

Schwarcz (2010a) argued that it has become increasingly clear that expected utility theory is a remarkably poor theory of how and why individuals purchase insurance. He observed that deviations from expected utility theory are likely to be the result of mistakes, in the sense that consumers would act differently than they do if they possessed perfect information and cognitive resources. From these perspectives, regulatory interventions designed to improve consumer decision-making about insurance are potentially desirable. At the same time, he argues that some deviations from expected utility theory may actually reflect sophisticated consumer behaviour. In some cases, seemingly puzzling insurance decisions may help consumers manage emotions such as anxiety, regret, and loss aversion, while in other cases they may represent valuable commitment strategies.

Given these conflicting explanations for expected utility failure as a descriptive theory of consumer demand in insurance markets, he argued that regulatory strategies that aim to encourage presumptively welfare-maximizing insurance decisions without restricting individual choice represent a promising and normatively defensible opportunity for improving consumer behaviour in insurance markets. According to the mistake hypothesis, consumer insurance decisions reflect the fact that time is scarce, cognitive resources are finite and information is limited. If these obstacles could be overcome, consumer insurance decisions would better reflect the predictions of classical theory discussed above. In other words, according to the mistake hypothesis, risk aversion is perfectly defensible as a normative theory of insurance purchasing, even though it largely fails as a descriptive theory.

The second explanation for low insurance demand can be labelled as the incompleteness hypothesis, which is premised on the notion that classical theory, with its focus on the decreasing marginal utility of wealth, fails to fully capture the benefits of insurance (Schwarcz, 2010b). Consumer behaviour, from these perspectives is the results of consumers' complete knowledge of risks and insurance. Households generate systematically incorrect probability assessments and estimates of risk exposure; therefore they invoke incorrect analytical constructs to measure the value of insurance. Households tend to employ a sequential threshold approach to insurance decision-making. Under this approach, they refuse to consider the desirability of insurance when they perceive the probability of the underlying risk to be below a threshold level. This threshold is different for different people depending on their characteristics. These mechanisms for household decision-making about insurance provide strong support for the mistake hypothesis. Insurers need to exploit a household's salient risks to sell micro insurance, and in particular, household's informational or cognitive limitations.

4.2.5 GROWTH IN MICRO FINANCE INSTITUTIONS

According to Morduch (1998) and Morduch and Sharma (2001) the outcome of the perceived successes of micro-finance programs such as Grameen Bank in Bangladesh, The Bank Rakyat of Indonesia and BancoSol in Bolivia stimulated the use of insurance by informal sector households. Furthermore, Siegel, *et al*. (2001) argued that there are strong links between the micro-finance institutions and micro-insurance schemes. Similarly, the micro credit summit campaign held in 2003, argued that the low-income markets which were previously regarded as not worth spending time developing products for, are big emerging markets. Any insurer would be well advised to give it focus, to study their needs, and develop the products. The summit reports that there are 235 million families around the world who could potentially be micro insured if efficient outreach mechanisms were available.

Moreover, Tucker (2007) reports that of the world population four billion people live on $2 a day and the lack of formal insurance choices does not stop them from mitigating risks. He argued that profitability in micro insurance is earned by offering products to masses of people in an efficient manner since micro insurance products have very low margins. If these products are sold to large numbers of people, the accumulated income will be substantial. The key to product profitability seems to lie in the type of products, the quality of the risk premium calculation and operational efficiency. A Swiss Re 2010[22] report on the future market for insurance products suggests that India and China are emerging markets which will be at the front of insurance in the 21st century. While China and India will provide a disproportionate amount of this growth, dramatic expansion is also likely in many other developing countries. This growth will cover a much wider range of household's incomes. Micro insurance will be the instrument for insurers who want to access to these markets.

4.3 SUMMARY OF THE CHAPTER

This chapter has described the conceptual framework adopted in this study. It depicts a unique process of understanding micro insurance demand perspectives in the informal sector. The framework shows that, although standard insurance demand theory provides a strong starting point for the analysis of micro insurance, additional factors were necessary to understand informal household demand perspectives.

Tanzania relies on a reasonably developed financial system, but one that is not intended for the informal sector, especially in insurance and the public protection networks are constantly expanding

[22] See Swiss Re website at www.swissre.com; Swiss Re Sigma study on growth potentials puts emerging markets in the spot light.

and changing. This requires a private micro insurance industry, well-adjusted to the new business opportunities of people with rising mobility who require protection to keep their standards of living. This overlap of effects and changes in opposite directions requires empirical work to guide the companies that aim to explore the micro insurance market in Tanzania. There are multiple sources of risks faced by households in the informal sector hence careful attention needs to be focused on the riskiness of informal based systems for effective design of micro insurance products.

The literature review and theories discussed in this chapter are an important aspect of the methodological and research design adopted in this research. The framework will be used as an interpretive framework in order to analyse the study's findings. A step by step research approach that discusses and rationalises the strategies used for the entire research will be presented in the next chapter.

CHAPTER FIVE: RESEARCH METHODOLOGY

This chapter seeks to explain the research design and processes used to achieve the objectives of the present study. The chapter addresses the key methodological concepts of this research: the philosophical position, design and sampling framework. Section 5.1 begins by contextualizing the philosophical positions of social science research. Section 5.2 describes the pragmatism research approach, giving details and justification for the various stages by which the objectives of the study were met. Section 5.3 deals with the research design and sampling framework. Section 5.4 describes data collection procedures and issues related to reliability and validity of instruments. Section 5.5 presents discussions on data analysis and ethical considerations in conducting the research. Finally in section 5.6 a summary of the chapter is given.

5.1 PHILOSOPHICAL UNDERPINNING

According to Saunders, *et al*. (2007) research philosophy relates to the development of knowledge and the nature of that knowledge. There are two philosophical positions which explain the nature of knowledge: ontological and epistemological. It is important to explain these philosophical positions because they inform the methods adopted for collecting and analysing data. Blaikie (1993) notes that the root definition of ontology is the science of being, which necessitates asking questions about the nature of existence. In social science, the main focus in the ontological philosophical positioning is the question of whether social entities can and should be considered as objective entities that have a reality external to social actors, or social constructions built up from the perceptions and actions of social actors referred to as objectivism and constructionism respectively. Objectivism asserts that social phenomena and their meanings have an existence that is independent of social actors (Bryman and Bell, 2003).

Epistemology refers to ideas about what counts as knowledge: the known and set criteria, rather than beliefs (Blaikie, 2001). There are two main epistemologies of what counts as knowledge within the social sciences: positivism and interpretivism. According to Bryman and Bell (2003), in positivism knowledge is associated with observable facts that exist independently from the mind; that is theoretical terms that are not directly open to observation are not considered legitimately scientific. The researcher acts as a natural scientist (Saunders, *et al*. 2000), interpreting data that have been collected in a value-free manner. Positivism places emphasis on a highly structured methodology to facilitate further replication (Saunders, *et al*. 2007) and is characterized by quantitative, objectivist, or experimentalist methods. The main focus of the positivist paradigm is, therefore, to produce generally accepted universal laws based on observable facts independent of the mind.

The second epistemological positioning is interpretivism which takes the view that people and their institutions as the subject matter of social sciences are fundamentally different from those in the natural sciences (Bryman and Bell, 2003). This is because the meanings of the concepts or the phenomena under investigation are derived from the lived experiences of individuals interpreted by the researcher. Thus the researcher constructs the world view, based on an understanding of the investigated individuals perceptions and experiences.

The present study aims to develop the understanding of micro insurance demand in the informal sector by mixing the elements of both positivism and constructivism, whereas in positivism the focus is on establishing universally accepted laws, the interpretivist approach aims at understanding a concept within its context. The researcher in this approach is regarded as an insider, because data in this study have been collected through structured and semi-structured interviews with selected informal households. Most writers on research methodology acknowledge that neither of the two approaches is better. Consequently the choice depends on the nature of the research (Blaikie, 2001; Hussey and Hussey, 1997; Saunders *et al*., 2007). Given the nature of the phenomena under investigation, the pragmatism approach has been adopted in this thesis.

5.2 PRAGMATISM RESEARCH APPROACH

The pragmatism research approach applies mixed research methods (Johnson and Gray, 2010). For the purpose of this the research pragmatism paradigm is deemed suitable, because the researcher is of the view that the phenomena under investigation may not be considered legitimately scientific. Micro insurance demand as an economic behaviour is specific to individuals and is said to be a changeable thing. In addition, the concept cannot be separated from the mind, a product of competitive advantage. Knowledge about it can be constructed from individual characteristics, thus, the application of both methods yield meaningful understanding of micro insurance demand. Pragmatism as a philosophical paradigm has elements of both positivism and constructivism. It is a philosophical underpinning for mixed methods studies (Tashakkori and Teddlie, 1998, 2009, 2010; Morgan, 2007; Patton, 1990; Burke and Onwuegbuzie, 2004). This conveys its importance for focusing attention on the research problem in social science and then using pluralistic approaches to derive knowledge about the problem. Within this framework, both qualitative and quantitative methodologies are appropriate (Healy and Perry, 2000; Burke and Onwuegbuzie, 2004), implying that methods such as unstructured or semi-structured in-depth interviews are acceptable and appropriate within the paradigm, as are statistical analyses, and other techniques.

The researcher deemed mixed methods appropriate for four reasons. Firstly, this research is an economic problem about making choices or decisions. Economics is a problem solving, decision

oriented discipline by the nature of its focus. It is a study of human activities in the allocation of limited resources in satisfying human want; focus is on allocating these resources among the competing uses. Economic research is expected to be relevant to understanding and dealing with current and future societal problems. The phenomenon of micro insurance demand has different interpretations among households in the informal sector. Consequently the meaning resides in the minds and contrasting experiences of the individual (Creswell, 1998). In addition, there is a considerable variation regarding the findings. Saunders *et al*. (2007) and Creswell (2010) noted that the approach focuses on describing subjective meanings, social phenomena and drawing attention to (a) the details of the situation, (b) the reality behind the situation and (c) the subjective meanings that motivate actions. Therefore, it is necessary to question the social, rather than the physical phenomenon. Given this lack of clarity surrounding micro insurance demands a research approach that allows for an in-depth exploration of both subjective and inductive aspects of the phenomena under investigation is appropriate.

Secondly, the concept of micro insurance demand is socially constructed by stakeholders, mainly for the purpose of improving individual well-being with the expected end being improved productivity. In this context, several authors note that micro insurances have an indisputable value as risk management instruments in the informal sector (De Weerdt and Dercon, 2006; Zeller, *et al.* 1997; Sebstad and Cohen, 2001). Given this background, it is undoubtedly clear that micro insurance is a concept which cannot be regarded as being independent of the involved social actors. Thus, taking pragmatism perspectives, this research views micro insurance as a construct that is dependent on human experiences, perceptions and interpretations. Accordingly, Miles and Huberman (1994) argued that the social phenomena exist not only in the mind but also in the objective world and that some lawful and reasonably stable relationships are to be found among them. This study describes micro insurance demand perspectives and critically analyses risk management practices in the informal sector.

Thirdly, given that there is a scarcity of empirical studies on micro insurance demand in the informal sector in Tanzania, mixed methods allows the researcher to explore the experiences of those individuals in considerable depth. According to Bryman (2006), mixed methods enables the generation of an understanding in the perspectives of the research participants. Therefore, engaging in FGD discussions with research informants implies that the researcher can also enter into the social world in which he/she is interested in order to gain an understanding of the participants' experiences of the phenomena under investigation (Shaw, 1999). Thus, because the researcher using the pragmatism approach tries to establish the meanings of individual experiences, the results are subject to an element of interpretation (Creswell, 2007). Therefore, micro insurance demand is a socially

constructed phenomenon which has a reality to a collective group of social actors within the informal sector.

Fourthly, the research goal is not to replace either of these approaches but rather to draw from the strengths and minimize the weaknesses of both in a single research study. Hence, the two opposing philosophic positions are more or less important according to the type of research. The study is designed to identify existing social phenomena and behaviours while acknowledging the consequences of social conditions and accepting the assumption behind relativist research that truth requires concession between different viewpoints (Easterby- Smith, *et al.* 2002). Visualizing a continuum with qualitative research anchored at one pole and quantitative research anchored at the other, this research covers the large set of points in the middle area. Those who rely heavily on quantitative method to understand social phenomena and individual decisions may believe that increasing numbers of groups and geographic diversity will start approaching the stability of quantitative testing. However, they forget that screening and recruiting usually are highly exclusionary, and the very act of being in a discussion group affects attitudes and reported behaviours.

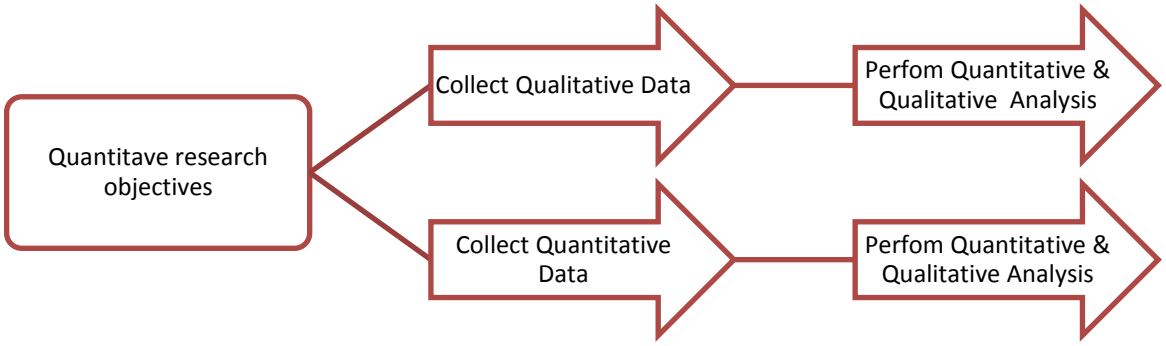
Regardless of paradigmatic orientation, all research in the social sciences represents an attempt to provide warranted assertions about human beings and the environments in which they live and evolve (Biesta, 2010). In the social and behavioural sciences, this goal of understanding leads to the examination of many different phenomena, including holistic phenomena such as intentions, experiences, attitudes, and culture. This thesis argue that researchers and research methodologists need to be asking when each research approach is most helpful and when and how they should be mixed or combined in their research studies. As Green (2008) and Howe (1988) indicated, although there are many important paradigmatic differences between qualitative and quantitative research there are some similarities between the various approaches that are sometimes overlooked. For example, both quantitative and qualitative researchers use empirical observations to address research questions. Both methodologies describe their data, construct explanatory arguments from their data, and speculate about why the outcomes they observed happened as they did. Additionally, both sets of researchers incorporate safeguards into their inquiries in order to minimize confirmation bias and other sources of invalidity or lack of trustworthiness that has the potential to exist in every research study (Sandelowski and Happ, 2010).

Taking a pragmatic position allows this research to mix and match design components that offer the best chance of answering specific research questions. As noted by Onwuegbuzie and Teddlie (2003), the logic of justification does not dictate what specific data collection and data analytical methods

researchers must use. Mixed research makes use of the pragmatic method and system of philosophy is an attempt to legitimize the use of multiple approaches in answering research questions, rather than restricting or constraining researchers' choices. It is inclusive, pluralistic, and complementary, and it suggests that researchers take a diverse approach to method selection and the thinking about and conduct of research (Tashakkori and Creswell, 2007; Lieber and Weisner, 2010).

Using this principle, the study collects multiple data using different methods in such a way that the resulting mixture or combination has resulted in complementary strengths and non-overlapping weaknesses (Morgan, 1998). Our mixed methods research process model comprises the following distinct steps: (1) determine the research question; (2) determine whether a mixed design is appropriate; (3) select the mixed method or mixed-model research design; (4) collect the data; (5) analyse the data; (6) interpret the data; (7) draw conclusions and write the final report. These steps are displayed in Figure 5.1 below.

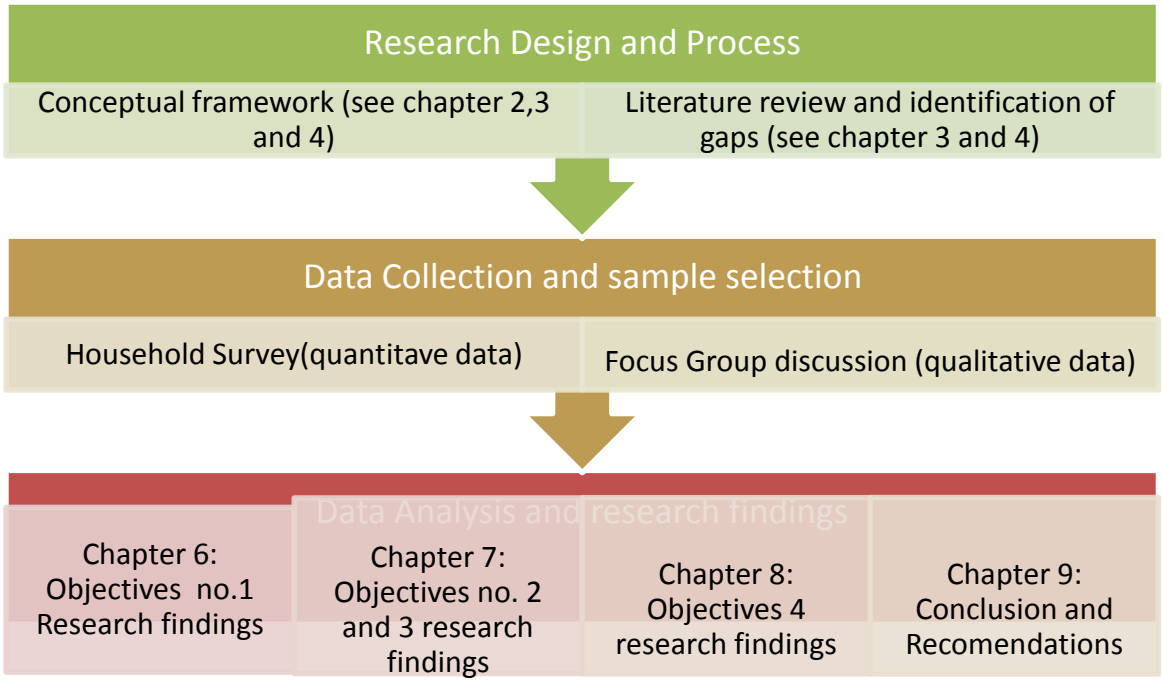
Figure 5.1: Mixed methods research steps



5.3 RESEARCH DESIGN AND PLAN

This section outlines the steps taken in conducting the research design and the process underpinning the present study. It describes and defends the logic of the steps taken. According to Yin (2009), a research design that is aimed at building an understanding of the phenomenon under investigation is vital to the process of social science inquiry. As there are limited empirical academic studies on the subject of micro insurance, a cross- sectional design, where information about the present existing conditions at a single point of time was gathered in order to collect a body of quantitative data in connection with two/more variables was used as suggested in Creswell (1994) and Brayman and Bell (2003).

Figure 5.2: Graphic summary of the research design and process.



In this study the demand was understood as willingness to use micro insurance products, therefore the research assumes that households who are not willing to use the micro insurance techniques either: - i) Have no access to it, ii) Do not demand it iii) or cannot afford it iv) or all three factors. Further research assumes that households which do not demand particular formal service, use informal techniques for different reasons such as requirements for certain procedural specifications that leads to rationing and restricts some people from using formal services or other services, such as lower transaction costs and greater flexibility, affordability/price of services and/or ignorance. The research rules out the possibility that the households may not demand the particular services at all, as it considers it to be unlikely that the households demand neither formal nor informal insurance mechanisms over time.

5.3.1 Sampling Framework

The study population is the informal sector households in Tanzania; the study was conducted in three administrative districts of *Ilala, Temeke* and *Kinondoni* in Dar es Salaam. The main reason for selecting this area was that; - Dar es Salaam is one of the leading regions with highest number of urban informal sector households. Further, there is little research done on micro insurance and the area guarantees a higher access to micro finance services in the country. In consultation with the local government authority the respondents were drawn from members of VIBINDO[23] an umbrella

[23] VIBINDO stands for Viwanda na Biashara Ndogondogo- which is an umbrella organization of small and medium economic groups in the informal sector in Tanzania. VIBINDO represents group members from a variety of different economic sectors working in the informal sector in Tanzania. VIBINDO represents over 300 groups' members with over 500,000 individual members. The primary

organization representing the interests of workers in the informal sector in Tanzania. The VIBINDO society represents micro and small enterprises in the informal sector. The micro and small enterprises are not only an important means to generate income; they are also an important entry points for the development of a strong private sector in the country. As such, it is important to consider their risk exposures and risk management techniques used before the process and transition into the formal insurance sector can be facilitated.

5.3.2 Sample Size and Sampling Technique

A proportionate stratified sampling method was applied in selecting a sample size because it reduces the sampling error and provides greater or better precision (Sapsford and Jupp, 1996). Where appropriate, a purposive or non-probability sampling was applied in identifying clients of micro finance institutions. With reference to the population and housing census (PHC, 2002), the number of households interviewed for each district was determined. The sample was stratified into three stratums (i.e. districts) with the sampling weight assigned to each district being determined by the number of micro finance schemes available in the districts and then random sampling was used to select sufficient numbers of subjects from each stratum.

Table 5.1: Calculation of study sample population

District/	Population size (NBS 2002)	HH's interviewed	MFI's Identified	MMFI's interviewed
Ilala	937,573	94	103	48
Kinondoni	1,088,867	123	75	35
Temeke	771,500	87	62	29
Total	2,697,940	304	240	112

Source: Author's calculation

5.3.3 Instrument Validity and Reliability

According to Bryman and Bell (2003), reliability is determined by the extent to which the results of a study are repeatable. For a qualitative study, reliability is concerned with the degree to which the features of the study's design are congruent with the research inquiries. In order to ensure that the results are reliable, the same sets of questions were asked. Therefore, since all informants were interviewed separately, subject bias was controlled to a large extent.

As regards to validity, Bryman and Bell (2003) noted that any research should be concerned with the integrity of the conclusions it generates. Therefore, the researcher considered construct validity to be

objectives of the society is effective representation, and to be an advocate and lobbyist for a better working environment for its members so that they may grow, eradicate poverty and create sustainable jobs for others.

of great importance. According to Yin (2009), to meet the test of construct validity, an investigator must be sure to cover two steps; (a) to define the phenomenon in terms of specific concepts, thereby relating them to the objectives of the study, and (b) to identify operational measures that match the concepts with the academic literature and other publications. The definition of the main concepts formed the first part of the literature review. The interview questions were not only grounded in the literature, but were also piloted and checked by the researcher's supervisors in order to enhance their reliability. To maintain validity of the instruments, the following measures were taken; related literature was reviewed, research supervisors were consulted and a presentation was made to different research workshops and finally the constructive feedback was incorporated. To maintain reliability of the instruments, a preliminary test was performed on ten percent (10%) of the total sample size prior to the actual research.

5.3.4 Pre-testing of the Instruments

For validation purposes, a sample of the set of survey questionnaires was initially submitted for approval, after which the questionnaire was tested to on 10% of the expected total respondents. The instruments were pre-tested for ten percent (10%) of the total sample size in similar setting in three districts. After pre-testing instruments, all necessary changes and modifications were made as required such as changing words, adding and deleting a few questions to improve the content of the questionnaire and for the case of the FGD, a discussion guide was used.

5.4 DATA COLLECTION PROCEDURE

5.4.1 Steps followed

The following steps were used for the data collection procedure: Firstly, the formal permission was requested from the authorized persons in the study area and at the VIBINDO society headquarters. Secondly, verbal consent was obtained from each respondent and a face to face interview technique was used to collect data by the researcher himself. Thirdly, inclusion criteria were maintained while collecting data and the obtained information was filled and recorded for future analysis. Finally, to minimize bias, the questionnaires were prepared and respondents were selected without any discrimination of sex, education, and socioeconomic status.

5.4.2 Ethical Consideration

Anonymity and confidentiality were guaranteed to all participants both at the beginning and the end of the interview. According to Remenyi *et al*. (1998), in business and management studies it is essential to understand the context within which the research is being conducted by considering

social or cultural factors that may impinge on the research problem. Regarding this study, all ethical norms were considered and followed throughout the study. Every precaution was taken to protect the rights of the respondent. The following steps were considered for this purpose: Firstly, formal permission was obtained from the authority in the study area and from group leaders. Secondly, verbal consent was obtained from each respondent and finally, privacy, anonymity and confidentiality were maintained by using code number and interviewing each respondent separately.

5.4.3 Data Collection instruments

The study used both qualitative and quantitative research methods. The application of both methods has philosophical roots (see section 5.2) which emphasizes the importance of understanding social and cultural processes in shaping human behaviour. The Swahili language was used for discussions, as is common for most studies in this area. Structured, semi structured and unstructured questionnaires were prepared with simple, understandable English and the interview was conducted in the Swahili language by the investigator on a face to face basis. The instrument contains three parts. Part I; a questionnaire related to socio-demographic characteristics Part II; a questionnaire related to risks and risk management mechanisms and Part III; a questionnaire related to financial services and insurance choices. These instruments are presented in *Appendix C*. Table 5.2 below summarizes the research methods, outlining the description and objectives of each approach.

Table 5.2: Research Methods descriptions and objectives

Research method	Description	Objectives/key questions
Unstructured interview (personal stories 3 people from each of FGD (done prior to FGD)	Researcher stimulated respondents to discuss and analyse information about their lives and risks they face.	The key issues for this research method were: • To investigate what sort of crises and risks informal households face. • To understand how households change their risk coping strategies depending on their life stage. • To understand demographic status and their effect on the choice of risk coping mechanism. • To understand the existing use of insurance as a coping mechanism (if any) and any biases or preconceptions that people have regarding insurance
Focus Group Discussions 6-10 people; 2 FGD each district	Researcher stimulated the group dynamics to elicit responses and capture diverse perceptions from both MFI clients and non MFI clients on the core research variables.	The main objective of this research method was to collect information from participants in groups on the following: • Common socio-economic risks • Common coping strategies • Factors that might determine the choices of coping mechanisms • Knowledge and experience (if any) of insurance

		• Household expenditures
Structured survey questionnaire (Face to face): Flexibility was allowed for open-ended question.	A structured questionnaire provided quantitative data from MFI and non-MFI clients.	The main objective of this research method was to collect information from participants on the following: • Demographic household information • Common socio-economic risks • Household socio-economic conditions • Common coping strategies • Household income sources and expenditure • Knowledge and experience on financial services (if any) for insurance

Source: Author (2011)

5.4.4 Sample per method

At the end of the study, after merging the data files and checking for missing information, the final sample consisted of 304 people including 246 heads of household for the structured survey questionnaire and 18 households participated for the unstructured interviews (personal history). The other 40 respondents participated in 6 focus group sessions 2 from each district; the group sizes varied between 6 and 10 participants. 112 MFI clients participated in this research which represented roughly 36 percent of the total sample population. The sample size per method is presented in table 5.3 below.

Table 5.3: Sample Size per Research Method

Method	Sample Size		
	MFI Clients	Non-MFI clients	Total
Survey Structured Questionnaire	112	192	304
Focus Group Discussion	12	28	40
Unstructured Interviews	6	12	18

5.5 DATA PROCESSING AND ANALYSIS

The analysis provides insights into business potential of micro insurance. The following steps (processes) were taken while analysing the data; daily editing was done after collecting data to maintain accuracy and completeness. The collected data were entered into SPSS statistical software. The data were analysed using simple descriptive statistical methods in terms of number and percentages. The findings were presented in tables, pie charts, and bar graphs. Interpretation of the findings was made descriptively on the basis of the analysed data. A probit model analysis was conducted to investigate household's characteristics that influence micro insurance demand in the informal sector. The probit equation model was established indicating independent variables and the probit results were presented in chapter eight of this thesis. Qualitative data analysis was based on

field experience. Familiarization of data was done by listening to the audio-taped information and reading through the notes and transcripts. Codes were developed and both pre-determined and emerging themes were identified for content analysis.

An attempt was made to capture data through the structured questionnaire on frequency of occurrence for the pronounced risks and particularly death, illness and theft for the last 3 years. Most respondents could not give a historical account. During data analysis the period of reference was restricted to the current year 2011, and previous year 2010. Incidences of death and prolonged illness were easier to capture than incidences of short illnesses. A significant effort was made to crosscheck information to ensure data integrity. Many research questions were approached from different perspectives, and through different research methodologies, to see if similar results indeed emerged. Where possible, results were also compared to the relevant literature. Focus group discussions composed of 6-10 people were used to provide qualitative insights into the data collected and a questionnaire was used to collect quantitative information.

5.6 CHAPTER SUMMARY

This chapter has covered a variety of issues that influenced the methodological approach and design of this study. The philosophical position regarding the researcher's ontological and epistemological standpoints has been presented. As a consequence, a pragmatism approach which reflects belief in the existence of an independent reality has been adopted. The combination of research methods allows the richness of the information collected from the respondents. In conclusion, therefore, this study was based on the qualitative and quantitative approach on multiple stages of data collection, both of which are complemented by the methodical procedures used to analyse the data.

There is little doubt that the choice of methodology has been an important contribution to the study of micro insurance demand in the Tanzanian context. Indeed, micro insurance demand in the informal sector is a complicated phenomenon which needs this research methodology. In accomplishing the objectives of this research study, mixed research methods were useful. To date, no comparable empirical research has, to the best of the researcher's knowledge, utilized such a distinctive approach to obtain knowledge on micro insurance demand in the informal sector. After reviewing the literature in chapter 3 and justifying the conceptual framework in Chapter 4 and the methodology adopted to accomplish the aim of this study in this chapter, the researcher is now in a position to move forward to the results stage. Chapters 6, 7 and 8 present the four research objectives findings respectively.

CHAPTER SIX: RESULTS ON RISK EXPOSURE IN THE INFOMAL SECTOR

This chapter examines the risk exposures in the informal sector and identifies the impacts of such risks. It further explores various understandings of risk events from respondents. A key contribution of this chapter is an attempt to answer the first research question, about which risk exposure brings high financial impact to the households, and the chapter also identifies potential risks which are insurable.

This chapter is divided into seven sections. Section 6.1 provides a description of data and a framework for analysis. Section 6.2 explores a detailed understanding of risks. Sections 6.3 and 6.4 are of a descriptive empirical nature and the types of risk exposures in the informal sector are discussed respectively. In section 6.5 a discussion of the insurable and non-insurable risks is presented with the aim of focusing on micro insurance demand. In section 6.6 extended analyses of insurable risks are conducted to show their impacts and the coping strategies applied for each risk. Finally, in section 6.7 a summary of the chapter is provided.

6.1 DESCRIPTION OF THE DATA AND FRAMEWORK OF ANALYSIS

The study uses a household survey containing individual level data on demographic characteristics, employment status, health status, social economic activities and use of financial services. The definition of a household is constructed to a sub-family relationship unit to include adults plus those family members who would typically live and eat together. These family members include spouses, unmarried natural or adopted children who are aged 18 or under, and children under the age of 21 who are full-time students. The household's head is classified as eligible to purchase insurance. The final sample consists of 304 people including 246 heads of household for a structured survey questionnaire and 18 households participated for unstructured interviews (personal history).

In order to understand micro insurance demand perspectives in the informal sector the research findings involves three steps. The first step establishes risk exposure faced by households and their financial impacts. In the second step the strengths and weaknesses of different risk coping strategies applied by household were analysed. The third step establishes the relationship between household characteristics and demand for micro insurance through a probit regression model[24]. Given this framework, the findings are presented and discussed in chapters six, seven and eight respectively. This chapter attempts to answer the first research question by identifying the risk exposure, their characteristics and impact (costs). The chapter analyses socio-economic risks facing households,

[24] The separate results for probit regression are presented in chapter eight of this thesis

how often they occur, the resulting cost of losses, and which risks takes most of the household's earned income.

6.2 UNDERSTANDING OF THE RISK EXPOSURE IN THE INFORMAL SECTOR

Three main understandings emerged related to risk exposure in the informal sector in Tanzania. Firstly, from focus group discussions a risk exposure is seen as events that cause financial liability. Households affected by a risky event incur a potentially substantial monetary loss. The liability which has a direct bearing on individual's well-being and causes poverty or increases the depth of poverty. Respondents indicate that apart from the physical and psychological consequences from experiencing a risk, risks events can push a household further into poverty, or drive a non-poor household below the income poverty line. A risk was explained as the reason why children's education is at stake; it affects people's health permanently or reduces life expectancy. In line with Alderman and Paxson (1994, 1995), Dercon (2001, 2003, 2005), Morduch (1995) and Adato, *et al.* (2006), there is evidence that if households have the option to insure against risk exposures, risk will have a limited impact on welfare. It is therefore exposure that causes undesirable welfare outcomes such as income poverty, poor housing, low education levels or low life expectancy. However, risks exposures are only one factor which can affect household wellbeing. Additional factors such as declining trends in economy and increases in commodity prices may also be useful factors (Mosely and Krishnamurthy, 1995; Kruger and Vakis, 2003; Alderman and Hague, 2007; Dercon and Krishnan, 2000; Foster, 1995).

Secondly, there is evidence that costly preventive measures chosen by households contribute to risks which in turn, causes poverty. These measures are expensive, inadequate and to some extent take longer to recover from after a loss event. Thirdly, households exposed to a risk suffer on-going uncertainty about whether and when a loss might occur. The households that are exposed to greater risk-uncertainty are less likely to take advantage of growth opportunities, such as investing in new technologies or additional working capital, that would be likely to lead to increased wealth and reduced poverty as in Ginnekin (2005), Mosely and Krishnamurthy (1995) and Eswaran and Kotwal (1990). As a result, households exposed to a great deal of uncertainty remain in persistent poverty.

It appears from discussions that considerable emphasis is placed on risk which causes financial burden. The financial impact depends on several variables, including the frequency of occurrence, the associated costs (impacts) and the duration or permanence of the effect. Households consider risks depending on the characteristics of the risks; there are risks that affect individuals and occur on an unrelated manner (idiosyncratic), and risks that affect the entire population, correlated among

individuals (covariate), across time (repeated). The study analyses risk exposures by looking at the financial need that takes a large portion of a household's income expenditure. In FGD the direct approach was adopted by asking respondents to rank risk exposure that they have experienced over last three years. Thereafter a more indirect approach was applied by trying to gain insights about the impact of risks by determining how crises affect their income pattern.

6.3 TYPES OF RISK EXPOSURES IN THE INFORMAL SECTOR

Using Rahman and Hossain (1995) risk framework three major risk categories were identified: - The first category of risk is lifecycle risks which stem from events such as marriage and birth, old age, and death, but also involve regular expenditures for food, housing, education and healthcare. These risks are generally predictable, which makes planning and managing them more feasible. However, they become crises if they are not adequately planned for, if insufficient savings have been accumulated to manage them, or if they occur concurrently with another risk. Secondly, structural risks that are caused by long-term or permanent changes in the national or international economy, as well as by disasters caused by seasonal or weather-related effects. The third category of risks are crisis risks, which are unexpected shocks to the household that may increase costs, drain resources, and/or disrupt its ability to generate income. These crises may have a sharp single impact (for example, business theft, fire); they may be recurring (i.e. on-going health problems); or they may be permanent (i.e., a disabling injury, unexpected death of a wage earner).

6.4 THE NATURE OF THE RISK EXPOSURE IN THE INFORMAL SECTOR

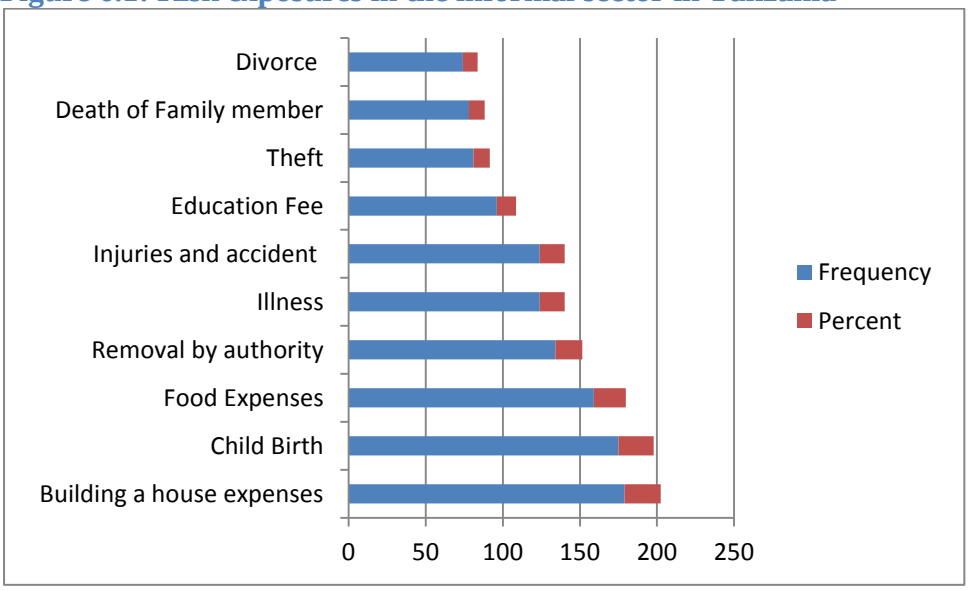
Firstly, the rates of injury, illness and mortality reported in this survey signify the presence of health risks. The pattern of risks and health outcomes indicate that a household spends a substantial amount on health risks. Food expenses represent around 20.8 percent of household spending, while cost of education represents 12.5 percent of household's spending and theft affected around 10.6 percent of the household. Other exposures that increase financial needs reported include flood, fire, divorce and dependents but were relatively less widespread.

Secondly, the household's major income was spent on risk exposure related to the cost of building houses 23.4 percent, child birth and medical expenses 22.8 percent and 16.2 percent respectively. Some risks are frequent and less severe (i.e. minor health problems), some are less frequent but when they strike they demand a big lump sum of money to recover from them immediately (e.g. injuries, medical expenses and losses resulting from fire in a business premises). These risks adversely affect the income flow of the household and raise expenditure on the lowered income.

Common risks that an informal sector household faces in Tanzania have been extracted from the survey see *Appendix C.*

Thirdly, further examination of the financial spending relative to household monthly incomes; the top ten risks that takes up household income are in the order: - House building expenses 23.4 percent of the income, Child Birth 22.8 percent, Food Expenses 20.8 percent, Removal by authority 17.5 percent, Illness 16.2 percent, Injuries and accidents 16.2 percent, Education Fees 12.5 percent, Theft 10.6 percent, Death of a family member 10.2 percent and Divorce 9.7 percent. Figure 6.1 below indicates risk exposure that takes up households earned income.

Figure 6.1: Risk exposures in the informal sector in Tanzania



Source: Household Survey 2010

The main risks identified can be classified into a more general typology that addresses the statistical probability of the risk occurring and provides a basis on which schemes and services can be developed and tailored to the community. Note the difference between covariate[25] risks and idiosyncratic risks. This distinction is important because a micro insurance technique applies for idiosyncratic risks while covariate risk calls for social protection measures. The difference between micro insurance and social protection were discussed in details in chapter two and three of this thesis.

[25]Covariate risks are risks that randomly occur but affect many individual households at a time. These are repeated shocks which put entire communities at risk and may prove very difficult to insure. However, other social protection mechanisms like labour market interventions, relief works, transfers, or development assistance may be more effective as risk-management tools in these circumstances.

Table 6.1: Typology of risks in the informal sector in Tanzania

Typology of risks	Example
Low frequency: occurs infrequently in a household's lifetime.	Serious illness, emergency hospitalization, being widowed, forced contribution tax, electricity bills, dependents.
High frequency: occurs frequently in a household's lifetime	Illness, death, food expenses, child birth, theft, school fees, cost of housing
Idiosyncratic: occurs randomly and affects the individual worker/ household	Loss of assets due to use of a particular type of risk e.g. fire, destruction and looting of assets by vandalism.
Covariate	Flooding, inflation, drought

6.5 INSURABLE AND NON- INSURABLE RISKS EXPOSURES

The findings presented in section 6.2 have led to the construction of insurable and non-insurable risk exposure in this section. The study makes a distinction between insurable and non-insurable risks to translate the information into a business proposition for micro insurance products. To qualify for economically feasible protection from private insurance, the criteria for the "ideal risk" should be met as far as possible. Firstly, insurance is based on the statistical laws of large numbers which imply that, for a pool of uncorrelated observations, the variance of the pool decreases with the number of observations (Priest, 1996). However, if insured units face highly covariate risks, the variance reduction that can be obtained by pooling is greatly reduced (Skees and Barnett, 1999; Bals, *et al.* 2006). Spatially correlated catastrophic losses can then exceed the reserves of the insurer leaving unsuspecting policyholders unprotected. The presence of highly covariate risk is a major cause of insurance market failure in many low income countries.

Secondly, the principal-agent literature identifies two primary types of asymmetric information problems; adverse selection (or hidden information) and moral hazard (or hidden action). In insurance markets, adverse selection occurs when potential policyholders have proprietary knowledge about their risk exposure that is not available to the insurer (Rothschild and Stiglitz, 1976). Insurance underwriters assign potential policyholders into risk rating classes. Because underwriters do not have access to all the relevant information, many potential policyholders are misclassified. Those who are misclassified to their benefit (detriment) are more (less) inclined to purchase. As a result the insurance program is likely to experience losses that exceed the projections used to establish premium rates. In response, the insurer may increase premium rates for all classes. But this only compounds the problem and leads to an even more adversely selected group of insurance purchasers (Beenstock, *et al.* 1986). Unless the underlying information asymmetry can be

addressed, adverse selection will cause insurance markets to fail. Moral hazard, the second common asymmetric information problem, occurs when, as a result of purchasing insurance, policymakers engage in hidden activities that increase their exposure to risk. This behavioural response leaves the insurer exposed to higher levels of risk than had been anticipated when premium rates were established. Unless the insurer can effectively monitor policyholder behaviour so as to enforce policy provisions, moral hazard will also cause insurance markets to fail.

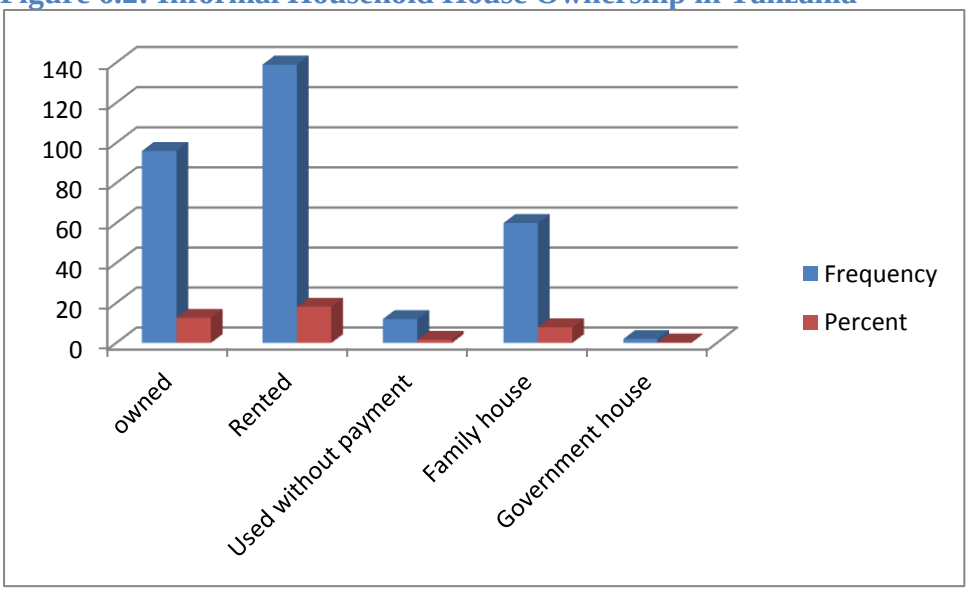
Indeed, using Siegel and Alwang's (2001) framework for an ideal risk to insure, the research has identified risk related to: medical expenses, death, theft, house building expenses, flood and fire, and education expenses are insurable. These risks are measured on the percentage of household income spent to cover risk and the financial impacts they cause to them. Each of the insurable risks will be examined and their characteristics will be analysed in the next section.

6.6 ANALYSIS OF THE INSURABLE RISKS EXPOSURE

6.6.1 House building expenses

In this expense, a financial risk arises when flows of income do not coincide with required expenditures. The general characteristics for these types of risk exposure are that they can be anticipated, they are generally predictable and that makes planning and managing them more feasible. However, certainty of the occurrence of a damaging event will not necessarily reduce an individual household's vulnerability if the capacity to protect income or consumption from the impact of the damaging event is limited. The results show that a total of n=96 (12.5%) owned houses while n=139 (18.1%) rent the houses as indicated in graph in the figure 6. 2 below.

Figure 6.2: Informal Household House Ownership in Tanzania

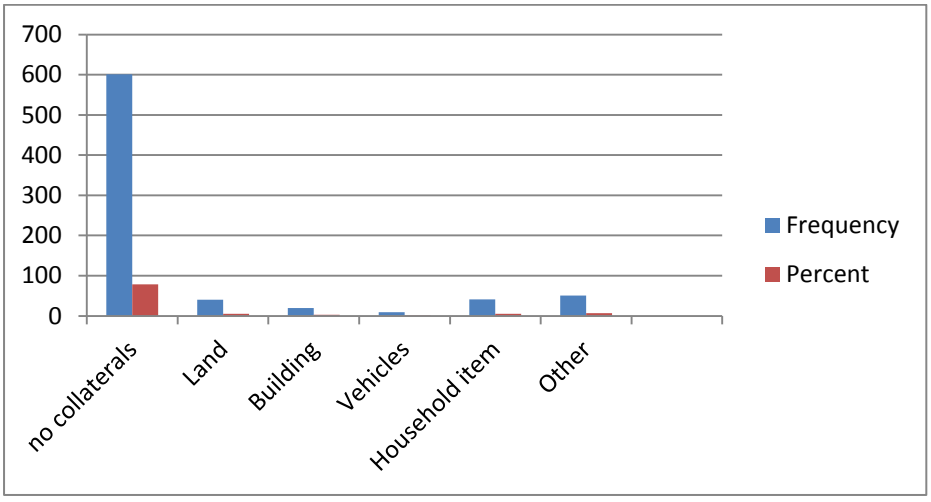


Source: Household Survey 2010

The study indicates that the cost of building expenses become crises if they are not adequately planned for, if insufficient savings have been accumulated to manage them, or if they occur concurrently with another risk. While households are generally aware as to whether and when these events will occur, the high likelihood and frequency of their occurrence creates an on-going uncertainty as to whether or not the household will have sufficient income or assets to cover the cost associated with this event. Indeed, research finds that irrespective of their status (legal or illegal) the following are common characteristics of most informal household housing settlements; they are built and serviced incrementally, ensuring flexibility on the part of builders and owners using personal savings since formal housing systems or markets are hardly realistic options.

The informally built houses exhibit high variations in types and quality of construction, ranging from traditional construction materials (e.g. mud and pole or thatch) to modern quality components (concrete blocks, corrugated iron, zinc, or tin roofs). The greatest motivation for house possession is that, it allows an individual household to access to large amount of loans to expand a business by using buildings as collateral. The household survey indicated the majority do rent the houses which suggest that peer pressure, income generating purposes and escaping high rent payments are the major motives to build a house.

Figure 6.3: Informal Household's Collateral used for borrowing



Source: Household Survey 2010

Specifically, the results from FGD showed that school fees, food expenses and cost of building a house emerged as significant risk exposure. Results suggest that life cycle events have a severe impact to most households. Their frequency makes managing them a pressing need for many informal households. From an insurance perspectives house building expenses cannot be associated with risk, as risk is an unexpected event causing financial loss. House building expense is predictable and expected. However, FGD participants indicate that this is one of the major causes of financial burden in their lives. Housing is often the biggest expenditure of informal household

families. For them their house is also the greatest source of wealth. The study reveals that households spend over 23 percent of income for housing purposes. Given the percentage of income that a household spends and the duration that takes (more than ten years) on housing expenditure we consider this risk in our analysis. The analysis conducted in the survey was supported by information extracted from the focus group discussion as indicated in Table 6.2 below.

Table 6.2: Focus Group's Discussion- risk exposures ranking

Group Numbers	1	2	3	4	5	6	Total
No of people in FGD	7	7	7	7	6	6	40
Building a house	4	5	4	4	3	4	24
Paying school fees	3	2	4	4	5	5	23
Food expenses	5	2	2	2	4	5	20
Bills(Rent, electricity, water etc)	2	1	1	1	2	2	9

Source: Focus Group Discussion

Building a house received the highest financial spending priority for most households interviewed, except in families where land is handed down between generations. Respondents reported that land prices have escalated rapidly in recent years. A typical plot for a house might cost 500 thousand shillings to 10 million Tanzanian shillings ($500 -$10,000). Many households' families cannot pay such prices and therefore have to share small plots with their parents or rent rooms for life. Construction expenses for building a house are in range of 5 million to 20 million Tanzanian shilling ($5,000 -$20,000) in high density areas only. For prime areas and low density prices tend to be far higher. Those who do not own a house highlighted rent as financial stress, particularly when coupled with other economic pressures such as illness or school fees. Monthly rent ranged from US$30 to $100 per month depending on the location and number of rooms required.

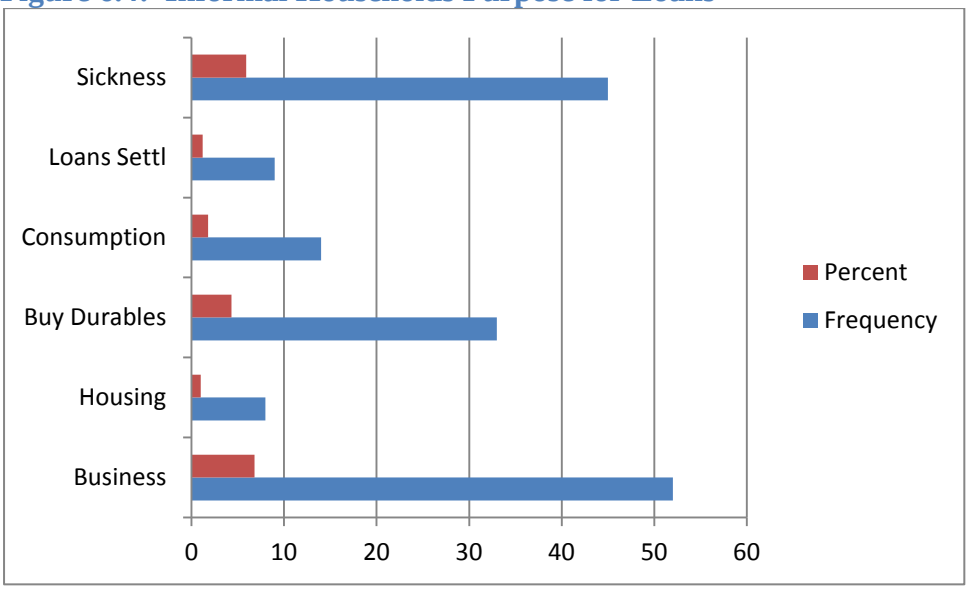
The major technique applied to cope with housing related expenses are use of personal home saving, households saving in order to purchase building materials. Most families plan well in advance for the expenditure of home construction. According to the FGD most families aim to have 60-70 percent of the total expense in hand before starting the house building. The survey reveals that over 40 percent of the respondents use their own saving to respond to different risks including house building. The respondents indicated that they kept some savings at home with an average balance of Tsh. 2,000 (US$ 1.5) per day. After saving at home, informal saving techniques (as discussed in chapter seven of this thesis) are the second most common type of saving practised by respondents. Informal savings techniques assist informal households to accumulate capital for a variety of

purposes, including the cost of building a house, business investment and as a crisis buffer, although their usefulness as a coping strategy is somewhat limited. The research identified that informal group savings dominates informal sector households.

There is evidence that apart from saving some families are forced to sell off part of their inherited land or physical assets in their possession in order to obtain the money needed for home construction. The household survey indicates that 38.6% of the households protect themselves from risk-induced losses by selling a stock of physical assets. Availability of surplus funds is an opportunity to buy more assets, which they were ready to sell to raise extra cash to build a house. Households in the informal sector often acquire extra assets such as radios, cassette recorders, refrigerators, televisions, VCRs and stoves. The FGD participants argued that rather than stashing away spare cash, they buy appliances above and beyond their households' needs so that they can sell them during cash flow shortfalls. These findings indicates that savings-in-kind seems to be more appropriate for risk management than cash savings because appliances are basically inflation and devaluation resistant. While most people buy these appliances because they want them, a large number of households are ready to sell off their assets as a coping mechanism although this does serve as a last resort.

Borrowing from micro finance institutions for housing purposes was practised by a few respondents in the informal sector. The data reveals that most of the respondents will borrow for business and sickness purposes, rather than for building purposes. The findings indicate that 1.5 percent will borrow for housing purposes, 6.8 percent will borrow for business purposes and 5.9 percent will borrow sickness purposes. Figure 6.4 below indicates the borrowing purpose.

Figure 6.4: Informal Households Purpose for Loans



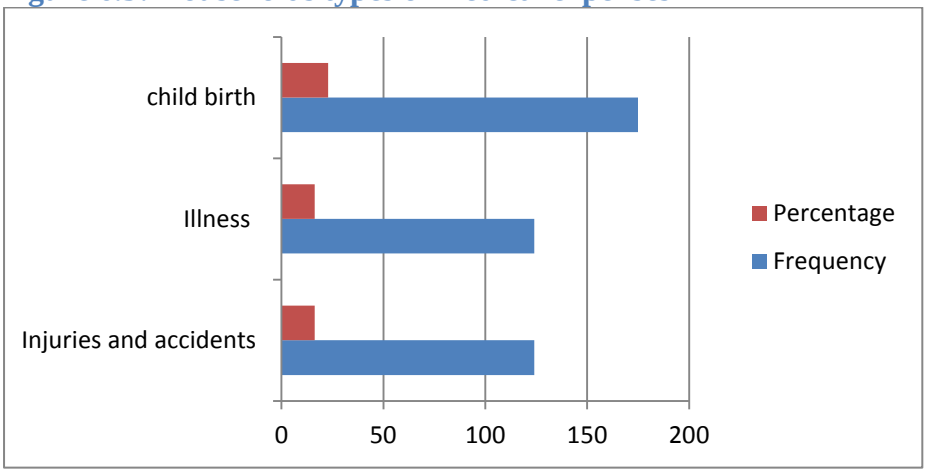
Source: Household Survey 2010

Major micro finance institutions providing micro credit loans include the Savings and Credit Society (SACCO) registered under the co-operative society act whose main function is to promote savings among its members and to create a source of credit to its members at a fair and reasonable interest rate. Generally, SACCOs are member based and their main source of capital is share holdings and member deposits. The use to which a loan is put is determined by the shareholder and can include housing. The loan size depends on the member's shareholdings which also provide the collateral for the loan. A detailed study of 5 borrowers from the FGD participants that was carried out by author shows, among other things, that: for the house owners who owned medium size houses, loans were used for room extensions and alterations; loans were relatively small and were issued repeatedly (more than three times). For example, the average loan obtained by each one of the five households was about TShs. 2,000,000 ($2000) and the disbursement was usually TShs. 200,000($200); followed by TShs. 400, 0000 ($400) and so on. The total loan amount was not adequate to complete the renovations. The owner households had to top up the amount from other sources. Tenants lived in the houses and monthly room rentals were adequate to repay the loan; and all borrowers admitted that the loan was an important catalyst for the house improvement.

6.6.2 Medical expenses (health risk)

The medical expenses were found to be the second highest risk exposure in the informal sector in Tanzania. Health related risks are stressful events for households because; its expenses cannot be postponed. They must be taken care of immediately or it will be worse. The results indicate that around 40% of the households incur medical expenses in the form of injuries and accidents, child birth and illness. Figure 6.5 below indicates types of medical expenses incurred by households.

Figure 6.5: Households types of medical expenses



Source: Household Survey 2010

The findings suggest that health risk exposures are a source of negative financial impact to many households due to the nature of its occurrences that is, it can happen to any family at any time, and

cannot be predicted. Households are especially vulnerable given their limited resources; they cannot afford periodic medical checks and once they are diagnosed, it is often too late to treat the disease. The financial impact of medical expenses varies. Generally, illnesses which require hospitalization have the largest impact on a household budget. Small illness can have a major impact on a family if they happen often enough or affect several members of the households at once. The harshest impact on a household comes from long-term illness and major injuries which require multiple hospitalizations. For example the FGD participants explained that "*she got sick for about one week ago; she thought she will be fine, if she just rested for few days. She was wrong. She ended up admitted and hospitalized for much longer period. During this time she stops attending to her business (selling food). Her only income generated over time was entirely spent for medical costs. In the end she became desperate that she finally sells her second house (formerly used for renting - generating income) in order to pay for proper health care. By the time she recovered she had suffered multiple losses.*

Everyday illness can be checked and treated at the government medical centers or district hospitals with reasonable expenditure. They are usually crowded and associated with shortages of medicine. The quality of health care in government hospitals and clinics is generally considered poor; hence households incur high expenses for medical care in private clinics. Many respondents identified high cost of prescriptions as a significant financial burden. All told, medical expenses have escalated rapidly in recent years. The monthly household expenditure information solicited from the structured interviews indicated that the average household spent US$10.60 on health expenses, which constituted 6 percent of monthly household expenditure. Most of the amounts given were for expenditure on medicines either with or without prescriptions from the doctor. Indeed, the cost of prescribed medications was a major complaint in the FGDs. In government clinics and hospitals where low income households usually access medical services, inexpensive health care is available for a registration fee of US$0.66 and monthly contribution of US$0.70; children under 5 years old do not pay any medical charges.

Serious disease brings much more potential for adverse impact. For example *Mr. "A", reported suffering from stomach diseases, since 2007. His treatment has cost him and the family a total of Tsh. 300,000/- ($300). Throughout the same time his wife has suffered pregnancy complications and a child died and they had to pay Tsh 250,000/- ($250) plus funeral costs. However, she (wife) has to remain hospitalized for the next two weeks and attend medical treatment after every week. To cover medical bills families have taken loans from MFI and sold a family asset of a plot (piece of land).*

Four major impacts were derived from these quotes; firstly, when severe health risk exposure impact occurs to households who are temporarily employed, they face greater risks of losing jobs in

cases of both short and long-term illnesses and emergency care and have lower productivity and there is also an increase in the possibility of losing a job due to missed days at work. Secondly, the disease reduces the earning capacity of the family as one or more wage-earners become debilitated. Thirdly, the emotional stress of a family member's illness can lower the productivity of the whole family. Fourthly, the medical checks and treatment for serious illness can be a huge economic burden, beyond the capacity of the typical informal households in the area. Added to this are transportation costs, as well as accommodation and food for family members who accompany the patient to care for him/her while in the hospital. According to the respondents in the FGD, average expenses for long-term care, intensive care, or an operation would fall in the following range: Less serious illness (10-50 thousand Shillings =$10 -$50), More serious illness (50 -200 thousand Shilling = $50 -$200, Fatal illness (200 – 500 thousands Shillings =$200 -$500, Most costly illness –Above 500 thousand shillings =>$500).

The easiest and quickest technique used to finance health risks are personal home savings[26]. In second place that respondents will look to cover medical expenses costs from their current business proceeds; if current income is insufficient, households may start to use up capital in their business. Moreover, households prepare for emergencies such as illness by engaging in multiple business activities. The FGD indicates that half of the participants do engage in multiple business activities to smooth seasonal fluctuations in income. For some, this diversification becomes permanent and it eases cash flow problems when one line is not doing well. It is common to find a household running several businesses that have varying levels of cash flow at different times of the year purchasing assets. Indeed, selling of assets in their possession to cater for this type of risk is also very common.[27]

The study shows that when savings and assets are insufficient households will borrow from whatever sources they can. Three sources are identified, firstly, FGD participants pointed out those families who have one person in a formal sector job often have access to interest free loans through their companies. Loans payment is deducted from a workers' paycheck. The amount that can be borrowed depends on the company's loan policy. The person or family retains the risk of the loss themselves by borrowing from a friends' network, and nearly 40 percent of the respondents were once assisted either freely or through borrowing from members of the family or friend's network during financial difficulties or need.

[26] Personal and group saving techniques discussed in section 6.4.1 apply to most of the risk exposures in the informal sector. Households kept saving on a daily basis a minimum amount of $1.5 for emergency and other purposes.
[27] As noted in section 6.4.1 households often acquire extra assets so that they can sell them during emergency risks like health risks. Some households beyond selling assets in their possession also save in the form of assets other than cash because appliances are inflation and devaluation resistant.

Secondly, there is great deal of evidence that borrowing from MFI Credit lines[28] and from moneylenders is widely practised to meet medical expenses**.** However, there is evidence to suggest that access to an MFI loan reduces reliance on the moneylenders; several focus group participants said: "*We stopped borrowing from moneylenders ever since we started borrowing loans from MFI.*" In general, the high interest rate of 50 to 100 percent per month is considered the main deterrent to this source of credit. The interest rate is usually for any period less than a month and hence a minimum rate even for a loan repaid in a couple of days. Non-payment of debt by the end of the one-month term results in a doubling of the interest payment. Seizure of assets is the penalty if non-payment continues for a couple of months. According to the FGD participants, most moneylenders lend out between US$25 and $150. The interesting feature however is that the attitude toward moneylenders is mixed, and for a business opportunity that requires an immediate injection of capital households would prefer moneylenders. Moneylenders lending, is something most people try to avoid because of the high interest rates and concerns about having their assets seized but occasionally they are used to take advantage of a business opportunity since their services are quicker, and easy with simple procedures. Thirdly, the use of medical health insurance is limited to 14% of the respondents. There are two types of health insurance schemes i.e. community health funds (CHF) managed by VIBINDO and an NHIF[29] scheme. However, in case of CHF, the level of enrollment decreases due to household's change of jobs and working locations.

6.6.3 Education Expenses

This risk does exist as a long-term expenditure in many families. Educational expenses may occur over the course of 20-25 years for families with 1-6 children. Most of the respondents perceived school fees among the major risk exposure that affect the household budget. The pressure to find money to pay for school fee was reported to affect informal households therefore is an important aspect in our analysis. Education related expenses are critical, in part because of the high value that the respondents place on children's education. Due to economic reforms in the early 1990s, schools began asking parents to assume a greater share of expenses through higher school fees. As for school fees expenses the major characteristics observed during the study was that both private and government schools do exist. But most of the respondents sent their children to government schools since costs of private schools are higher. The cost of going to school includes registration fee (once a year), tuition (twice a year), examination fees (twice a year), uniform, supplies (books, notebooks), meals and transportation.

[28] The result indicates that a larger number of households would borrow from MFI for business and sickness purposes than would borrow to cover the cost for building a house. The major MFI credit lines operating in the informal sector in Tanzania are explained in Chapter seven of this thesis.

[29] National Health Insurance Fund is a compulsory insurance scheme for civil servants' in Tanzania. The scheme provides coverage to a worker plus any other four households or dependants. The scheme provides general health services benefits to its members including hospitalization.

Kindergarten is necessary not compulsory. Most households would prefer to send their children to attend this level. Universities and vocational schools bring additional expenses. Most education expenses occur at the beginning of the school year in January (kindergarten to secondary level) and October each year for university students. Most of the household's families often adapt to the fees for primary schools, because the fees are reasonable and anticipated.

The financial impact on education expenses become especially significant for households whose children enroll in secondary and university/vocational schools. Respondents estimated the average financial impact for school fees for children of different educational levels as follows: Kindergarten: 2 -6 years child costs around (US$150-250) per year and Primary school: 7 -13 years old child costs per pupil/year (US$100 -$150) (only transport and meals)**;** Ordinary level Secondary school/vocational training: 14 -17 year old child costs per pupil/year (US $400-$600) depending on location of the school and High Secondary School: 18-19 year old student costs per student /year (US$500-$700) depending on the location of the school**;** University: 20 and above years old student costs per student/year (US $800-$2000) depending on the university and location. There are student loans available provided by the state for university applicants with conditions.

The major technique used for educational expenses are personal home saving; Use of Business Proceeds; Informal Savings Clubs; and Selling of Assets (see discussion in section 6.4.1). However, the FGD reveals the unique technique of reducing expenditure on non- food items were applied as way to increase household saving. The household reduces expenditure on expensive foods (usually high protein content foods such as chicken and beef), compromising the nutritional value of the meals. Other respondents indicated that, if reduced consumption did not free up sufficient funds, they were likely to borrow from friends and relatives, often without interest. Borrowings from friends and family are typically interest free, but the amount available is usually limited and also has a short duration.

6.6.4 Death of household member

The agony due to deaths of a loved one has been consistently noted as a financial burden. A survey indicates that 12.5 percent of the households surveyed have experienced loss of a household member. During the FGD discussion, the research revealed that the financial burdens resulting from the deceased was not due funeral expenses but rather the member's contribution towards the total household income during his lifetime. The most expensive death-related loss is the premature or unexpected death of a breadwinner; the household has to find a way to replace the lost income.

The financial impact for the death of member of the household is significant. In addition to pain and emotional suffering the family goes through the (aside from the emotional loss) one-time component

cost of proper burial, cost of settling the deceased's accounts and potentially, an on-going component to replace the income that the deceased formerly provided to the family. Other adverse effects that bring huge financial risks for families include lowered productivity within families over both the short-term and long-term. For example the cases extracted from the FGD illustrated the point in question *Mr. "E" is self-employed and lives in a family house (owned by his father) with his step mother. He normally received an addition working capital from his father to expand his business on a monthly basis. His mother is divorced, his father died in early 2009. His step mother chased him out of the family house immediately after the death of his father. Court proceeding are taking longer than expected; his business income is shrinking because of the increased expenditure resulting from renting out, legal expenses and less capital invested.*

Another impact is the changes in life styles for example *Mr. "F", twenty two years old lost his father who left her mother (unemployed) with three children. Funeral events and costs were well attended by relatives/siblings/friends and neighbours because the father was a popular leader in the area. He has been student at the time of his father's death. Problems start to unfold because of the increased expenditure beyond capacity to pay (school fees, limited assets to sell and no monthly income) he has had to leave school and establish a small business to support the family and three young siblings. The father's premature death causes a lot of changes in their family life styles.*

According to respondents, expenses for a typical funeral runs 100 – 500 thousands Tanzanian Shillings ($100 -$500). These sums of money are quite high in this socio-economic context, though participants noted that the financial stress for funerals tends to be mediated by families and friends. There is evidence to suggest that funeral costs in most Tanzanian communities are financed by relatives and neighbours since social commitments are still very high.

The major techniques applied to handle this type of risk exposure include the use of personal saving, use of business proceeds[30] and family and friends contributions. The primary social connection tends to be proximity, either from neighbours, other market vendors or religious group members. There was evidence that the building of social networks to fall back on in times of need is regarded as a type of ex ante risk management strategy. This ranges from an implicit understanding between households and to community ties in general. There is a strong expectation of reciprocity. The FGD sessions considered friends and families to be social capital utilized by households. Reciprocal support is most common for household crises such as death and illness. According to many respondents, when struck by death of a household member for instance, sometimes you don't have to seek assistance; friends and relatives make contributions on their own as in the following case: -

[30] Explanation the same as that in medical expenses

Respondent aged (38) lost a husband in 2009. Funeral expenses, she spent Tsh. 100,000/- ($100) from her own pocket, received Tsh. 150,000/-($150) from friends, and Tsh. 300,000/-($300) from relatives. She received a lot of financial assistance from her husband's relatives because they felt more responsible for the funeral expenses.

According to the FGD families receive financial support from relatives/family/friends/neighbours in the form of cash envelopes/labour at funerals. An envelope for a funeral might be Tanzanian Shillings 5000- 10,000 per person (US$5-10). Relatives or close friends might send Tanzanian shillings 10,000 - 50,000 ($10 - $30) per person. Contributions to that amount depended on both their economic status and the strength of their relationship to the deceased. When death occurs every member shows respect and even those who are rarely involved in family issues will wish to assist with funeral costs. In total, respondents estimated that families on average can cover 30-60 percent of funeral expenses via external support. Funeral expenses typically are shared among siblings, especially when a parent dies. The shares are not equal (sons normally contribute more than daughters), but all make a substantial contribution. The use of life insurance is limited to a few respondents mostly members of MFI with credit line access to life insurance, and the policy covers funeral costs for the policy holder. An example of an life insurance policy can be seen from the first micro insurance scheme[31].

6.6.5 Theft and covariant risks

In the FGD sessions, a participant does not consider theft as major financial risks and mass, covariant risks like floods[32], earthquake and fire calamities seem to be remote in occurrence. However, their consequences to household income are huge. Indeed, little evidence of floods was reported during the rainy season. In this study the data provides a smaller portion of loss of assets due to fire, floods, theft, drought, and riots because these events were not common in Tanzania. Fire incidence was reported at a very minimal level which was an unexpected result. Floods occur seasonally during the rainy season each year affecting non movable assets and were not considered to be major risks. Generally these exposures affect those families who live in unplanned lowland areas where the water drainage system cannot handle heavy rains.

[31] The First Micro insurance Agency Limited (FMiA), was an insurance company focused on microfinance borrowers in Tanzania. They provide insurance services for small-business owners and low-income earners. The FMiA involves people who are members of the Savings and Credit Cooperatives Organizations (SACCOS), cooperatives, village savings, loan associations, banks and other forms of microfinance institutions

[32] Risks are said to be covariant when their pattern of occurrence is the same for a substantial portion of the population. For example, the risk of flood damage of household living in the un-surveyed lowland areas in Dar es Salaam is covariant because a substantial portion of households are significantly affected when a flood occurs. Risk whose pattern of occurrence varies for each household affected are called idiosyncratic.

6.7 SUMMARY OF THE CHAPTER

This chapter has explored the financial consequences brought about by the risk exposures in the informal sector, by describing characteristics and their impacts to the household's earned income. The results indicate that informal households face a variety of risks that provide unique challenges to their incomes. The household incomes were interrupted occasionally by unforeseen events like increases in food prices and medical expenses resulting from illness and injuries.

The results from the data reveal three important outcomes. Firstly, that the most important risk exposure relates to house building expenses, medical expenses, education expenses and death related costs. A theft, flood and fire risk seems to be remote in occurrences.

Secondly, it appears from the data that there are great variations on impacts on risk among households depending on the family background, economic status and the groups they belong to. More significant impact on risk exposure relates to major health problems which require hospitalizations and proper diagnosis.

Thirdly, there is evidence of collective and group responsibilities on handling risk exposure. Significantly, findings show that death related risks are taken care of largely by families and friends networks.

Having identified the major risk exposure, the next chapter will therefore focus on furthering the analysis on risk coping strategies used in the informal sector in Tanzania. The analysis will highlight weaknesses and establishes the attributes of the informal techniques that can be applied in micro insurance products design.

CHAPTER SEVEN: RESULTS OF ANALYSIS OF RISK COPING STRATEGIES

The aim of this chapter is to present and discuss the finding related to risk coping strategies used in the informal sector in Tanzania. The chapter focuses on the second and third objectives of the research by examining the strengths and weaknesses of risk management techniques in place. A key contribution of this chapter is to highlight the gaps and establish the attributes of the informal techniques that can be applied in micro insurance product design.

The chapter is divided into six sections. Section 7.1 provides a description of the major coping strategies in place in the informal sector. Section 7.2 discusses the major features of the risk coping strategies in place. Section 7.3 provides an analysis of the major strengths of the coping strategies in place. Section 7.4 identifies the limitations of the coping strategies. Section 7.5 presents a social protection case from the findings and finally section 7.6 provides a summary of the chapter.

7.1 MAJOR COPING STRATEGIES IN THE INFORMAL SECTOR

The finding indicate that a coping strategy depends on the type of risk and the ability of households to cope with their consequences; it differs from one risk exposure to another and whether the risk in question is predictable or unpredictable. The data suggests that the coping strategy applied depends upon the existence of a household's stock of physical and financial assets, the nature of the social networks the household is connected to, the frequency of risk exposures and expectations about possible future risk exposures.

Table 7.1: Major coping strategies and risk management techniques applied.

Technique applied	Frequency	Percent	Percent Applied	No of Risks	Grade
Use of personal savings	307	40.1	50	*****	A
Informal Saving Clubs	300	39.2	50	*****	A
Use of business proceeds	296	38.6	40	****	B
Selling of Assets	84	11	40	****	B
Reducing Expenditure	17	2	10	*	D
Borrowing: Friends and Family	228	29.8	40	****	B
Borrowing: Banks and MFI credit	33	4.3	20	**	C
Borrowing: Moneylenders	19	2.5	10	*	D
Health/funeral Insurance	98	14.9	20	**	C

Source: Household Survey and FGD participants 2010

7.2 THE FEATURES OF COPING STRATEGIES

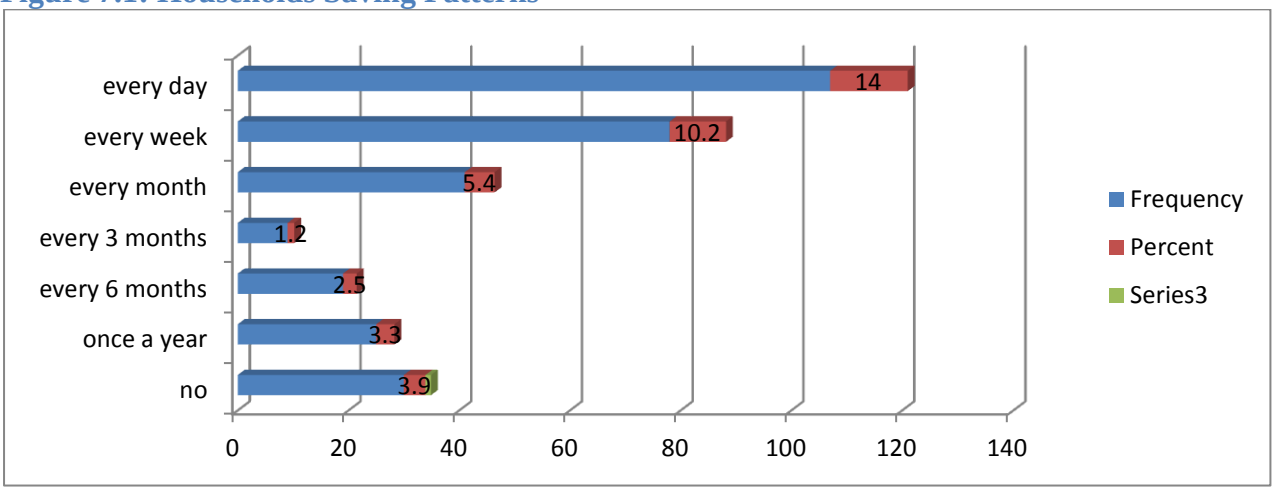
As indicated in table 7.1 above; it appears from the data that there are four features of risk management applied to cover large number of risk exposures. These are self-insurance elements, informal social networks, and member based micro finance and funeral/health associations.

7.2.1 Self-Insurance

These techniques appear to be more frequently used than others to cover many risk exposures; they were used to cover the cost in respect of building a house, medical expenses, education expenses, death and theft. There are three aspects of self-insurance that is; personal savings, use of business proceeds and selling off assets. Personal saving is directly linked with level of individual income and expenditure. Saving works as proxy insurance during the contingency and plays a crucial role in households' decision making. In a standard saving model, households calculate how much money to spend in each period and how much to save. However, in practice, households' expenditure overrides cash inflows or the income schedule. So the scope for saving remains secondary, unless it is mandatory to save (Deaton, 1991, 1992).

Data suggest that saving is influenced by the nature and condition of households' income. The research findings indicate that daily saving was well practised; the respondents indicated that they kept savings at home with an average balance of Tsh. 2,000 (US$ 1.5) per day. The interpretation is that majority of the respondents are self-employed and they own a small business which provides them with income on daily basis. The study reveals that over 40 percent of the respondents use their own savings to respond to different financial needs. However, expenditure puts households in a low profile cycle of competing financial pressure and saving. In other words households earning at a subsistence level find it difficult to accumulate savings.

Figure 7.1: Households Saving Patterns



Source: Household Survey 2010

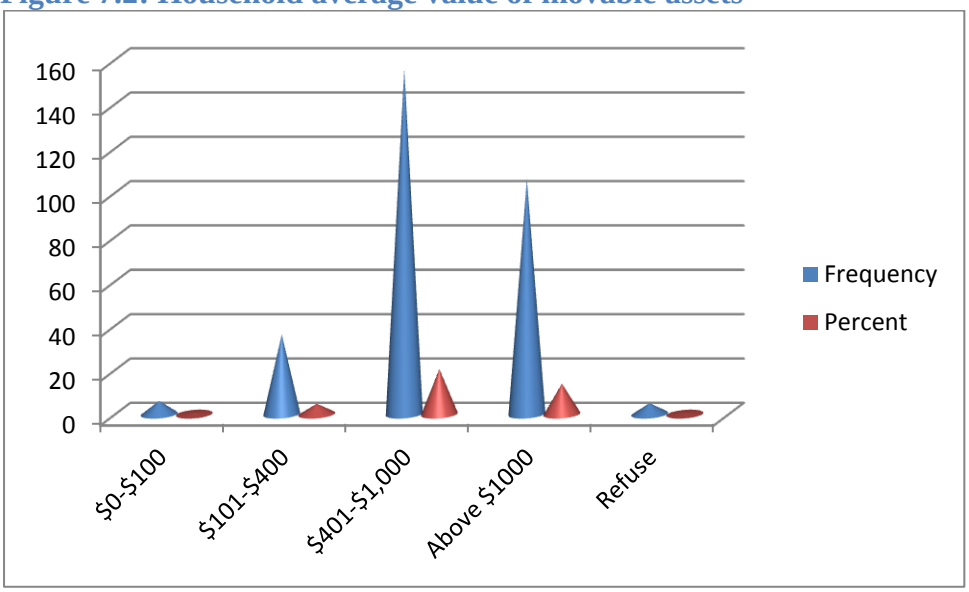
It appears from the data that there are both push and pull motivations behind saving behaviour. On the one hand, explanations suggested a lack of attractive formal savings facilities as a major factor as explained by FGD participants: - *"the respondent in the FGD argued that "you are better off putting your money back in the business." On the other hand, there were strong indications that reinvestment also reflected a desire for business growth. "My business capital is too small…if it is to grow I have to keep pumping in more money." Hence this reduces the amount of savings.* Therefore, household saving patterns though practised, for less disciplined households savings become inadequate to cope with risks. Focus group discussions revealed that, although they usually maintained some savings, most households were more inclined to reinvest surplus funds into the business rather than save.

The second element of self-insurance derived from the data is the use of business proceeds; this was applied by 38.6 percent of the households interviewed to cover four types of risk exposure. The strategy seems to be the first line defence during financial needs. To increase income households do diversify and engage in multiple business activities to smooth seasonal fluctuations in income. Hence, data indicates the diversification process allows households to accumulate monthly annual income ranges from $301 to $600, the average monthly accumulated earnings[33] of the households surveyed ranged from $101 to $600. The unit of protection in this technique is the level of income obtained from diversified sources. During the survey a diverse range of activities were uncovered. These activities were characterized by their small scale, labour intensive work practices and small amounts of fixed capital.

The third element of self-insurance is that households insure themselves by building up assets. The study indicates that precautionary savings provides quite an effective, even though imperfect strategy for households in dealing with income risk. The choice of assets being held depends on the extent and speed with which assets can be made liquid which is very important from insurance point of view. Household asset holding patterns in the study areas is presented in figure 7.2 and 7.3 below. The coverage provided by asset based saving depends on the size of the assets. This strategy is accessible to most households depending on how much money they are able to save. The data indicates that the majority of households owned total movable assets worth $401-$1000 which can be sold in case of emergencies.

[33] Most of the household incomes are generated from business proceed and sale of labour

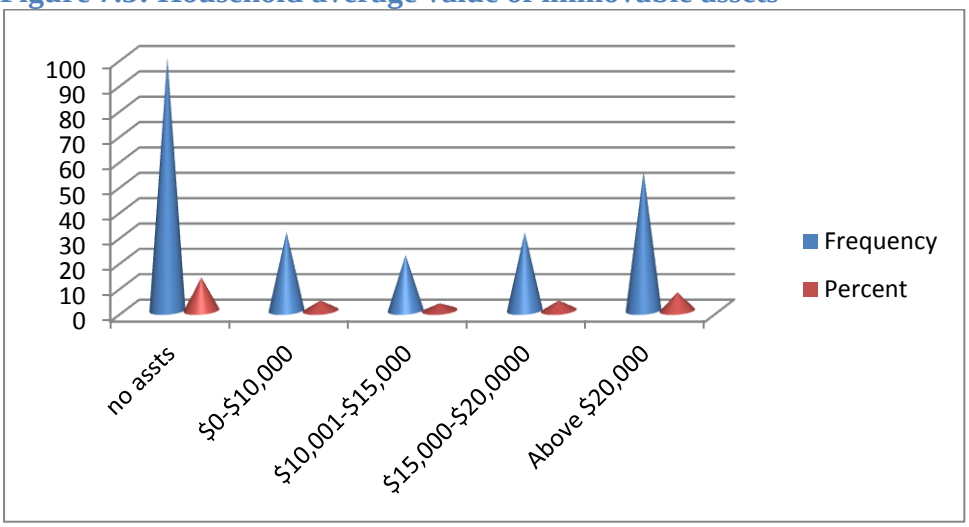
Figure 7.2: Household average value of movable assets



Source: Household Survey 2010

A total immovable asset includes plots, land and property. The household survey indicates that the majority of households do not own any assets. However, there are reasonable numbers of households who have immovable assets worth above $20,000. Comparing this with total immovable assets and movable assets we find the majority of households own movable assets which are easy to sell and there are not very expensive unlike immovable assets.

Figure 7.3: Household average value of immovable assets



Source: Household Survey 2010

The level of utilization of self-insurance techniques underscores the existence of low uncertainty avoidance behaviour within the households discussed in chapter four of this thesis. The findings show three major weaknesses with respect to self-insurance techniques. Firstly, the costs of most significant risk exposure (see chapter six) far outweigh the monthly or weekly household income. The income-based strategies are costly preventive measures, which in turn, contribute to poverty. As

indicated by Wood (2003), the consequence is that households cannot enter into high-risk activities, and since downside risks are too high, the decision not to invest in a high risk but high return activity means foregoing income. To handle income risk, households have to enter low-risk, low-return activities. The consequence is further impoverishment, or at least increased inequality. Indeed, the same evidence was identified by Morduch (1995) and Dercon (2002), using the ICRISAT sample which shows that households with limited liquid assets grow proportionately a low-return, low risk crops.

Secondly, the cost of holding different assets seems to be too high for most households. The main problems associated with this strategy are: a) having sufficient storage space and b) being able to sell them at an appropriate price when cash is really needed. In many cases households will first borrow to pay for an emergency and then sell their assets. The household survey indicates that 38.6% of the households protect themselves from risk-induced losses by selling a stock of physical assets. Deaton (1991) sets out clearly the benefits of self-insurance via asset saving when credit markets are imperfect. The model shows that if households are infinitely lived then households will build up assets in good years to deplete in bad years. Assets will not be systematically accumulated to very large levels due to impatience. However, it is not easy to draw policy conclusions from this work, and any way the results follow largely from the impatience of households: if only they were patient, they would build up sufficient assets to cope with future stress.

In practice, assets are risky, not safe. The covariance of asset values and income due to risk exposures makes self-insurance a far less useful strategy than it seems. Asset market difficulties that face households suggest that the portfolio of assets available to the households is far from ideal. Another form of risk related to assets is not so much related to the return per se, but to the terms of trade of assets relative to consumption. If negative risk exposures occur, households would like to sell some of their assets. However, if everybody wants to sell their assets, asset prices will collapse and the consumption that can be purchased with the sale of assets will be lower. Similarly, when a positive shock occurs, all will want to buy assets for future protection, but then prices will be pushed up. In all, self-insurance becomes far more expensive as a strategy.

Bevan, *et al.* (1991) reported on the construction boom taking place during the coffee boom in the mid-1970s in Kenya; prices for construction materials and other durables increased considerably. Households tried to put some of their positive windfalls into more assets, but their choice set was strongly restricted due to the macroeconomic policies. Moreover, access to relatively safe and profitable assets, which might be useful for self-insurance, may be limited. Unevenness in assets may be a reason why households cannot protect themselves easily via assets. While risk in returns and terms of trade may limit, in certain circumstances, the use of assets for a risk management

strategy, there examples where assets contribute as risk coping strategy. This study suggests that integrating asset markets with the wider economy could avoid much of the often-observed covariate movements in asset prices and incomes. For example, if a household in the informal sector is holding assets, a low cost financial saving could be facilitated, and then communities could use alternatives to physical assets for saving of wealth. Introducing a focus on savings for self-insurance in the micro finance schemes could be of help.

Thirdly, diversification of sources of income does not necessarily imply that the household follows a high-risk strategy. Also, entry constraints limit the diversification that can be achieved, leaving only low return activities free to the households. When a large negative event occurs, the usual households' activities may not yield sufficient income. If all households in a community or region are affected, local income earning activities are unlikely to be sufficient. The findings show that substantial scope for diversification exists, but income remains highly variable. The income diversification for effective risk-reduction appears to be limited. Observed diversification patterns are often not aimed at reducing risk, since households face entry constraints to enter into profitable activities.

The study finds that informal households work with very little capital and utilize a low level of technology and skills. They generally operate at a low level of productivity which provides irregular income and employment to meet some of the daily needs. The findings indicate that profitable or mean income preserving diversification is not easily achievable; household have to enter into low return-capital extensive activities, since high return activities require capital. The households are less diversified despite facing more serious consequences of bad income draws with limited risk management instruments. The implication is that many diversification strategies are actually mean income reducing, making them less interesting for households; lower risk will have to be weighed against low returns, providing another reason for the limited income smoothing achieved in practice.

7.2.2 Family and friends network

The second feature derived from the data is the dependency on family and friends networks. This suggests that Tanzania is a collectivistic society. Networks of friends and families are mainly coping mechanisms that depend on family (nuclear and extended) and other networks of friends. Kinship and geographical proximity between neighbours assume fundamental importance in certain types of locality and are particularly activated during periods of social and economic uncertainty. The build-up of reciprocal favours between neighbours thrives among cohesive, informal households where resources for satisfying needs in other ways are low. The study finds that the strategy was used to finance costs related to medical expenses, education fees, death of a household member and theft. Friends, relatives, neighbours and fellow businesses represented key social assets for most FGD and

household survey respondents. This support typically emerged in the form of reciprocity: "Assist someone today in order to be assisted some other time when you are in need". Reciprocity involves the mutual obligation to give and to receive. It expresses and cements a social relationship between giver and receiver. The product or service exchanged symbolizes the underlying social relationship and has value over and above its material worth. In practice then, the commodities and services exchanged tend to lie outside market calculations of the value of the exchanges. Rather, they are characterized by the principle of reciprocity which mutually obliges the parties concerned to enter into binding relationships with other households.

The research suggests that the habit of share and share alike is easily understandable in a community where everyone is likely to find himself in difficulties from time to time, for it is scarcity not sufficiency that makes people generous. He who is in need today receives help from him who may be in need tomorrow. These extended kinship networks provided a major source of social and economic support for those in need. Nearly 40 percent of the population indicates to have used this strategy for different financial needs. This research finds that the reciprocity was paramount and bound kin, neighbours and friends to each other as in Dercon and Krishnan (2005). The data suggest that most households did not have sufficient income to meet their own needs. Hence, they were often compelled to create and maintain supportive relationships within their community. Out of these relationships emerged reciprocal transactions which bound households together and helped strengthen social relationships. These reciprocal transactions symbolize the social and economic interdependence between the households involved.

Although the relationships are quite complicated, family support appears to be motivated by two main factors. Firstly, people give money or other assistance in times of crisis on the expectation that recipients will return the favour in the future. This informal obligation seems to be fortified through participation in other social structures that increases the likelihood that one will actually benefit in the future. A second motivation is family obligations, for example to give money to needy dependents. This obligation is not accompanied by any expectation of reciprocation. Since some extended families only include one or two persons who earn reasonable wages, family obligations can represent a significant expense. Many respondents consider the family and friends as an effective, easy coping mechanism. However, major weaknesses in relying on friends and family are the availability and reliability, incomplete protection and vulnerability to covariant risks. The payout from an informal network is not usually sufficient to pay for the whole risk; it is often supplemented by the individual affected member.

7.2.3 Member based micro finance

The third element of risk management strategies in place is the use of member based micro finance schemes. This study has identified four major groups based micro finance institutions used to manage risks in the informal sector. The data shows these schemes allow households to accumulate capital for a variety of purposes, including consumption, business investment and managing emergency risks.

Firstly, are the Rotating Saving and Credit Associations (ROSCAs), which are traditional savings and credit arrangements. While the main function of ROSCAs is to enable capital accumulation of indivisible items; they also serve as risk-pooling arrangements if individuals receive negative risk exposure during the rotation cycle. ROSCAs is a group of people who come together at regular intervals to make contributions into a fund that is distributed to one of its members at each meeting until each member has received money from the fund (a.k.a pot). Interest is not earned on the fund. The members of the ROSCAs are normally from within the neighbourhoods and thus know one another. These contribute to ensuring commitment to the association and reduce the risk of default. When each person has received money from the fund the group could be dissolved or the cycle is started over again. The ROSCAs contain both the element of saving and lending. The first person to receive money from the fund is a borrower, since s/he is receiving money up front. The last person to receive money from the fund is a saver since s/he would have been making regular contributions to the fund until such time as it is his/her turn. To reduce risk and enforce commitment new members are placed in the last positions. The placement of an individual in the cycle can be random or through bidding. Membership of ROSCAs is used to finance expenditures such as school fees, the purchase of plots or building a house. Members can only win the pot once in the lifetime of the ROSCA. As indicated in Chiteji (2002) and Besley, *et al.* (1983) defaults on ROSCA loans are found to be extremely rare. This is because ROSCAs use pre-existing social connections between individuals to help circumvent the problems of imperfect information and enforceability.

The second category of a members based micro finance schemes is the SACCOs; the idea seems to have been highly marketed during the implementation of micro finance policy in 2001. The group member based SACCOs in the informal sector in Tanzania adopted the Grameen Bank methodology[34] based on peer groups. Normally business groups collect compulsory payments from

[34] Schemes using the Greeman model, offer general loans for business expansion. Clients must have an existing business in order to qualify for loans. Saving products are generally compulsory guarantees for loans which, means that starts-ups do not qualify for loans. The model aims at meeting working capital needs although there are incidental data indicating some loans finance house improvements, acquisition of durables such house furniture and television sets.

members to contribute to the group's fund - incorporating both savings and loans. Recently, a few SACCOs have modified the traditional Grameen model; developing new products including micro-insurance covering risks related to health and credit life insurance.

The third category of member based micro finance is the village bank model which was established in the 1980s in Latin America by Foundation for International Community Assistance (FINCA). The model has proved hugely exportable, and can now be found in over 3000 cities in 25 countries including Tanzania. Village banks have been set up to serve the informal households community. They serve entrepreneurs in order that they can build their business and escape poverty. More than improving the businesses opportunities of the poor, providing credit allows the opportunity to learn how to manage money and how best to make a living. Morduch, (1999) indicates that the village bank enforces group based collateral, by allowing substantial local autonomy over loan decisions and management. The theory behind community banks is that a sense of ownership among the community ensures repayment. Loans are made to individuals, with a mandatory saving of at least 20 percent of the loan value. This mandatory saving also serves as a type of collateral in kind, since subsequent loan sizes are tied to the amount that members have on deposit with the bank. This also ensures that the village bank will become self-sustainable, and not reliant on the external finance of non-governmental organizations. Many other methods may be used to ensure repayment of loans; however, these methods are decided very much on the village scale. They provide a wide range of savings and loan products to their members. They commonly require compulsory savings, but also offer individual or group saving products and deposits. This methodology focuses on empowering relatively large groups of people (20-40) in building their own financial institutions, with a savings first approach.

Savings, credit and insurance arrangements help risk management in two ways. Firstly, households use precautionary savings or consumption credit to smooth consumption in the face of either income risks or anticipated variation in income or in expenditure. Secondly, households can use production or investment credit to build up assets and thereby increase future capacity to self-insure. As a vast literature on micro finance indicates, there exists a wide range of community-based arrangements for managing risk through finance[35]. Informal credit arrangements commonly incorporate some insurance element, enhancing the risk management function of the (informal) contract. Thirdly, major credit-based quasi insurance is the existing of loans according to risk exposures that happen to

[35] The excellent reviews of the micro finance movements as well as the stylized features of micro finance institutions see for example, a recent book by Armendariz and Morduch (2005) on the economics of micro finance. See also Robinson (2001), Hossain and Rahman, (2001) for an overview of the micro finance movement in developing countries and Zeller and Meyer (2002) for limitations of the micro finance movement and how to make it sustainable and more effective. For a general overview of formal and informal financial services used by poor in developing countries see Rutherford (2000).

either the borrower or lender. The research finds that an informal contingent loan provides insurance against a wide variety of idiosyncratic risks exposure faced by informal households. In this arrangement, loans are state-contingent. If the borrower faces a negative risk exposure after the loan was agreed, he pays a lower interest rate. If, on the other hand, the lender faces a negative shock after the loan was agreed, then he receives a higher interest rate. Repayment dates are also flexible and state-contingent. Due to the high incidence of idiosyncratic risks faced by households in this setting, the quasi-insurance component of informal credit arrangements effectively pools risks over time as both parties are likely to find themselves affected by negative risk exposures over successive periods. Micro finance offers a well-known category of a semi-formal, community-based credit, savings and insurance services.

The research indicates that microcredit institutions are typically characterized by joint liability; loans are made to individuals, they can obtain a loan only if they form a group with other individuals seeking loans. This creates added incentive for group members to provide each other with insurance against risks as part of the cost of risk induced illiquidity so that disruptions to loan servicing is shouldered by other group members. As a result, microcredit arrangements lower informational costs for lenders by taking advantage of peer selection effects (which can lower problems of adverse selection) as well as peer monitoring (which can lower problems of moral hazard). The risk-sharing inducements of microcredit arrangements are further deepened by dynamic incentives, whereby loan sizes are increased over time. Hence, default rates are lowered provided progressive lending takes place over infinitely many periods. In addition, default rates are also lowered by screening out 'bad types'. The most important feature is that microcredit institutions are less likely to require traditional collateral (e.g., housing, land) that have resale value, as they rely more heavily on reputational mechanisms to reduce default.

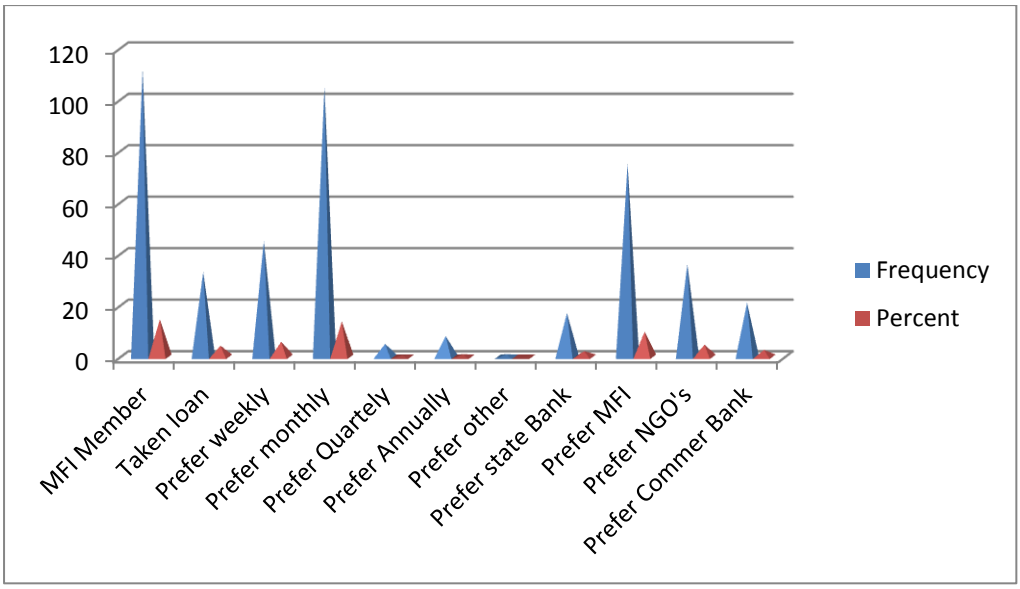
By lessening the need to place borrowers' assets at risk of seizure in the event of default, micro lending arrangements reduce borrowing risk and associated risk rationing of credit[36]. Perhaps more importantly, lower or no collateral requirements tend to improve the access of households to credit to tide them over in the wake of serious risk exposure. Khandker (2007, 2009) finds that micro finance institutions enhanced flood-affected households' access to finance and thereby played a central role in enhancing coping ability. The findings suggest that increased financial savings improved liquidity hence facilitating better risk management by depositors. Micro savings arrangements can be voluntary or compulsory and typically involve small, frequent deposits. In the former case, savings can be withdrawn at the depositor's discretion and thereby helps households to meet anticipated but

[36] See Boucher, et *al.* (2005), Boucher and Guirkinger (2007) for theoretical discussion and empirical evidence, respectively, on risk rationing in credit contracts in rural Latin America.

lumpy expenses or to cope with unanticipated shocks. In the latter case, they act as a form of collateral that can be accessed in the event a borrower runs into repayment problems. Under such arrangements, compulsory savings can typically be withdrawn only with the consent of the group. This provides a form of credit insurance otherwise unavailable to many borrowers.

The data indicates that 14.6 percent of the populations are members of an MFI and 4.3 percent have taken loans. Those who have taken loans say they prefer monthly payment than annual repayments loans. The most popular loans are from MFIs (10%) and NGOs (5%). Households prefer to borrow from MFIs than NGOs and Banks. Most of the participants will prefer state banks to commercial banks. The findings indicate that most of the loans were used for business purposes and purchase of assets or working tools. The household borrowing patterns shows that MFI with a monthly payment model are most preferred as indicated in figure 7.4 below. This suggests that borrowing culture within an informal household is reasonable.

Figure 7.4: Household's Borrowing Patterns



Source: Household Survey 2010

On other hand the study provides evidence of use moneylenders which involves significantly higher interest rates compared to borrowing from MFIs. The high interest costs of the private money lender are partly due to the costs of monitoring. However, the transaction costs (pecuniary and time costs) incurred when contracting a loan may be much lower than in the formal sector. Thus depending on the size of the loan it may be less costly to contract the loan from the informal sector. The costs of default to the borrower may be lower when borrowing from the informal sector compared to the formal sector. Thus if the borrower should be hit by an adverse shock that makes it difficult to keep

up with loan payments, the interest cost on a loan in the formal sector can become quite large if penalty payments are imposed. An informal lender may not impose such stringent conditions if it is observed that the delinquency is because of a real difficulty in meeting payments because of an extraneous shock. Thus for households who face a high amount of risk and uncertainty, and therefore a high probability of delinquency in payments, the informal sector may be the preferred choice for sourcing a loan.

The results indicate that moneylenders were used for medical expenses only (health related risks). However some participants apply for business purposes. When the MFI's products do not address their needs, households were forced to borrow from moneylenders for emergencies. Indeed, respondents argued that the MFI loans process hinders some households from borrowing from MFIs. The chain of process includes membership registration and sometimes at the end insufficient loans will be granted. For a business opportunity that required an immediate injection of capital, a household would prefer to borrow from a moneylender in order not to lose a business opportunity. The moneylender's services are occasionally used to take advantage of a business opportunity; their services are more likely to be used to manage risks. During FGDs, there were strong indications that households borrow from moneylenders primarily when struck by a risks crisis.

The defining features of all members' based schemes are the interpersonal relationships between members. The schemes are characterized by low information and transaction costs, since participants typically live in close geographical proximity and their economic circumstances; wealth, income, realizations of risk exposures are, for the most part, easily observable. Contracts, almost always unwritten, are found to be self-enforcing even in the absence of state policing and judicial courts arising from a combination of effective peer monitoring, fear of social sanctions as well as repeated interactions over time between the same individuals. Therefore, informal arrangements are similar in that they involve repeated transactions between the same (or almost the same) set of individuals (or households).

The data indicates three major issues related to the member based micro finance scheme as an insurance technique; firstly, micro finance becomes an ideal institution to provide micro insurance because of the pro-poor nature of interventions; their clients are low-income individuals or households that would typically be excluded from standard insurance schemes. Due to its group-based community character, they can exploit informational advantages that are not available to private or public insurers that deal with individuals, thereby overcoming moral hazard and adverse selection problems. In addition, they overcome the problem of limited scale economies that affect larger insurance companies, since it typically has much lower overhead costs. It can also resolve

enforcement problems common in low-income economies using peer monitoring, a mechanism unavailable to non-community based private insurers. It can more easily address the problem of low awareness among clients regarding insurance products via outreach efforts, thereby increasing the risk pool. However, the small size of the risk pool in informal-based micro insurance schemes is one of its major shortcomings.

Secondly, there is evidence to suggest that member based schemes provide social relationships that foster and strengthen ties for reciprocity and inter-household borrowing. However, data indicates that these strategies have two major problems. Firstly, they provide incomplete protection, as the pay-out is not usually sufficient to pay for the whole risk. There is evidence of partial risk-sharing via transfer behaviour in the systems and the insurance model is rejected. The key prediction of the insurance model implies that all group resources are effectively pooled; therefore an unpredicted event is covered by insurance policy transfer from other members in the group. From this it was obvious that the group can insure particular risks, not all risk exposures. Therefore it is tempting to suggest that other means should be used to insure excluded risk exposure. Member based schemes should be equipped to develop micro insurance policies to cover these risks. However, the consequences of these alternatives should be well understood.

Thirdly, another problem of member based schemes is issues related to self-enforcing, imposing sustainability constraints. Enforcement through norms alone is unlikely to be sufficient. These schemes rely on specifying an enforceability (or sustainability) constraint in each group, in which individuals must find it in their interest to remain in the scheme, rather than going it alone. The easiest assumption to justify this is that besides full information, because of strong social norms, and the existence of rules to punish deviations, it is never better to renege on the agreement to share risks. The schemes systematically find that risk-sharing arrangements can be sustained if individuals discount future returns at a low rate, so that any future benefits matter in deciding to enter or to remain in the scheme. Evaluating the effects of group saving coping mechanisms needs to take into account their effect on incentives to sustain the agreement rather than to go it alone.

It can be concluded from the findings that any policy intervention that improves an individual's position outside a member based scheme should understand the existing mechanisms. Insurers must target groups rather than individuals; this of course requires detailed information about the group schemes operations. Member based schemes provide a useful alternative to sale micro insurance within its members when substantial design and information are gathered and analysed. An alternative could be to encourage and support groups involved in informal insurance arrangements to

develop group-based self-insurance mechanisms. Ultimately, more empirical research should shed light on various groups and institutions engaging in informal arrangements, their functioning, role and their potential for expansion. Also, more work is needed on whether and how these informal arrangements are affected by interventions and whether alternative schemes can be designed. It is likely that interventions should be cautious especially in contexts conducive to these private informal institutions.

7.2.4 Funeral/Health Societies

The fourth features on risk management techniques applied in the informal sector are health or funeral societies. These are used to cover events such as deaths and funerals. They have arisen largely in response to the substantial expenditures associated with funerals. They are typically characterized by a well-defined membership base and membership rules. Membership is restricted to individuals living in the same geographical area. As a result, individuals are able to observe fellow members closely and monitor their behavior, mitigating problems of moral hazard (for example spending payouts on non-funeral expenses). Moral hazard is not as much of a problem in the case of funeral insurance as in the case of other forms of insurance as, at least in most cases, it is extremely unlikely that individuals precipitate death because they have funeral insurance.

In these semi-formal burial societies, contributions are typically to be made on a regular basis or when a death occurs. Contributions can be monetary or in kind (in the form of food and labour assistance). Payments are made for funeral-related expenses incurred when a member or a well-defined set of relatives of the member die and the amount is typically conditional on the relationship of the deceased to the member. There are funeral associations established to provide insurance against death-related risks. In addition to death-related risks exposure, these organizations provide insurance against other adverse shocks. For example, funeral associations provide coverage for funeral costs and illness. Although these institutions are described as informal they operate with written rules and regulations, and membership rules of funeral associations require that new members must put in applications. The rules include but are not limited to group's membership fees, and members in default are subject to exclusion from the group, fines, public warning or bringing the person before a local court. Invariably the fear of shame is expected to play an important role in reducing the incidence of default. There was a significant positive relationship between incomes and whether a person or household would be a member of a funeral association. These requirements are a screening mechanism to reduce the incidence of adverse selection and to ensure commitment. The activities that are insured are clearly defined and this reduces the incidence of moral hazard.

The research finds various semi-formal community-based financing scheme initiatives known as micro insurance community health funds or mutual health organizations. Typically, these community-based health insurance initiatives are established in conjunction with health care providers. They are usually characterized by voluntary membership (which can potentially increase adverse selection problems) and have strong community involvement in pooling, revenue collection, resource allocation, and often, service provision. The latter can ameliorate moral hazard and adverse selection problems. Members make regular ex ante contributions and receive a payout in the event that illness occurs. Among other things, community-based health insurance associations vary on the basis of the extent of coverage (high frequency, low cost events; or low frequency, high cost events). In a review of community-financed health initiatives, Preker, *et al.* (2002) finds micro-level evidence that community financing improves access for informal sector households to much-needed health care and provides them with some financial protection against the cost of illness. In addition they also find macro-level evidence that risk-sharing in health financing improves all five World Health Organization (WHO) indicators of the performance of a country's health system (including the level and distribution of health, financial fairness and responsiveness indicators).

This research finds that community-financed health initiatives frequently suffer from low resource mobilization, small size of the risk pool and poor management capacity. Perhaps most critically from the viewpoint of risk management by the informal households, we find evidence that the poorest are often excluded from these schemes in the absence of some kind of subsidy. The household survey reveals that 14 percent of the respondents use formal insurance services and in particular health insurance schemes managed by VIBINDO society. This scheme is a provider based scheme. This strategy was used for the costs related to death and medical expenses only. For a few respondents mostly members of MFI with credit lines have access to life insurance. The policy covers funeral costs for the policy holders, examples of an insurance policy available can be seen from the first micro insurance scheme.

The high level of risk and the evidence that households are not able to completely protect against adverse shocks suggests that there may be demand for insurance. The relative successes of informal techniques appear to be in terms of getting round the problems of information asymmetry and enforcement. This suggests that they should be the ideal local financial intermediary to link up with formal financial institutions. There are challenges associated with this kind of cooperation that must be addressed if these arrangements are to be successful. Informal insurance groups tend to be small in size and the success is because their relatively small size allows them to screen and monitor at reasonable costs. A program linking them to formal financial institutions should be careful not to

expand the size of the associations beyond what is optimal to effectively continue to perform these functions. Dixon, *et al.* (2007) indicates that the experience of micro finance organizations that expand too quickly is that staff get over-stretched and diverted away from their core functions. This leads to frustration amongst members of the micro finance groups and the rate of default increases.

There is evidence to suggest that a large number of member based schemes deliver public goods[37] and services, bolstering the ability of households to manage risk, whether through risk transfer (i.e., insurance) mechanisms or, more commonly, through reduced risk exposure. The research finds disease control through community-based preventive medical and sanitation programs that help to reduce health risks in market centers. These are typically provided through community-based arrangements established by NGOs or local governments to deliver goods and services that have a public good character. Findings from a combination of focus-group discussions and household surveys suggest that the community-based model for the provision of public goods and services are preferred by respondents to those by the commercial sector. The major reasons cited for their preference are the ease of access and flexibility for payment provided by community-based distribution, relative to other models.

7.3 MAJOR STRENGTHS OF COPING TECHNIQUES APPLIED.

The data indicates that coping strategies applied have two main advantages relative to private risk management schemes that do not involve communities in program identification and implementation. Firstly, community participation often results in improved targeting outcomes[38]. Not surprisingly, relative to insurance projects from outside the community, communities can better identify the most needy and vulnerable among them. Thus, there is substantial evidence that communities enjoy major informational advantages in identifying who needs assistance and when, thus reducing the costs of verifying the need for indemnity payments and the risks of either false negative or false positives in the decision as to whether to provide claims payments.

Secondly, member based schemes have an advantage of low information and enforcement costs. Due to the frequent, repeated interactions among members linked through kinship, informal group members and the general lack of privacy that characterizes their economic activities, the effort and circumstances of a member of the community can typically be observed relatively easily. This reduces problems of asymmetric information (i.e., moral hazard and adverse selection) which beset insurance markets. Moreover, due to the close proximity of members within a community, the cost of monitoring a fellow member is low and social sanctions are commonly available as relatively

[37] Public goods do not have rivalry in consumption and are non-excludable
[38] See Coady, *et al.* (2004) and Conning (1999) for relevant references

low-cost enforcement mechanisms. In addition, given that members of a community typically interact with the same individuals on a repeated basis over long periods of time, unwritten or informal contracts can be self-enforcing as the short-term benefits from reneging are much smaller than the long-term costs. Thus, even in the absence of formal legal courts, community-based arrangements can ameliorate problems of moral hazard and contract enforcement that plague insurance contracts.

However, these cost and information advantages can easily be offset by objectives, one should guard against the naïve assumption that member based schemes are necessarily always superior. To date, there are no careful evaluations of the efficacy or rate of return from community-based arrangements, and the extent to which they address problems of informational asymmetries and lower enforcement costs. An empirical project for the future could be to fill this gap[39] in knowledge either through non-experimental econometric work or randomized controlled trials related to community-based arrangements.

7.4 MAJOR LIMITATIONS ON COPING STRATEGIES APPLIED

Informal risk management arrangements are not a panacea for uninsured risk. The research has identified two main limitations of these arrangements for managing risk successfully. Firstly, the exclusion of the poorest and other marginalized sub-population. The evidence for most semi-formal institutions in the informal sector in Tanzania;- shows that the poorest members of the community cannot participate in SACCOs, ROSCAs, Village Banks and mutual health associations because they are not able to afford to make contributory payments. Indeed, Hogset (2005) finds that poorer households are systematically less likely to receive transfers from other households than are better-off neighbours. Similarly, Dercon, *et al.* (2008) finds that better-off households belong to more mutual insurance groups and have larger social networks. This research shows that households with more human and physical capital have larger social networks, indicating that exclusion from social networks can be due to economic status.

The key point from this study is that group formation for risk management purposes is voluntary and therefore potentially excludes subpopulations such as women, religious minorities and the poorest. Access to groups is not necessarily equal and is not readily imposed exogenously. Santos and Barrett (2006) discussed that exclusion of the poorest from insurance groups may be a rational response for non-poor agents in the presence of poverty traps, as those trapped in a low-level equilibrium are far less likely to be able to reciprocate in the future and thus become undesirable insurance partners.

[39] This research recommends that future research direction should focus in this area.

Using data from a village in Tanzania, De Weerdt (2005) and De Weerdt and Dercon (2006) find that the poor have less dense social networks used for risk-management purposes. In addition to exclusion of the poorest, endogenous group formation can also lead to exclusion along the lines of ethnicity, occupation, gender, geographical proximity or other characteristics. For example, Goldstein, *et al.* (2005) finds that gender, lineage and social interactions, as well as wealth, matter at the individual level for inclusion in informal social networks among rural households in eastern Ghana.

Secondly, the findings suggest that decisions to exclude insurance partners on the basis of variables such as lineage, occupation and geographical proximity can be rationalized on the basis of keeping information and enforcement costs low. However, on the other hand, more homogenous groups are also less likely to be able to withstand large covariate shocks, as their incomes are likely to co-vary. For example, Grimard (1997) discusses the tension in the selection of insurance partners made by households in Cote d'Ivoire. The study suggests that households living in close proximity can be easily monitored but are vulnerable to correlated risk, while households living far away from each other are difficult to monitor but do not suffer from correlated risk.

Moreover, while inter-household transfers offer some effective insurance against idiosyncratic shock, they offer no insurance against covariate shocks for the obvious reason that all community members find themselves in the same boat with respect to the covariate component of realized income. Informal risk coping strategies thus commonly fail in the wake of natural or manmade disasters, during which poor households have limited resources for self-insurance and often cannot avail themselves of local risk sharing arrangements; consequently they must reduce consumption drastically (Morduch, 2005; Platteau, 1991). In addition, Rosenzweig (1988) indicates that the severity of risks determines the efficacy of informal risk management arrangements, as risk sharing may break down in the face of more severe risk exposures. Table 7.2 indicates the major strengths and weaknesses of risk management applied.

Table 7.2: Strengths and weaknesses of applied coping strategies (insurance perspectives)

	Moral hazard	Adverse selection	Covariate risks	Cost efficiency	Quality	Equity of access
Self-insurance	+++	++	+/-	+/-	-	+++
FF-Network	+++	++	+/-	+/-	-	++
MB-MFI's	++	-	+/-	+/-	+/-	++
Funeral/Health Ass.	++	-	-	++	+/-	++
Market based scheme	+	-, -	+++	++	+++	-,-,-

Source: Authors analysis; Note: (+++) strong comparative advantage (- - -) Strong disadvantage

7.5 A SOCIAL PROTECTION CASE IN THE FINDINGS

The limitations identified in section 7.4 calls for social protection cases in the informal sector. Broadening the concept of public-private partnership, to take into account the variety of informal schemes engaged in the provision of public goods is the way forward. This co-provision largely depends on the willingness of the state to cooperate (Schmidt, 1995; Brown and Ashman, 1996). Recent studies by Berman (1998) and Alderman (2002) describe the important role of private health care providers and social assistance schemes in financing health risk and meeting the demands and needs of the population. There is empirical evidence that argued that public-private partnership influences economic growth (Knack and Keefer, 1997; Putnam, 1993; Narayan and Pritchett, 1997; Moser, 1998). These studies argued that cooperation can lead to more efficiently operating government structures, and have a positive influence on household incomes and that it is an important element in the complex asset portfolio of poor households, as it reduces vulnerability.

This finding has brought some insight on the relationships that are grounded in structures of voluntary associations, norms of reciprocity and co-operation. The existence of member based schemes indicates the importance of public-private cooperation. Memberships in groups and networks facilitate information exchange and participation, thereby reducing transaction costs and helping to build trust and social cohesion. Whereas it has widely been accepted that social capital matters for successful cooperation between the state, market and member based schemes several questions remain open. As Putnam (1993) pointed out that building of social capital depends upon basic structural factors such as the state's capacity, the degree of cohesion within local communities and the extent to which the social structure is egalitarian. The key question is how to build institutional bridges in a situation where there are insufficient resources and where the relationship between public authorities, the private sector and member based schemes has been distant. The necessary pre-condition for cooperation is for the state to withdraw and give up some of its activities.

The research presents four major areas that social protection programs can potentially bridge. Firstly, the provision of financial services to households with low income involves huge fixed costs to the financial service providers as indicated in Siegel and Alwang (1999). The scope for positive government action in support of greater access is most evident when the overall contractual and information frameworks are deficient. Building sustainable and deepening financial systems is a long term process; additional impact can be achieved by government action in the short to medium-term specifically directed towards facilitating financial market activity that helps access. This would include putting in place the legislation and other rules needed for specific financing tools and

institutions, and giving every individual a national identification that can be used as collateral in obtaining a financial service. Governments can also opt to stimulate access more directly through financial literacy programs.

Secondly, social protection can be used to reinforce and harness the informational advantage enjoyed by informal based arrangements by covering the start-up costs associated with creating viable micro finance institutions, thereby providing households with valuable credit, savings and insurance products. Relative to strict commercial or central government mechanisms, informal based mechanisms typically enjoy an informational advantage, leading to reduced enforcement, monitoring and transactions costs. This advantage can likewise be harnessed to make financial services delivery commercially viable through group lending and insurance arrangements where they might not otherwise be remunerative for a commercial provider nor attractively priced for poor households.

Thirdly, social protection can address one of the most important limitations of informal based risk management arrangements; their frequent inability to insure the poorest households. In the case of many semi-formal risk management institutions, households need to make an initial contribution in order to become a member, and poor households often cannot afford the ex-ante contributions required to become members of an insurance pool. By providing funding to an appropriate informal based insurance arrangement, social protection can enable participation by socially-excluded groups. The social grouping also creates potential opportunities to reduce social exclusion and thus perhaps to use social protection to close some of the holes in existing social safety nets. The key is whether gaps can be identified and directly addressed through the design of social protection transfer schemes. Chantarat and Barrett (2008) show how transfers to poor households that are otherwise endogenously excluded from social networks can induce new social relationships that not only benefit those who gain directly from transfers but also nonparticipants with whom participants then endogenously link.

Fourthly, social protection can expand their role in enabling the informal sector to manage risk by expanding the menu of permissible projects to include innovative programs. The findings suggest prominent examples include burial insurance societies and health insurance associations. In fact, informal based arrangements can be supported successfully by social protection because of the latter's close link with informal sector. Other examples include public goods and services, and social protection can reduce the risk of infectious disease by subsidizing informal based public health programs that reduce the risk of water-borne disease by supporting informal based sanitation programs that promote changes in individual hygiene practices. Expanding the menu of permissible

projects also enables social protection to be more inclusive of potentially vulnerable groups that may not be able to participate in more traditional social protection programs. As already discussed, informal based arrangements inherently struggle to internalize risks experienced by all members. Social protection can in principle, help informal households reduce exposure to covariate risk, through provision of risk-reducing public goods and services.

Social protection can harness the power of informal based techniques targeting for effective two-tier allocation of disaster assistance. Alderman (2001) describes a two-tier allocation of social assistance, whereby the central government provides grants to members based on commune-level criteria. Local governments then allocate these grants to poor households within their communes based on household-level criteria. Social protection similarly adopts a two tier allocation process, whereby it provides in-kind or cash assistance to a community organization. The community organization can then use its superior local information to allocate program participation (or assistance) to the poorest households. Nevertheless, the existence of significant risk pooling in the absence of social protection should serve as a caution, policymakers need to guard against disrupting existing social insurance arrangements. As discussed by Dercon (2005) public assistance that improves a household's position outside group-based informal risk sharing arrangements can change the nature of informal networks. In particular, it can reduce households' reliance on and need for each other, thereby adversely affecting the ability of informal networks to act as a safety net. This can not only crowd out pre-existing community based risk management, it can have broader disruptive effects on information flow, and cooperative decision-making in production, marketing and community resource management processes. Literature on the possible crowding out effects of new, exogenous transfers emphasizes these prospective problems (Cox and Jimenez, 1998; Cox, *et al.* 2004). The extent to which these problems are general, however, remains an open question. For example, Lentz and Barrett (2005) find no evidence of crowding out of private transfers by food aid, whether allocated by communities or external agencies, in northern Kenya and southern Ethiopia.

7.6 SUMMARY OF THE CHAPTER

The chapter had analysed major coping strategies; the ability to manage risks is a function of a combination between social, physical and financial assets in place. The chapter indicates the social protection case from the data. In addition, the study has shown that income variability remains high; diversifications and other income strategies are only used to a limited extent and in any case insufficient. The chapter has documented in detail the complexity of these strategies and weaknesses.

There is strong evidence of insurance need in the informal sector, since the available techniques provide for only partial insurance, and emergencies and crisis expose the limitations of informal systems and self-insurance. Hence, households are not able to fully insure against risk. For example, funeral associations normally provide insurance against particular risks and not all households are involved in risk-sharing networks. The entry requirement has been the barrier for households and therefore some are left out of these arrangements. Other risk-sharing arrangements provide partial but not full insurance because contributions may not be large enough to cover the full cost of the risk. Thus some households are able to insure against certain risk exposures, whilst others cannot.

As discussed in the literature review and conceptual framework, it is expected that households who are more exposed to risks with limited protection in place are more likely to opt for insurance products. The next chapter provides for better understanding of household insurance demand perspectives. The chapter analyses the market's understanding and perceptions of insurance and summarizes the empirical evidence for the possible factors that influence demand for micro insurance.

CHAPTER EIGHT: RESULTS ON HOUSEHOLD CHARACTERISTCS THAT INFLUENCE MICRO INSURANCE DEMAND

The results on chapter six and seven on major households risk exposures and coping strategies respectively provides a background for better understanding of households' participation in insurance market. This chapter focuses on the fourth objectives of the study by examining households understanding and perceptions on insurance products. The main contribution of this chapter is to highlight factors that influence demand in the informal sector and provides empirical evidence from the data.

The chapter is divided into five sections. Section 8.1 begins with the relative attitudes of the informal households towards use of financial services. Section 8.2 explores types of micro insurance products demanded in the informal sector, by summarizing the evidence for the possible factors that influence demand for micro insurance. Section 8.3 Probit regression model which examines the household characteristics that influence micro insurance demand was presented. Section 8.4 presents the result and interpretation of probit regression outcome. Finally, section 8.5 summarizes the chapter.

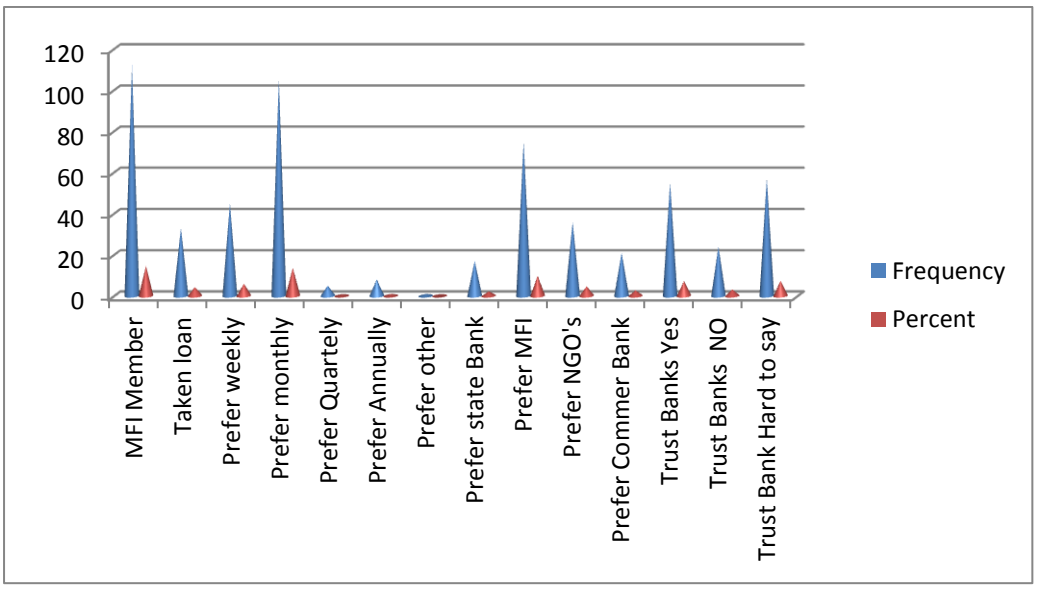
8.1 ALTITUDE OF HOUSEHOLDS TOWARDS USE OF FINANCIAL SERVICES

8.1.1 Savings and Borrowing

Savings and borrowing are important aspect of financial services that encourage household financial decision making. Firstly, saving is a source of working capital and is used during emergencies. The survey revealed that most of respondent derived their working capital form relative/family/friends and personal wages/labour representing 12% and 11.5 percent respectively. Almost half of households were self-employed and their working capitals were derived from family and personal saving through labor (salaried income from part time or permanent job). 4.5 percent of the respondent derived their income from bank/mfi/ngo institution.

Secondly, borrowing behavior is an important aspect since it provides an insight regarding demand for micro insurance. The households who engaged in regular borrowing and saving activities have better exposure to financial markets. There is evidence that use of one financial service provides an informational advantage to know more about additional services. The study indicates that borrowing from relatives and friends dominates; the survey reveals that 21% of households have taken at least one credit in the last 3 years. The most popular loan was from MFI (10%) and NGO (5%). The preferred mode of loan repayment is monthly payment. MFI in the form of SACCOs is widely used by group.

Figure 8.1: Household Use of Financial Services



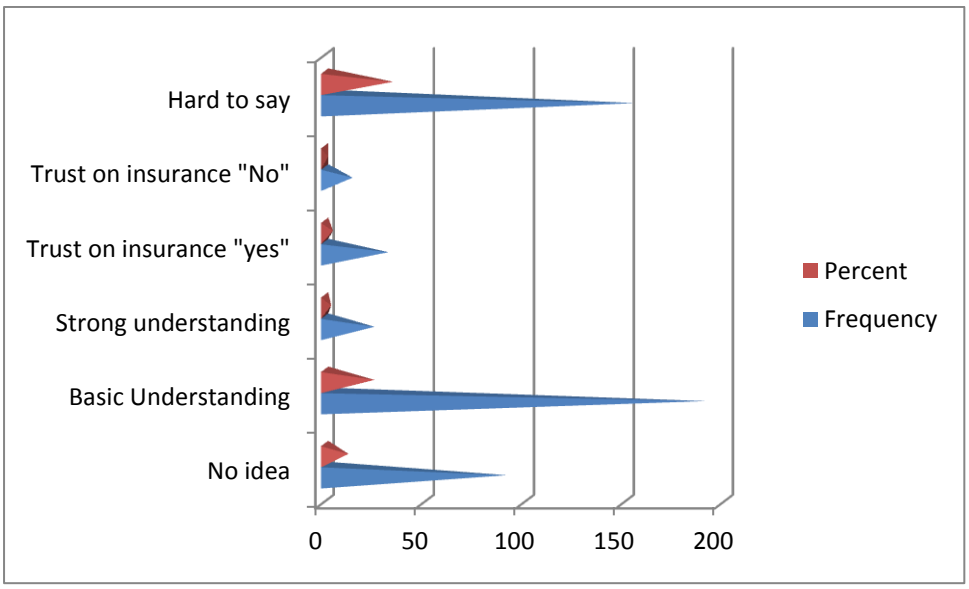
Source Household Survey 2010

8.1.2 Knowledge of Insurance

The data indicates that households have a basic understanding of insurance; few respondents demonstrated a strong understanding of insurance. Strong understanding implies that the respondent had a clear definition of insurance, why insurance products are purchased and how it works, that is, payment of premiums and a conditional benefit if the insured event occurs. Basic understanding signifies a limited grasp without full knowledge of how insurance works for example types of insurance products and able to mention at least five insurance companies operating in Tanzania. No idea captures both misunderstanding as well as inability to define insurance.

The survey revealed that the lack of trust undermines successful micro insurance delivery. Only 11.8% trust insurers. As many as 34 % of households neither trust nor do not trust insurers. Any possible bad experience with insurance that might be easily spread by media or word of mouth can turn those neutral into distrustful, thus reducing the market size significantly. On the other hand, big number of neutral people is also an opportunity. This group would not reject a new product because of trust. If they have good experience significant market opportunities would open up. At least one or two individuals per group have heard of vehicle insurance but their knowledge of other types of insurance was limited and in some cases nonexistent. Apart from those with credit life insurance none of the participants had insurance (currently or previously). A few participants, however, indicated that they knew people who had insurance. This confirms the earlier findings by Churchill and Manje (2002) that a lack of awareness or impartial knowledge, as well as attitudes based on misconceptions undermine the insurance potential in the informal sector.

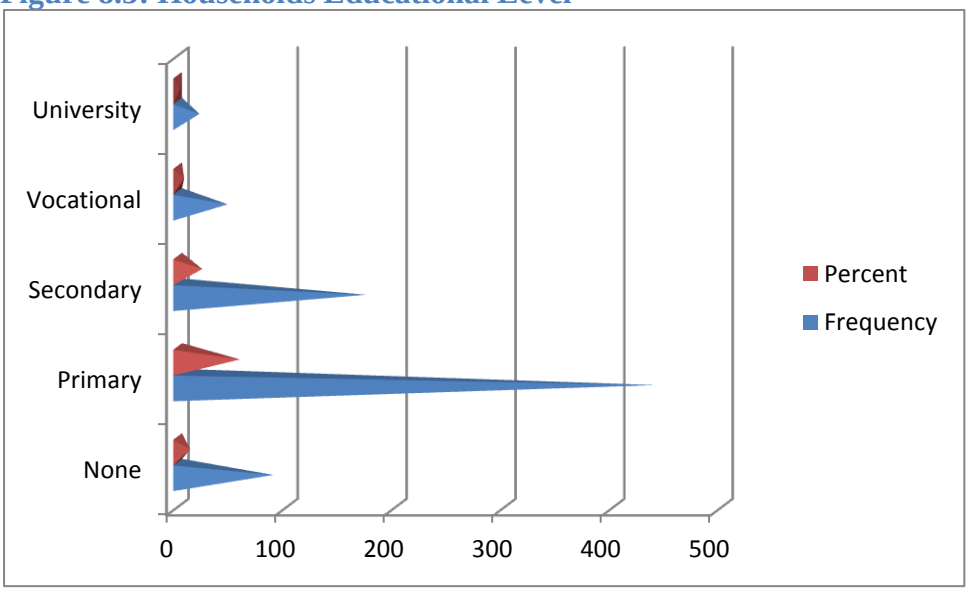
Figure 8.2: Households Insurance Knowledge



Source: Household Survey 2010

This highlights the need for effective and broad-based consumer financial education with regard to insurance. Analyzing the education levels of the household and insurance knowledge, the study finds insurance knowledge varies with educational level. While secondary school leavers and above have strong understanding of insurance concepts. Primary school levels who have strong understand either through credit life insurance education or they owns vehicles and motorbike were mandatory third party liability insurance is required.

Figure 8.3: Households Educational Level

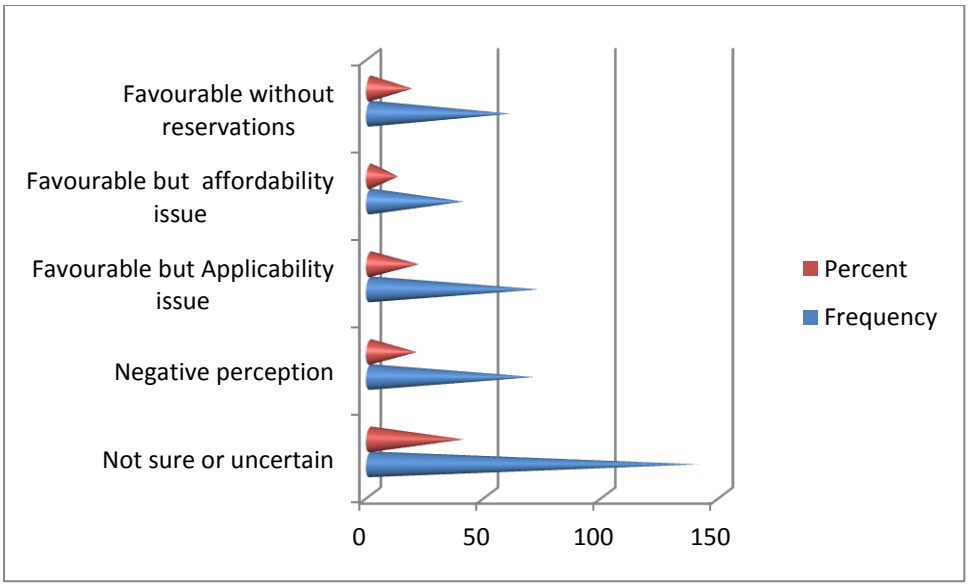


Source: Household Survey 2010

8.1.3 Perception of Insurance

The insurance perception seems to be poor; the study finds the relative frequencies for five categories of responses indicated in figure 8.4. Forty percent of the respondents did not indicate any perception because they were not sure they knew enough about insurance to express opinions on the subject. This suggest that majority of the respondents are open to education and insurance companies needed to market in their areas about their products and costs. Only eighteen percent expressed a favorable response regarding insurance without reservations. Those who were categorized under "affordability reservations" mentioned that while they knew the benefits that stem from insurance would help them cope with risks, but insurance was beyond their means. Applicability reservations were slightly different as respondents indicated that they did not have anything that was worth insuring.

Figure 8.4: Households Insurance Perceptions



Source: Household Survey 2010

Negative perceptions[40]was reported and twenty percent of those respondents with a strong or limited understanding of insurance expressed strong negative views, either based on their own experience or through hearsay. Their perception of insurance is highly affected by media and insurance staffs. There is evidence that negative perception was the results of company personnel had commuted fraud. The primary complaint was the length of time for claims to be paid. A few mentioned that insurance firms and brokers are not trustworthy. Even stronger negative perceptions emerged during the focus group discussions. There is general sense in FGD that people prefer to save or invest money is such a way that they can be certain and they are able to access it later. In sum, 52 percent of the respondents either think that insurance is not appropriate for them or have a negative view

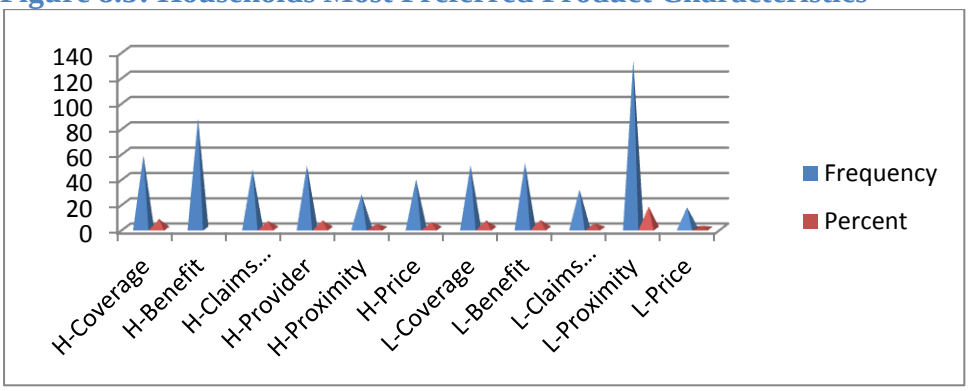
[40] See appendix D; for perceptions of micro insurance extracted from focus group discussion.

about insurance, while 40 percent do not have sufficient information to form an opinion. With full knowledge that they are vulnerable to risks, and that insurance is one way to protect against them, lack of exposure makes the majority of informal household feel that insurance is not applicable to them, they cannot afford it, or they have more pressing needs.

8.1.4 Product demand match

Figure 8.4 demonstrates that most respondents are satisfied with different product characteristics. For the purpose of this analysis we have presented to respondents two generic micro insurance products with detailed information allowing household to declare if they are willing to purchase given specific product features. This exercise was aimed to find micro insurance demand perspectives. We presented life insurance product and health insurance because these products widely available in Tanzania and we adopted features of micro insurance products of "First Micro insurance Agency (Life) and Community Health Funds[41] (health insurance). Research identify that benefits, coverage and quality of provider commands the best-selling characteristics for health insurance while life insurance the opposite result was identified; the most prominent selling characteristics was proximity, coverage and benefit.

Figure 8.5: Households Most Preferred Product Characteristics



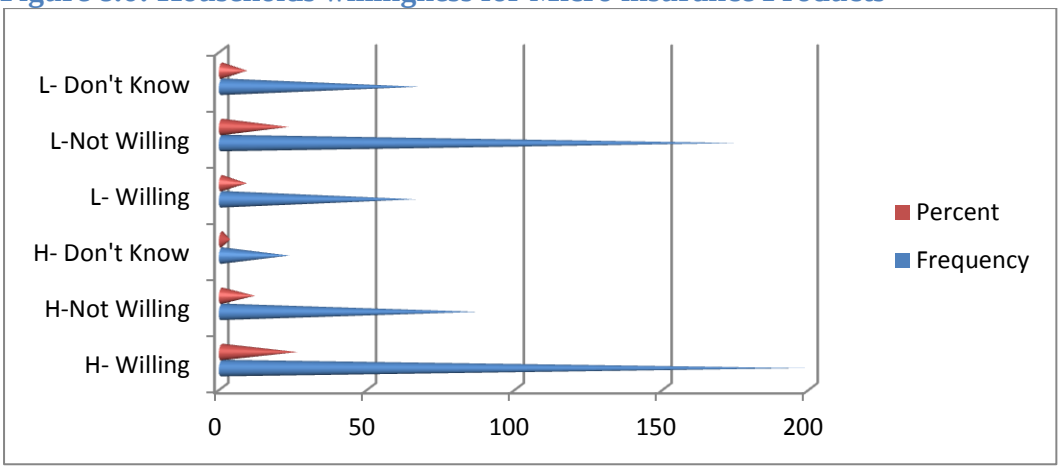
Source: Household Survey 2010

The cost of coverage was assessed in two ways: first, the concept of insurance was explained; then we ask participant if they are willing to pay given this type of insurance cover. The results give a lot of new insights on micro insurance perspectives. However, Churchill and Manje (2002) suggest that there are a number of hurdles to be overcome before willingness to use micro insurance will be put into action. Their findings indicated that people have an inclination to invest in financial services for which they get cash back, indicating a lack of understanding of the insurance value proposition. Furthermore, the trade-off between "peace of mind" and "bread on the table" will always be particularly pronounced for the low-income market. All of this once again underlines the need for financial education. The reasons for not purchasing insurance, (lack of willingness to buy) can be

[41] Detailed information about Community Health Funds in Tanzania see chapter two of this thesis

explained by combination of bad experience, benefits, coverage and price of the product. In case of health insurance quality of the provider is the most important reason after benefits. The other important reason is knowledge gap in the form of dissatisfaction from the fact that there is no benefit while nothing happens.

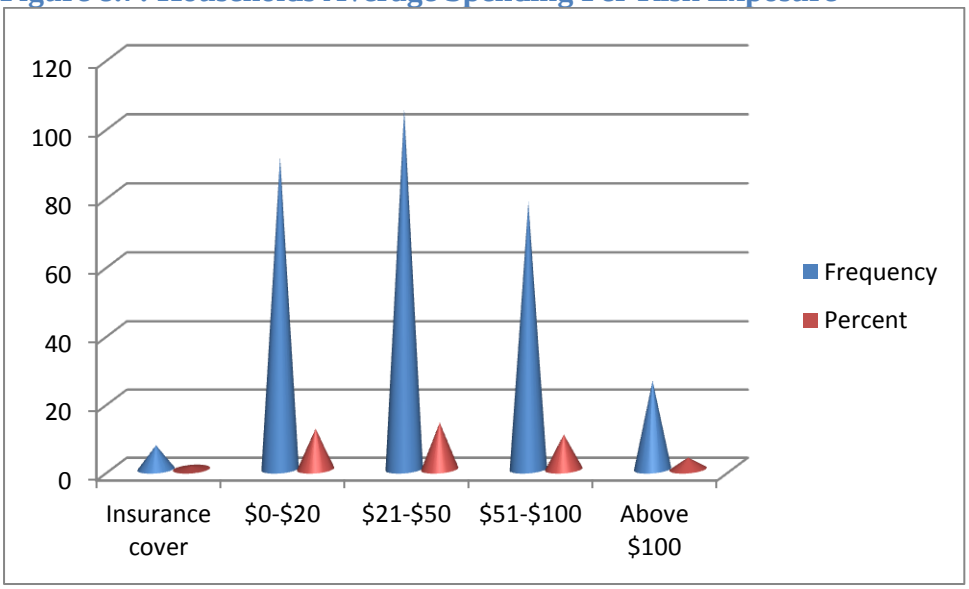
Figure 8.6: Households willingness for Micro insurance Products



Source: Household Survey 2010

The amount that are currently spent for any risk exposure happened over last three years indicates that most of the household over 13 percent spends on average between $21 and $50 for one risk event. 10.2 percent spends from $50 to $100 while over 3 percent spends above $100 for one risk exposure. This gives important insurance pricing mechanisms.

Figure 8.7: Households Average Spending Per Risk Exposure



Source: Household Survey 2010

8.2 TYPES OF MICRO INSURANCE DEMANDED IN THE INFORMAL SECTOR

Based on the evidence presented in chapter six and seven, the findings indicates that the most prevalent financial liability were those related to house building expenses, medical expenses, educational expenses and death of member of household. This suggests low cost housing insurance, health insurance, educational insurance and life insurance are the potential micro insurance products useful in the informal sector.

8.2.1 Low cost housing insurance

Building a house is a financial priority for most informal household; Due to lack of access to housing finance the majority of households are building houses informally and incrementally. Incremental building is self-financing strategies were earning through small business and other informal means were applied. Small daily incomes make it difficult to obtain the lump sum of money necessary to undertake home construction or make a meaningful home improvement. The cost of building house creates financial needs. The informal household does not have access to the existing formal housing systems. Hence, households suffer from a severe shortage of quality housing[42].

This research finding conducted affordability analysis considering the capacity to pay for the cost of building materials and infrastructure. The results indicates that the amount that a family can allocate from its monthly savings for housing payment is no more than Tshs. 50,000/= (US $ 38.00) per month which will take 10 years to build two bedrooms of 25 sq m. this has been compared to a family with a minimum monthly accumulated income Tshs 150,000/= (US $ 115.00) per month at a construction rate of Tshs. 240,000/= (US $ 185.00) per sq m.

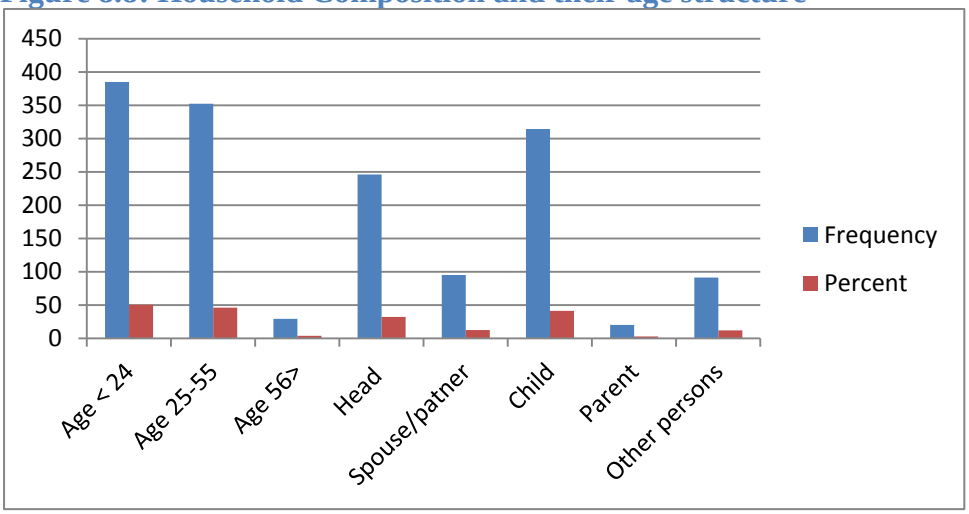
These results suggest that any micro finance program with both financing and protection concept will create micro insurance demand. This will assist informal households to improve asset holding, through access to affordable housing and protect homeowners against their properties. The program may include improvement loan which is designed to support ongoing incremental building. The loans must be highly flexible and can be applied to completing unoccupied houses, finishing already occupied houses, extending extra rooms onto houses, repairing worn out components of existing housing, and building auxiliary structures such as a latrine or outdoor kitchen. This program must also allow the homeowner to maintain protection measures (micro insurance) over their housing process. This category of insurance can be sold through informal coping structures.

[42] Tanzania Building Agency (TBA) an executive agency under the ministry of Infrastructure development with main function of providing safe office buildings and accommodation to Tanzanian citizens in 2009 conducted housing needs survey in Dar es Salaam. They found that over 79.8 percent of the city population live in a rented house.

8.2.2 Educational endowment insurance

There is evidence that household are not so much worried about uncertain events but an educational expense which seems to be mandatory expenditure given the value proposition for children's education. Education endowment insurance providing investment vehicles for household to save for education expense may stimulate demand for micro insurance product in Tanzania. The endowment insurance particularly education insurance will receive high demand among many households since household with children below 24 years age will be interested in education insurance for their children's. The survey indicates the number of younger household is over 46 percent.

Figure 8.8: Household Composition and their age structure



Source: Household Survey 2010

8.2.3 Health and accident insurance

For most informal households, illness represents a regular threat to their income earning capacity. Beside the direct costs for treatment and drugs, indirect costs for the lost earnings of the ill person and those accompanying her/him to the hospital, have to be shouldered by the household. Almost 80% of the diseases are water borne or are caused by water bodies; cholera, diarrhea, typhoid, hepatitis and malaria, most of which require prolonged treatment and sometimes hospitalization. The average expenditure on health care among various income groups varied from 6% for low income households to 2.3% for households with larger incomes, as per a household survey of healthcare utilization and expenditure survey of 2010. Thus it makes sense for the household to buy health insurance.

However, health insurance products need to be customized to the requirements of the households. For frequent but less expensive illnesses, self-insurance (dipping into savings) is desirable. For the next level of illnesses, which may require hospitalization, insurance should cover treatment as well as related costs, transportation and attendants' stay. For catastrophic illnesses, full reimbursement of costs of treatment in a public hospital only may be affordable. Thus, for health insurance to work in

the informal sector, it needs to be blended with savings schemes, preventive health care, and better management of public health facilities. Health related risks manifests in the form of illness, child birth, injuries and accidents. Minor illness can be easily paid out of current business income. However, serious illness or accident and major injuries which require hospitalization are costly and brings major financial burden to household.

Based on the analysis of the risks and coping mechanisms, this research suggests a possible demand for two types of health insurance. First, households at the upper end of the low income market, who normally pay for private clinics, might be interested in a scheme that allows them to access better quality health care. As we have already demonstrated serious illness is by far the most significant risk facing household in the informal sector. The long term illness has potential to reduce household income to absolute poverty by taking away their assets. Since their health care costs are higher and they are better educated, they might be more receptive to health insurance. There is evidence that for many household payment of transport for the patient and caretaker is the first financial hurdle they meet when faced with health problem. Health insurance that covers the cost of hospitalization and transportation would help household avoid using stressfully risk management strategies.

Second possible health insurance niche could be prescription insurance. A health insurance plan marketed and delivered through private clinics is unlikely to reach poor households. These groups have access to health care services through government facilities were the costs of treatment and medication were generally low. The major financial concern was about the high cost of medicine. Prescription insurance scheme may be able to negotiate discounted rate for scheme participants if the insurer pays the pharmacy directly.

8.2.4 Life Insurance

This research found that death of a family member was a manageable risk for many households, with the possible exception of the death of a breadwinner. The most expensive death-related loss is the premature or unexpected death of a breadwinner; the household has to find a way to replace the lost income. The finding indicates that majority of household had experienced a death in the past 3 years and all had contributed to the funerals of relatives, friends and neighbors. There is evidence of the affected families borrowing without interest or selling assets to take care of contingencies to cover for proper funeral expenses. The demand for life insurance is linked with loan; this suggests that credit life insurance is perceived as condition to loan rather than insurance product. The respondents were aware of the fact that they have credit life cover and that it is capitalized upfront. In the event of borrower's death, the outstanding balances are paid and the client's family receives a lump sum that varies in amount with the size of the loan balance and cause of death. Often policy covers a

spouse and fixed number of children. For example of the First micro insurance agency provides a lump sum of US$300 plus funeral grants in the event of the policyholder's death.

However, the emergence of informal funeral funds in particular suggests a potential demand for life insurance because it demonstrates a willingness to accept preventative risk pooling, at least for death risks. Any life insurance product for the low-income market would be wise to imitate the strengths of informal schemes, such as expedient claims processing and the use of groups to control adverse selection and deter premium lapses. A formal insurer should then be able to position itself well vis-à-vis funeral funds by providing greater value. With a larger risk pool and greater economies of scale, for the same premium amount a formal insurer might be able to provide a benefit that is roughly 5 to 10 times larger than the payouts in most informal schemes, especially if it could rely on existing distribution channels, such as market associations, religious groups and MFIs, to minimize transaction costs.

Improved products and processes for micro life insurance will stimulate demand. Life insurance for households on an individual basis can be expensive since data on mortality rates is limited within this group. Further the administration costs on an individual insurance can be higher due to the low level of insured amount for households. Thus life micro-insurance products have to be designed differently. In case individual insurance is to be given, the premium may have to be split into several installments, to make it affordable. Moreover, standard requirements such as proof of age and medical examination may have to be waived. Group insurance products automatically mean a better pooling of risk and less adverse selection against the insurance provider. The higher the rate of participation by the members of the group, the less expense is needed for underwriting. Very important from a household's point of view, is that a significant number of risks that would be rejected by an insurer on an individual basis can be covered in group schemes. Access to insurance protection is thereby improved. Where little insurance exists and premium-paying resources are very scarce, group insurance products may be the best viable way to proceed. An excellent group life insurance product could be family group life insurance which is designed to cover all the family members of the insured and the premium amount would also be low as compared to the sum of the premium amount required for all individual family members.

While a product that packaged together savings, credit and insurance would help overcome many obstacles, it would still have difficulty penetrating the poorest segments of the market, which indicated that they had difficulties in saving on a regular basis. It may also not be attractive to entrepreneurial persons who are less risk averse than the general public and prefer to flow excess cash back into their enterprises. For different reasons, both of these market segments prefer not to

adopt a preventative approach; for these groups, emergency loans would probably be the most appropriate risk-managing financial service.

8.2.5 Property, fire and theft insurance

The informal households own home equipment's, electronic and work related machinery. These assets are susceptible to idiosyncratic contingencies such as fire, theft and breakdown which may affect income levels. Many of these assets are low priced and easily repairable; thereby reducing possible impact. However, untimely occurrence of these events may substantially impact the income of the poor household. Impact of these events on borrowed assets is more severe. The availability of insurance coverage for such property insurance for the informal households is virtually non-existent. While theft and to a lesser extent fire, were identified as risks for households and businesses, probes on frequency of occurrence and the associated losses indicated that these were generally not major concerns. In fact, most respondents had very few assets that would be worth insuring. Until the situation changes if theft or fire become more frequent occurrences and the households have accumulated more assets property insurance will probably not appeal to a large enough segment of the low-income market to make it viable.

8.2.6 General factors that stimulate demand

The research findings provide four deliveries and design factors which will influence demand for micro insurance, firstly, the study has demonstrated that a majority of respondents are either wary of insurance or not sufficiently familiar with it. Indeed, household show a strong preference for improved savings facilities and emergency loans to help them cope with risks, rather than insurance. The lack of familiarity with insurance, social biases, and a few negative perceptions will definitely inhibit demand. To serve the informal market, insurance providers will have to stimulate demand through good promotion strategies that educate the market and increase the social acceptance of insurance as a legitimate coping mechanism. This type of social marketing campaign would use their existing coping strategies, especially reciprocity and mutual support, as a frame of reference to explain how insurance works. Sales techniques should also help customers understand that insurance could offer better coverage than that provided by informal coping strategies.

Another approach would be to segment the market and initially target clients that are more receptive to insurance, particularly the less poor and better-educated clients. If an insurance product is well received by this segment, then it will be easier to market it to other market segments. One of the most effective sales techniques, testimonial marketing, uses case studies, quotes and endorsements from actual persons who have benefited from the insurance products to tell their stories. Prospective customers can relate to them and their situation. By highlighting the experiences of persons who are

reasonably representative of the target market, it promotes a broader social acceptance to legitimize insurance.

Secondly, timely disbursement of payout, the trust that underlies their basic tenets of reciprocity and their integral role within community explain the popularity and persistence of many saving clubs that provide informal insurance. They are well understood by the target population they serve and can quickly verify claims in the event of risks. Marketing will not be effective if the insurer does not deliver since complaints about delays in processing claims were common and strongly felt, demand could be stimulated by attacking this issue, by guaranteeing payment within three days (or whatever period of time market research concludes is acceptable). The insurer would then be able to garner favour in public opinion and generate positive word-of-mouth marketing, by exceeding expectations, for example paying out benefits in 1 or 2 days.

Thirdly, flexibility system of premium payment, the seasonality analysis of household cash flow shows that equal monthly or weekly installments may present a problem. Significant innovations are required to tailor the premium payment schedule to the household's cash flow. With an uneducated, low-income market, there is a high chance that the insurer will experience late payments or lapsed policies. The insured event is then bound to strike former policyholders who will want to make a claim. When claims are rejected because the policies had lapsed, the insurer will probably experience public relations problems that will cement the negative perceptions widely held by the skittish market. The challenge, therefore, is to develop payment mechanisms that dramatically reduce the likelihood of lapsed policies.

Fourthly, another major factor that will influence demand for micro insurance and enhance outreach of micro insurance is the adoption of suitable distribution channels. The households in the informal sector are numerous but dispersed, and often not members of any organized association or cooperative. Micro insurance can be distributed using existing channels to the households at a reasonable incremental cost. These include; networks of existing micro-credit institutions, agent network of existing insurance companies, community organizations such as self-help groups, credit and saving cooperatives, post offices, which tend to have a widespread network in Tanzania and marketing network of consumer product companies. Due to the complex challenges of enhancing the outreach and sustainability of micro insurance, it is important to recognize that no single actor the user community, NGOs, government or the private sector, can by itself provide all the inputs that are needed to make it a success. Thus there is a need for collaboration.

8.3 HOUSEHOLD CHARACTERISTICS THAT INFLUENCE MICRO INSURANCE DEMAND

This section establishes household characteristics that influence demand in the informal sector. According to the framework of analysis[43], in this third step the probit regression model results were presented and discussed.

8.3.1 DESCRIPTIONS AND MEASUREMENT OF THE VARIABLES

8.3.1.1 Dependent Variables

This study attempts to show how informal household characteristics influence the demand for micro insurance. Therefore, the dependent variable is whether household prefer to use any insurance cover/policy and is measured 1 if yes and 0 if no.

8.3.1.2 Independent Variables

The explanatory variables are expected to influence the demand for micro insurance includes demographic characteristics age, education, employment status, risk exposure, marital status, economic and financial characteristics (income, house ownership, assets and use of financial services).

8.3.1.2.1 Demographic factors

Age: There were no prior expectations on the sign of the estimate for the average age of the population to the demand for micro insurance. On one hand, young household with younger children may tend to be more risk averse and have a higher demand for insurance. On the other hand, young aged household may be less risk averse than older household. Some elderly households may be very risk averse, while others may be less concerned about the risk of financial losses because of a shorter time horizon or greater assets. The study therefore hypothesized that the estimates sign for the age variable can take negative or positive influence on overall demand for micro insurance. Previous studies such as Duker (1969) suggested a curvilinear relationship between the demand for insurance (life) and age. As age increases, household heads have a greater awareness for need of life insurance due to decreasing earning power and a greater number of dependents to protect against financial loss following the death of household heads. Beyond a certain age, however, the needs of life insurance declines as children's grow up and become self-supporting and the household accumulates wealth that can be used to support the level of living of the family (Beck and Webb 2003; Browne and Kim, 1993; Chui and Kwok, 2009; Outreville, 1996).

[43]As ddiscussed in Chapter 6 this is third step in the framework which involves three steps where by first step involves identifying risk exposures, second step involves analysis of risk management techniques and last step involves probit regression analysis.

Education: Education improves individual household understanding of the importance of risk management. Education, as an index of the stock of human capital within a household, is associated with insurance demand. Normally, people with higher education would imply that they have greater expectations of income growth, have more awareness of the necessity of insurance. Indeed, (Burnett and Palmer, 1984) indicated that higher education is related to greater insurance demand. Thus, the education level of the household head is hypothesized to be positively associated with micro insurance consumption. In this study, education is categorized into three variables: none and primary (PEDU) are considered as less educated household and have less demand for micro insurance hence negative estimates measured as 1 if household has attained PEDU level or 0 otherwise. While households with SEDU and UEDU level of education are considered educated and have positive estimates to the demand for micro insurance since they are able to understand the concept behind insurance and the technical procedures attached to them, measured 1 if household attained SEDU level and 0 otherwise and University (UEDU) measured 1 if household attained UEDU level and 0 otherwise. Educated people are better able to understand the benefits of risk management and long-term savings and may become more risk-averse in the process. Therefore, we expect a positive relationship between education level and micro insurance demand as in Browne and Kim (1993), Burnett and Palmer (1984), Li *et al.* (2007), Outreville (1996) and Truett and Truett (1990).

Employment: Demand for micro insurance can differ depending on the type of household employment in the informal sector. This variable has not been examined in the previous studies. Self-employed household or salaried staff's e.g. casual laborers, daily payment are two categories of employment considered in the study. In this study self-employed household head is hypothesized to have a negative influence on micro insurance demand because household is considered to have income enough to handle risks and have greater access to alternative risk management while salaried staffs are considered to have positive demand for micro insurance because of the nature of their income flow and limited access to alternative risk management schemes available in the informal sector. In this study employment is categorized as self-employed (SEMPL) measured as 1 if household is self-employed and 0 otherwise and Wage employed (temporary or permanent) (WEMPL) measured 1 if household is a salaried staff and 0 otherwise.

Marital status: As one of the main purposes of insurance is to protect dependents against financial loss if the breadwinner dies prematurely, one would expect that married couples will have children hence need for insurance protection. Hence, in this study married households are predicted to have a greater demand to own insurance since there are one or more persons depending on their earnings. The most obvious example might be a possible demand for childbirth or maternity insurance. The

study measured married household as 1 and 0 if otherwise. It has been argued that marital status increases number of dependents (Beenstock, *et al.* 1986; Browne and Kim, 1993; Burnett and Palmer, 1984; Chui and Kwok, 2009; Li, *et al.* 2007; Truett and Truett, 1990). Hence, the higher the number of dependents, the larger is the demand for income risk protection as a form of insurance (Lewis, 1989). The study expects a positive relationship between marital status and micro insurance demand.

Risk exposure: The adverse effect of risk exposure to the wealth of the informal households influence demand for micro insurance. As discussed in the conceptual framework and literature review[44], it is expected that households who are more exposed to risks are more likely to opt for insurance products. We considered respondents' frequency of risk events and the associated costs to measure the degree of uncertainty about whether, when and how often loss occurs. The costs of the potential loss (money spent for event, time, other hidden/associated costs).

Health risk exposure measuring household medical expenses incurred during the last three years were taken into account: medical expenses were categorized as injuries and accidents (HRIA), minor illness (HRMI) and serious illness (HRSI) (Child birth, hospitalization) and premature death (DHMR). These risks are expected to have positive influence to the demand for insurance. We measure health risks or premature death risks by considering weather household have incurred any of these risks exposures over last three years and coded 1 and 0 otherwise.

Another category of risk exposures includes education expenses (EER). Education fee bring financial burden to informal sector household. Although this category of risks exposure is not insurable risks per se, general characteristics for these types of risk exposure are that it can be anticipated. A financial risk arises when flows of income do not coincide with required expenditures. While households are generally aware whether and when these events will occur, the high likelihood and frequency of their occurrence create an on-going uncertainty as to whether the household will have sufficient income or assets to cover the cost associated with these events. The study measures household who incurred or is continuously paying educational fee as 1 and 0 otherwise.

Costs of building house (HBER) are considered to have a positive influence to the demand of micro insurance. Building a house is a priority for most informal household[45]; the cost of building house creates financial needs. Cost of building house seems to be financial risk or expenditure due to the priority given to most household in the informal sector. Low cost housing insurance providing investment vehicles for household to save for building a house may stimulate demand for micro

[44] See chapter three and four of this thesis
[45] See chapter six were the detailed priorities of the informal households were analysed.

insurance product in the informal sector in Tanzania. We measure household who incurred or is continuously saving to pay cost of building a house as 1 and 0 otherwise.

8.3.1.2.2 Economic and financial factors

Income: The expected sign of the estimates for income is ambiguous because of two competing hypotheses. If the estimates on income are negative it implies that increases in income reduce the demand for insurance. As Lin and Grace (2007) hypothesized individual will purchase less insurance at higher income level implies that as income increases the demand for insurance should diminish. Mossin (1968), in turn, proved that if a person faced a price of insurance greater than the actuarially fair value, but below the price at which no insurance would be purchased, and the consumer exhibited decreasing absolute risk aversion, then the amount of insurance coverage fell as wealth increased. Mossin did not consider the case where higher incomes might generate more assets at risk and thus the higher income person would have greater losses to insure against.

The alternative hypothesis argued that income could have a positive coefficient in the insurance demand equation (Dionne and Eeckhoudt, 1989; Dionne and Harrington, 1992). This implies that if potential losses change as wealth changes (which makes sense in our case as wealthier people may have more assets and businesses that are exposed to potential losses), we may see a positive relationship between income and insurance purchased. Higher income may generate more risk for the individual and therefore it increases an individual's insurance demand. Previous empirical studies by Goldsmith (1983) and Burnett and Palmer (1984)) have consistently found that income has a strong positive effect on the demand for insurance. Intuitively, as income increases, insurance purchases become more affordable, however and most importantly, as a person's income increases, so does the capacity to absorb shocks increases. The income in this study was measured by accumulated monthly earned income from wages, business and salaries. Obviously, increasing income makes insurance more affordable and creates a greater demand for micro insurance to safeguard the income potential of the insured and the well-being of dependents. Also, accumulated wealth needs to be invested, and life insurance can be an attractive instrument to achieve financial goals.

House ownership: The greatest motivation for house possession is that, it allows individual household to access to large amount of loans to expand business by using buildings as collateral. Thus, we hypothesized that household who owns house have a higher demand for insurance than household without houses. The major argument is that house owners possess risk of losing a very valuable and expense asset due to risk events. House ownership is predicted to have positive

influence on household insurance demand. The house ownership variable is coded 1 if the head owns his house and 0 if he does not.

Assets: We follow Lin and Grace (2007) who split assets into liquid and fixed assets. Liquid assets are expected to have a negative effect on insurance holdings because, if a household has more liquid it means that he/she has liquid assets to prevent unexpected financial risk, the household would buy less insurance. On the other hand fixed asset are expected to have positive influence on the demand for insurance to protect assets in question against insurable losses. To identify the impact of different types of assets on insurance demand, this study classified asset as liquid assets and fixed assets.

8.3.1.2.3 Financial literacy

Use of financial services: The use of financial services increases the confidence of consumers in other financial instrument such as insurance. Thus, a positive relationship is expected (Beck and Web, 2003; Chui and Kwok, 2008; Li, et *al.* 2007; Outreville, 1996). The use financial services were categorized into two aspects. First the use of bank services (UBSERV) i.e. bank account, bank loans and use of MFI services (USMFISERV) i.e. member of MFI, loans from MFI were assumed to have positive influence on demand for micro insurance, this is associated with readily available insurance information, experience and trust.

Insurance Knowledge: Insurance knowledge refers to familiarity about the concept of insurance and is expected to have positive influence on the demand for micro insurance because they understand and value insurance services. Respondents who had some understanding of insurance (i.e., those in the "strong understanding" and "limited understanding" categories) was measured 1 and 0 if he has no idea about insurance.

Insurance Trust: This refers to the impact of expectation, prompt payment of claims and the value of micro-insurance products to low-income earners. Respondents who had some understanding of insurance (i.e., those in the "strong understanding" and "limited understanding" categories) were asked about their perception or impression of insurance measured 1 if household positive perception about insurance 0 if has a negative perception about insurance products.

8.3.2 MODEL ESTIMATION

The probit model is used to analyze an econometric framework that has dummy dependent variables. In order to evaluate factors that influence demand for micro insurance. When household prefer to use any insurance policy the desire is greater than zero (y * > 0) the person demands micro insurance. The probit procedure calculates estimates of regression parameters; it computes estimates of the parameters β and € of the probit analysis model $\gamma^* = \times^1 \beta +$ € Where € ~ N (0, 1). Whereas

Y* is a depend variable that represent a choice of household, β is a vector of parameter of estimates and X is a vector of independent variable, presumed to effect the household choice. We therefore, define a dummy variable Yi = 1 if person demands micro insurance and 0 otherwise. Then Y* can be viewed as an indicator of whether household's characteristics influence demand positively or negatively. Thus, our model to investigate household demand for micro insurance is given as follow:-

$$Y^* = \times_0 + \times_1 (AGE) + \times_2 (SEMPL) + \times_3 (WEMPL) + \times_4 (MARRIED) + \times_5 (SEDU) + \times_6 (PEDU) + \times_7 (UEDU) + \times_8 (UMFISERV) + \times_9 (UBSERV) + \times_{10} (LIQASSET) + \times_{11} \log(INCOME) + \times_{12} \log(FIXASSET) + \times_{13} \log(ASSET2) + \times_{14} (HOUSE) + X_{15}(HRMI) + \times_{16} (HRIA) + \times_{17} (DRHH) + \times_{18} (EDUER) + \times_{19} (INSKNOWDL) + X_{20} [INSTRUST]$$

8.3.3 PROBIT REGRESSION RESULTS

A probit model investigates factors that influence micro insurance demand in the informal sector. In this study it was hypothesized that variable in the equation would influence demand for micro insurance in the informal sector since previous studies have shown conflicting results using same variables we wanted to probe this case in Tanzania. Table 8.1 summarizes the results for the demand for micro insurance in the informal sector in Tanzania.

8.3.4 RESULT DISCUSSION AND INTERPRETATION

The estimations are correspondingly run for any micro insurance policy and table presents the results of the probit regressions. The results are discussed in details hereinafter.

8.3.4.1 Significant determinants of micro insurance demand in the informal sector

The model implemented investigates factors that influence household demand for micro insurance. The estimate value of dependent variable in the table 7.1 is interpreted as the strong significant, if significant column indicates zero value or the value closer to zero, we consider values ranging from 000 – 067 to be significant. This implies that the age, employment, married, education, use of financial services, income, risk exposures, insurance knowledge and trust as significant determinants of micro insurance demand in Tanzania. The model negative estimates means that given household characteristics reduces the demand for micro insurance while a positive estimate means that given household characteristics increases chance to use micro insurance services.

8.3.4.2 The age and demand for micro insurance (AGE)

The significant and positive estimate is in line with the result of (Beck and Webb, 2003) which implies that with the increase of age, household will buy insurance to protect their economic requirement during old age. The result indicates that as informal household becomes older, due to the fears of old age lives and related socio-economic risks; they are more willing to participate in insurance. To protect the basic livelihood when they are old, they are more inclined to join micro insurance services.

Table: 8.1: Probit Parameter[46] Estimates Results

	Parameter	Est.	Std. Error	Z	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
PROBIT[a]	AGE	.372	.161	2.315	.021	.057	.687
	SEMPL	.618	.159	3.883	.000	.306	.929
	WEMPL	.565	.160	3.528	.000	.251	.878
	MARRIED	-.601	.186	-3.223	.001	-.967	-.236
	SEDU	.397	.126	3.163	.002	.151	.643
	PEDU	-.175	.063	-2.778	.005	-.298	-.051
	UEDU	.373	.125	2.974	.003	.127	.619
	UMFISERV	.722	.172	4.190	.000	.384	1.060
	UBSERV	-.465	.195	-2.383	.017	-.847	-.082
	LIQUID ASS.	.226	.136	1.667	.095	-.040	.492
	FIXED ASS.	-.005	.009	-.517	.605	-.022	.013
	HOUSOWN	-.066	.076	-.865	.387	-.215	.083
	INCOME	-.207	.079	-2.623	.009	-.361	-.052
	HRMI	-.184	.063	-2.924	.003	-.308	-.061
	HRIA	-.247	.074	-3.331	.001	-.393	-.102
	DR HH	-.207	.079	-2.637	.008	-.361	-.053
	EDUER	.208	.088	2.359	.018	.035	.380
	HBERISK	.212	.108	1.965	.049	.000	.423
	KNOWL. INS.	.560	.157	3.570	.000	.252	.867
	TRUST INS.	.318	.174	1.828	.067	-.023	.660
	Intercept	-1.419	.526	-2.700	.007	-1.944	-.893

a. PROBIT model: PROBIT(p) = Intercept + BX

The survey shows that over 5% of the sample are over 56 years, it means that there are reasonable numbers of elderl

y people at home that need supports, which makes households, face a heavier burden of maintenance. As many household have personal experience of the family support, so they know the drawbacks, out of concerning about their lives of future and reducing the burden of their children, they are more willing to participate in micro insurance. Given the expected increase in the elderly population and the willingness and ability to save for old age, it becomes clear that there is a strong need of micro insurance to provide financial security for aged living in informal sector.

The results imply that, all else equal, older household demand micro insurance higher than the youngest individuals. This is in line with the study by Ito and Kono (2010) were through a household survey complemented with experiments finds that age significantly explains health insurance uptake. The positive and significant estimate may also imply lack of social security systems and disintegrating social safety nets in the informal sector.

8.3.4.3 Employment and demand for micro insurance. (SEMPL, WEMPL)

In contrast to our expectation, the result shows that self-employed household has positive and significant influence to the demand for micro insurance. Self-employed were hypothesized to have negative influence to micro insurance demand because they have enough income to cover risks and can easily save and access alternatives risk management techniques. The result however shows the opposite; one possible explanation could be those households are able to save more which increases the capacity to purchase micro insurance. This may also be an indication that household engaged in self-employment have more assets and income. They have more to lose or subjected to losses hence interested with micro insurance products. Hence, confirming that employed people accumulate more income; they have capacity to purchase insurance, the patterns of their income induces better saving and have more knowledge with insurance.

8.3.4.4 Married status and demand for micro insurance (MARRIED)

The effect of marital status on micro insurance demand is negative and statistically significant, this result is inconsistency with our expectations that the married couples determines the expanding size of the family and therefore demand for micro insurance protection. This finding also negates previous and more recent research by Osei and Gemegah (2011) held in Ghana were marital status variable was found to have positive and significant statistically at the 10 per cent significance level.

The results may come from the two possible reasons. First, a large number of families spend a large part of household income into children's education and daily consumption, reducing the purchase power for insurance, to some degree. Secondly, it also suggests that married couples have improved sources of incomes against risks due to increased social network.

8.3.4.5 Level of education and demand for micro insurance (PEDU, SEDU, UEDU)

The result largely confirmed that better educated i.e. secondary to university level tends to prefer the use insurance products while those household with lower level of education avoids the use of insurance. The education measured in three levels in this study, is positive and significant for all dependent variables except PEDU. The result verifies our expectations and indicates that educational level is an explanatory factor for micro insurance demand in the informal sector. Secondary and university level attained by households expresses to be positive and significant and PEDU indicates negative estimates. This not only proves our hypothesis that education attainment is positively related to micro insurance demand but also supports previous empirical findings (Beck and Webb, 2003; Browne and Kim, 1993; Hwang and Gao, 2003; Hwang and Greenford, 2005). The result indicates that, in Tanzania, individuals with higher educational attainment are more likely to buy micro insurance.

One interpretation being that educated households are more open to ideas, receptive to alternatives, easy to learn and understand the policies and therefore ready to accept micro insurance policy. Respondent who completed at least secondary school (SEDU) and university graduates (UEDU) were more likely to demand insurance than those illiterate or completely primary School only (PEDU). Another interpretation is that education level is associated with the insurance knowledge this means that if the informal sector are well informed and educated about the concept of insurance, they will value insurance services, which will impact positively on their demand for micro-insurance services.

This calls for an improvement level of information given about insurance products to the market particularly, to the informal economy. Such information should be designed to meet the unique needs and backgrounds of the informal sector. The challenge will be to provide this education on a broad scale and in a manner that addresses the needs of different people with varying degrees of literacy (McCord, 2008). This finding are also in line with recent research by Chankova, *et al.* (2008) and Bendig and Arun (2011) who finds that household heads with no formal, primary or secondary education are less likely to be enrolled in a MFI or participate in the micro finance market than higher educated head and that education is a significant factors explaining the uptake of voluntary life insurance. These studies combines' comparable household surveys conducted in Ghana, Mali and Senegal in a model which tries to predict enrolment in a mutual health organization and they find that education is the significant explanatory factors.

8.3.4.6 Use of other financial services and demand for micro insurance (USMFISERV, USBSERV)

The variable USMFISERV refers to those household who accessed micro finance services both informal and formal such as credit to cope with risks. The estimates for this variable was positive suggesting that households engaged in regular borrowing and saving activities have better exposure to financial markets and would like to use insurance products. Though, strong positive influence may also be the result of linked life credit insurance required by micro finance as a condition to loan rather than insurance product. Yet, the result demonstrates a strong association between use of micro finance services and household demand for micro insurance.

Contrast to our expectation household members who used banks services (USBSERV) was less likely to demand micro insurance. The use of banks services has negative influence to the demand for micro insurance. One interpretation is that the use of banks is a qualification to formal insurance than micro insurance; it also indicates higher financial literacy associated with a greater use of banks services and forma insurance service.

The magnitude of estimate suggests that it is less important factor to the demand for micro insurance. The other possible explanation can be that bank debt might make insurance unaffordable for household under financial pressure. In additional the trust to insurance given the historical evidence of the failed state owned insurance company can profound less demand for insurance product. This study have provided evidence that demand for insurance itself is considered as risky by individuals because the insurance purchase implies a risk of loss if the claim is not paid.

8.3.4.7 Risk exposure and demand for micro insurance (HRIA, HRMI, DRHH, EDUER, and BHER)

The study expected that risk exposures household experienced over last three years would positively influence demand for micro insurance. There were three categories of risks; heath related risks injuries and accident which are considered to be serious health problems (HRIA) and minor health risks which are considered to minor illness (HRMI). Second category is death risks (DRHH) i.e. death of household member and third category of risks education (EDUER) and house building expenses (BHER) incurred by households.

Result is in support of the view that risk exposure positively influence demand for micro insurance for risk related to housing costs and education expenses. There were significant and negative estimates. This indicates that household would prefer insurance product in the form of investment to cover risk related to building a house or paying for educational fee.

However, as for risk exposure related to health and death crisis we found that there are negative estimates with the demand for micro insurance. The possible explanation is that emergencies crisis and health risk household would prefer using most common and familiar informal technique. Results provides an evidence that household regards the use of formal services to be additional risks possibly because they don't trust providers or do not understand the functioning of the services hence prefer to use informal services. A similar conclusion was drawn in earlier studies on micro insurance by Gine and Yang (2009) and Gine, et *al.* (2008).

Another explanation may be that serious shocks like death of household is taken care by families. A similar interpretation may be hold for the experience of illness and other emergency crisis which suggest that household are more likely to use loans for emergencies crisis i.e. health, injuries and death. Findings suggest death of a family member was a manageable risk for many households given the available informal risk management techniques.

8.3.4.8 Income and demand for micro insurance (INCOME)

In contrast with our expectation, the effect of income is negative and statistically significant for insurance demand in the whole sample. We use average monthly earned income to represent household level of income. Although the result contradicts with the already published studies obviously it verifies that saving income effect micro insurance demand as a substitute for the handling risk exposure. This indicates that household with higher income were less likely to use micro insurance as a risk management option given their financial capability to handle risks.

The previous studies suggested that income have a positive influence on the demand for micro insurance for example according to Hwang and Gao (2003), income is statistically significant and positively correlated with life insurance consumption in China. Many other authors who have analyzed the insurance purchase decision have found income as a significant factor (see for example, Scotton, 1969; Propper, 1989; Savage and Wright, 1999; Bhat and Jain, 2006). It is possible that this reflects the fact that incomes enables household handle risk exposures using other means.

Another possible reason may lie in the constrained in the access to formal services relatively due to irregular incomes. The belief that income earned in the informal sector may not necessarily put in the formal financial services given the available informal risk managing technique. Other interpretation is those households have little faith in the compliance mechanisms given widely held view that insurance is not paying claims. Informal households think that they do not require insurance. This is probably due to lack of confidence in insurers and poor understanding of the risk-pooling concept. Previous experience with micro insurance shows that many people do not

understand the concept of insurance and how it works. In some cases, the views of households about insurance are negative. They see it as the reserve for the rich; something that is irrelevant, too expensive or even unfair (McCord and Osinde, 2005; Cohen and Sebstad, 2005; Churchill and Manje, 2002); Matul, 2005; McCord, 2008).

This result proves that the increase of income will not serve as a pushing factor for insurance purchase, also verified by Beenstock, *et al.* (1988) in property-liability. That is to say, the income is not high enough to encourage household purchase micro insurance. Compared to previous studies in this study, the savings rate in the informal sector is extremely high. We can therefore forecast that the big volume of savings will discourage potential for the demand for micro insurance in future.

8.3.4.9 Insurance knowledge and demand for micro insurance (KNOWLEDGE, TRUST)

Insurance knowledge and trust was found to have a significant and positive influence on micro-insurance demand. This means that if the informal sector household familiarity and understanding of the concepts of insurance have positive influence on the demand for micro insurance because they understand the value of insurance services. This calls for an improvement in the level of information given about insurance products to the market particularly, to the informal economy. Such information should be designed to meet the unique needs and backgrounds of the informal sector. The challenge will be to provide this knowledge on a broad scale and in a manner that addresses the needs of different people with varying degrees of literacy (McCord, 2008)

Insurance Trust refers to the impact of expectation, prompt payment of claims and the value of micro-insurance products to low-income earners. It measures the household perception of insurers. Our result shows that an improvement in the perception of low-income earners about insurers has a positive and significant impact on the demand for micro insurance. This result corresponds to the finding reported by Gine, *et al.* (2008), and Bhat and Jain (2006) also found perception to be significant and positively associated with health insurance purchase. For instance, if low-income earners trust that insurers will honour their contractual responsibilities by making timely payments of claims when necessary, then they will have the confidence to take up micro-insurance cover (McCord, 2008).

8.3.4.10 Non-Significant determinants of micro insurance demand in the informal sector

The result shows that house and assets possession are not statistically significant contrasting with our expectations. Nevertheless, the result is explainable. The main risks against assets/house are fire and theft; these risks affect a very small number of household in the informal sector in Tanzania. The finding indicates that there is no significant relationship between household assets possession and

risk exposures and therefore insignificant demand for property insurance. The result means that household house and assets possession is not enough to induce the person to purchase micro-insurance products. Instead, the micro insurance, demand can be explained by other factors in the model.

The distinction has to be made with regards to liquid and fixed assets possession. A higher liquid asset index has a positive estimate with the demand for micro insurance, the fact that liquid asset has positive estimate may be due capacity to purchase insurance or an indication of socio-economic status hence financial literacy (Bendig and Arun, 2011). However, fixed asset endowment in this study indicates to have insignificant effect to the demand for micro insurance which seems different from conventional situation. There are two possible reasons; Firstly, fixed asset possession means easy access to loans in case of risk events and secondly, household who have more fixed assets engage in multiple economic activities and earn higher incomes which provides guarantee in case of risk events.

Similarly, in the case of house ownership which is often viewed as a proxy for socio-economic status of the household. An interesting finding emerges with regard to the house ownership, which are negative estimates with the demand for micro insurance. This could imply that household reluctant since incidence of loss of property against fire appears to be remote case in the informal sector or it implies that household has capacity to borrow in event of crisis given collateral availability.

8.4 SUMMARY OF THE CHAPTER

This chapter has highlighted two major issues related to micro insurance demand perspectives in Tanzania. Firstly, it provides the attitudes towards use of financial services and analyzes potential innovative micro insurance products in line with the financial needs of the households. The study finds that knowledge and trust as a measure of degree of familiarity and perception for a given household, proves more significant to the development of micro insurance in the informal sector. Hence, provide necessary information of interests to commercial insurer willing to undertake micro insurance business in Tanzania. The study shows that the demand for micro insurance increases with household self-perception towards financial products and trust. The study suggests that implementation and promoting financial education will improve the demand and reduce mis-trust of insurance business among informal sector household.

Secondly, probit regression model examines the household characteristics that influence micro insurance demand suggest possible markets segment toward those groups of household who

preferred micro insurance products. There is evidence that micro insurance demand can be influenced by household's characteristics in different ways. Unlike the variables of income, assets and house possession which verifies their insignificant influence on micro insurance demand among the variables employed in our model. This study indicates risk exposures that a household experienced in the past three years has relation to demand for micro insurance. The health risks and death related risks has negative influence to the demand for micro insurance, education expense and cost of building house have positive influence to the demand for micro insurance. This implies that existing informal programs function as the effective strategies towards emergency health and death related risks in the informal sector in Tanzania.

The next chapter will conclude the study by re-visiting some of the main findings from this research. The chapter will also discuss main contributions of the study, some of the key implications and recommendations for practice identified before concluding with areas worthy of consideration for further study.

CHAPTER NINE: CONCLUSION AND RECOMENDATIONS

This is the final concluding chapter; Section 9.1 re-visits some of the main findings and the respective conclusions from this research are presented. Section 9.2 discusses key policy implications and provides some recommendations. Section 9.3 provides three main contributions of the thesis. Section 9.4 indicates the limitations of the study which calls for further research. Finally, section 9.5 identifies areas worthy of consideration for further research.

9.1 SUMMARY AND CONCLUSION

The research findings in this PhD project render reasonable explanations for micro insurance demand perspectives in the informal sector in Tanzania. The thesis has systematically analysed the risks to which informal households are exposed and their coping strategies. A comparison of risks and coping strategies were used to identify possible gaps that could be filled by micro insurance services. The debate centers on three categories: 1) the financial needs to which informal households are exposed; 2) the coping strategies in place including strengths and weaknesses and 3) household characteristics that influence demand for micro insurance. To understand the differences in the needs, preferences, and opportunities for insurance among different market segments; - the research examines expenses which take large portions of household earned income. This involves three subsequent stages. The first stage identifies risk exposures facing households and their frequency and severity. In the second stage respondents were asked about their coping strategies and their strengths and weaknesses were examined. In the third stage the probit regression model was conducted to identify the relationship between household characteristics and demand for micro insurance. The results are presented in chapter six, seven and eight respectively. This thesis provides critical insights regarding informal household's risk exposure, the coping strategies they have in place and evidence of the relationship between micro insurance demand and household characteristics.

There are three major findings from the data analysis. First, the thesis has demonstrated that with limited and inadequate risk management measures available to households, the consequences and recovery from risk exposures remain for several periods after their first occurrence. Hence, risks exposures causes decline in household earned incomes. It has been found that some risk exposure has significant influence to micro insurance demand while others have less significant influence. This implies that micro insurance policy designs must reflect those risk exposure with significant influence to micro insurance demand. Moreover, the findings indicate that demand for micro insurance in the informal sector depends on the competitive advantage between formal insurance services and available informal techniques. Comparing to market-based, informal arrangements have

important informational advantages. Informal households typically have intimate knowledge regarding the circumstances and needs of member households, and due to their close physical proximity and frequent, repeated interactions between them, they can use relatively low-cost methods of contract enforcement, such as peer monitoring and the threat of social sanctions. These advantages provide better risk management among households which is often not the case for a typical commercial provider.

This implies that some inferences can be drawn from the design and development of micro insurance. For example schemes may allow flexibility in the premium payments, such flexibility can reflect household income earning flow and insurance companies may design timely disbursement of payouts, which is the trust that underlies the basic tenets of reciprocity and the reputation of many informal group based schemes that provide insurance. The results show that low demand for micro insurance in the informal sector is the result of the inflexibility of financial instruments, which does not adapt to the conditions prevailing in the informal sector. The analysis suggests that informal households may be willing to be integrated into formal financial services if thorough review of the existing eligibility criteria that hinders them to join is changed to conform to their financial needs. There is evidence that the insurance industry has done little to improve their operations and product innovation to meet the household's needs.

The important measures to put into consideration in future may include to link up insurance with the informal schemes through which public social assistance programs can be initiated that will help informal households build up their asset base with the minimum micro insurance cover against uninsured risk exposures. This result conforms to the mistake hypothesis which explains the low demand of insurance as the result of obstacles related to information, cognitive resource and time. As suggested in the mistake hypothesis, the households might not insure themselves if they do not know whether benefits of insurance exceed the cost of being uninsured. It seems to suggest that traditional insurance theories provide a strong starting point for the analysis of the insurance market. However, micro insurance demand requires insurers to look at informal based solutions already in place and incorporate these into product design.

Secondly, the findings show the existence of a direct link between demand for micro insurance and household characteristics. This implies that household characteristics are key factors in the development of micro insurance products in the informal sector. The implication is that selected key characteristics which have positive and significant influence to the demand of micro insurance must be taken into consideration for effective and innovative micro insurance products. The research

shows that factors that strongly and significantly influence micro insurance demand in the informal sector in Tanzania are employment status, marital status, and education level, and risk exposures, knowledge of insurance and use of micro finance services. Micro insurance demand appears to vary across demographic variables; in this study there were noticeable differences according to marital status, income, and education. Among the factors that affect the choice of coping mechanisms, the major ones were income and education levels of a household. Less poor households use primarily reversible coping mechanisms, which included formal and informal savings, while poorer households often resort to irreversible responses, such as selling business assets or borrowing at exorbitant interest rates. Reversible responses only have a marginal effect on the household's cash flow, while irreversible coping mechanisms either increase subsequent costs or reduce future earnings, and make it difficult for the household re-establish its normal expenditure pattern. More educated households were much more ready to use micro insurance than less educated households. There is evidence that any insurer targeting the informal sector market would be wise to invest heavily in consumer education and advertising.

Thirdly, there is evidence to suggest that the low demand for micro insurance can be explained by behavioural biases, in particular the underestimation of risk exposure and individuals' aversion to insure against high severity, low probability risks. This behaviour seems to be derived from the available informal arrangements which are characterized by closely knit social networks and groups that provide security in exchange for loyalty to the group. Also, uncertainty avoidance culture is low within the households in Tanzania, and households seem to be more tolerate to different situations.

The study demonstrates that the majority of respondents are either wary of insurance or not sufficiently familiar with it. Indeed, households show a strong preference for improved savings facilities and emergency loans to help them cope with risks, rather than insurance. Four types of insurance discussed in section 8.2 may stimulate demand for micro insurance. As current coping strategies are inadequate with a larger risk pool and greater economies of scale a formal insurer could probably provide a benefit that is 5 to 10 times larger than the payouts in most informal schemes, especially if it could rely on existing distribution channels, such as members associations, group savings and MFIs, to keep transaction costs low. In summary, there is evidence that micro insurance has potential if the barriers to adoption are overcome. It seems that the most important area for innovation is around the types of products, distribution channels and administration. If insurance providers can bring down those costs, they will find demand and will be able to grow a sustainable business that provides substantial benefits to clients.

9.2 RECOMMENDATIONS AND POLICY IMPLICATIONS

The current analysis was driven by the challenges facing access to micro insurance in informal households in Tanzania. Like in many parts of the world, the informal sector in Tanzania is growing and its contribution to the overall national economy cannot be underestimated. The lack of sustainable financial risk management makes informal households vulnerable to socio-economic risks that hinder the expected economic growth**.** Tanzania has made significant progress in implementing financial sector reforms and achieved a more competitive market with an expanding market share of private insurance[47]. Thus, understanding demand perspectives enables stakeholders of the insurance industry to improve their product development, policy formulations and implementation.

Based on the analysis above, this research proposes three policy recommendations. Firstly, the findings suggest that there is a micro insurance product design gap. Indeed, there is no doubt in the finding that informal households in Tanzania need some financial instruments given the nature of socio-economic risk they encounter. The results therefore suggest that it is important to have appropriate policies aiming at developing financial instruments which incorporate attributes of the informal sector households. To accelerate demand and create trust a properly designed micro insurance product is likely to result in higher demand. This must be accompanied by a well-functioning scheme to remove any imbalance which might set an unprecedented bad scenario. Findings indicate that the point of entry to address the product design gap should be housing/building and education insurance.

The important policy recommendation is that insurance companies should liaise with local or community based organizations to be attractive to informal sector households. Insurers must adapt effectively to the living and working conditions of people, which are usually area or trade specific. Effective adaptation can occur through a process of mediation composed of two essential functions; empowerment and increased social capital. The first happens by enabling the population to express its needs and priorities; and the second occurs through forging a receptive public opinion towards the insurance. The process requires trust-building measures. The role of informal institutions which is a major determinant of micro-insurance demand is to reduce transactional costs and the tendencies of moral hazard and adverse selection. The insurance companies can help local associations to form agencies by giving them capacity training in issues covering premium payments and collections, claims processing and the duties of the parties involved in an insurance contract. Correct marketing measures must be adopted to increase demand for micro insurance in the informal sector.

[47] The comprehensive analysis of the growth of financial sector in Tanzania can be seen in chapter two of this thesis.

Moreover, the household perception about insurance products can be improved through the proper explanation of the benefits of micro-insurance products, the legal obligations of the parties involved in the insurance contractual relationship and an explicit explanation of when a policyholder can make a claim and the procedure for making such claims. Such initiatives will improve the trust and perception of the informal households about insurers and this would eventually impact positively on the demand for micro insurance. Financial literacy must be offered, focusing on products developed according to the socio-economic situation of the clients in each group. While most informal households have heard about micro insurance, the ratio of real understanding is not high, so the focus of publicity should be recognized from the surface to the depth of understanding, which could remove the worries left behind about the micro insurance services. The efforts to support education should be strengthened since the education level of a household influences positive participation in micro insurance.

Secondly, government subsidy is needed and is an important policy issue. In order to achieve the aims of poverty reduction strategies, micro insurance must be part of the equation. Sometimes poverty reduction initiatives encounter major setbacks when the target groups and individuals suffer from medical expense, loss of property or the death of the breadwinner in the family. These risks push the informal households further below the poverty line thereby eroding any meaningful gains made by the poverty reduction programs. It is, therefore, imperative for the government to make micro insurance a central pillar in its poverty reduction program. The findings suggest that the subsidy has an important role in extending and replicating micro insurance schemes that have emerged as promising route for financing socio-economic risk exposures. The research indicates that gaps in coverage exist for the poorest households, because these households are unable to make the initial contributions needed in order to become members of the schemes. The exclusion of certain individual households is of particular interest to policy makers; hence the need to subsidize the cost of participation of these households. Alternatively, governments can build the capacity of micro insurance schemes to tap into reinsurance markets, thereby enabling them to transfer risk outside the community; they can underwrite the start-up costs needed to create relevant insurance products. In so doing, governments can develop a system of two-tier allocation of disaster assistance which harnesses the informational advantage enjoyed by communities while providing the external assistance necessary to cope with covariate risk.

Thirdly, a successful business case for micro insurance requires a supportive regulatory environment. The ideal regulatory environment neither over promotes the market (because to do so

distorts the market) nor does it create barriers by insisting on rigid enforcement of traditional insurance guidelines. New regulatory frameworks that are easier to enforce and follow must be developed since creation of regulatory frameworks assist on trust building too. The Tanzania Insurance Regulatory Authority should also consider appropriate legislation that will encourage insurance companies to venture into the micro-insurance business. Such legislation can take the form of providing subsidies or tax exemptions to insurers that provide a certain level of micro-insurance services.

Nevertheless, the results of the study should not be interpreted as suggesting micro insurance demand is free from dangers. Experiences from other countries should assist in taking precautionary measures. Other non-financial factors such as distribution and technology are also necessary to influence demand for micro insurance. Not only do they have a direct effect on economic growth but also promote insurance demand. Implicitly, if policies aim to promote demand for micro insurance they must also focus on factors that influence economic growth and investments. Research suggests that five focus areas that need to be delineated before a micro insurance scheme can be instituted, these include; a clear specification of the target group/client profile within the informal economy, the nature of risks faced by this sub-group, the types of interventions possible (social security, social insurance, social funds, labour market interventions), the financing options available (fees for services, premiums, subsidies, rotating savings and credit type circulating schemes, loans) and the delivery system and management structure.

9.3 CONTRIBUTIONS AND SIGNIFICANCE OF THE STUDY

This study has made three main contributions from its findings. Firstly, this PhD's research provides unique conceptual contributions through clarifying the concept of micro insurance and extends the debate of the effectiveness of micro insurance as a risk management tool in the informal sector. The study contributes to the existing literature on micro insurance demand and risk management in the informal sector (see for example, Adams, 1992; Alderman and Paxson, 1995; McCord, 2008; Jalan and Ravallion, 1999) by taking into account recent advances in the understanding of poverty and their relationship to risk management techniques. By doing so, it has not only filled the gap in the area but has also improved the general understanding of the micro insurance demand concept. The results optimize household's insurance needs; identifying the positive attributes of informal insurance systems that could be incorporated into the design of micro insurance products**.** It also provides the operational linkages and determines which processes can be improved, with a view to determining the factors that allow them to participate in micro insurance schemes.

Secondly, a major contribution is made through the employed probit regression model, which is the first of its kind in Tanzania, to develop and empirically test models of micro insurance demand using household's characteristics; and this contributes towards advancements of knowledge within the context of micro insurance demand. The extent to which micro insurance demand studies commonly used micro finance clients to derive the demand perspectives was noted. This coverage of micro finance clients was found deficient in that it included only the beneficiaries of micro credit clients. This study addressed these weaknesses to provide arguably the representative evidence needed in the informal sector. This was possible by including members and non-members of MFI's in the informal sector in Tanzania.

The third major contribution of this study is the synthesis of evidence of a range of risk management arrangements observed in the informal sector in Tanzania. They include traditional, indigenous, informal credit, savings and insurance arrangements as well as newer, semi-formal community-based micro finance. These schemes share a common feature absent from market-based arrangements, namely, the use of interpersonal relationships in order to reduce informational and transaction costs. In this context this research recommends suggestions on appropriate interventions on micro insurance product design. Such information is vital for policy makers and other stakeholders addressing issues of access to micro-insurance in the informal sector.

9.4 LIMITATIONS OF THE STUDY

The study has limitations that signify the need for further research. The main limitation is that the study does not collect opinions of the providers of micro insurance services; the supply side opinions could have provided more insight into the problem. The second limitation is that the demand model equation is made up of a few selected variables. This was done in order to have a reliable interpretation of the study. The study could have been richer if other variables were also studied. However, despite these limitations the present study has come out with some meaningful findings and policy suggestions for further actions.

9.5 DIRECTION FOR FUTURE RESEARCH

The conclusion of the current study does not in any way mark the end of serious research on micro insurance demand in general and for Tanzania in particular. Previous studies have their limitations ranging from methodological issues to coverage and scope restraints. The limitations of the current study have been mentioned in section 9.4 above. Certainly these limitations warrant the need for further research both in the field in general and in Tanzania in particular. It was duly acknowledged

by the researcher that there is considerable scope for further research. The researcher argues that future research may explore three major areas.

Firstly, the micro insurance field is still young and growing, and there are various areas for research. Some of the areas for further studies may include research concerning distribution, as clearly MFI distribution is a useful channel. Beyond credit life, however, micro insurers that rely solely on MFI distribution typically do not scale up to expectations. Very little has been done to document the cost of distribution, which in insurance is a key component of any profitability analysis. While much has been written about the problems associated with MFI distribution, we have yet to see much documentation about the outcomes of alternative channels. Lack of capital and lack of insurance expertise are inherent constraints for self-funding and other informal schemes.

Secondly, another area is concerning product suitability and customization. Much has been written, but little literature describes profitability at the product level. Of particular interest is whether voluntary products can be profitable. This issue is clouded, as many micro insurance schemes are delivered by organizations with multiple lines of business, with little documentation on how expenses are allocated across lines of business. Contributing to this blurring is a dual bottom line perspective, balancing both social and business goals. Research has hardly looked at how these goals are balanced. Also, little has been written about competition within the micro insurance field. An examination of competitive factors would seem central to any classical business analysis.

Finally, given the broad range of existing informal arrangements; which are marked by differences in membership and leadership structure, history, longevity and nature of activities, future studies which would provide evidence on which features of such arrangements make them more conducive for successful involvement of micro insurance would be very beneficial. While this study has documented the targeting and informational advantages of informal arrangements relative to formal arrangements, there are no careful evaluations of the efficacy or rate of return from community-based arrangements. Future studies which fill this gap in knowledge through either non-experimental econometric work or randomized controlled trials related to community-based arrangements can promote the understanding of their costs and benefits vis-à-vis other arrangements.

……..God Knows Best……

REFERENCES

Adams, D.W. (1992), "Taking a fresh look at informal finance" In D.W. Adams and D.A. Fitchett, (eds.), *Informal Finance in Low Income Countries*, Boulder: Westview Press.

Adato, M., Michael, R. C., and J. May (2006), "Exploring Poverty Traps and Social Exclusion in South Africa using Quantitative and Qualitative Data", *Journal of Development Studies*. Vol. 42(2), pp. 226-247.

ADB (2005), "The Changing Face of the Micro finance Industry: Building Financial Systems for the Poor". *Theme Paper No. 14. Manila: ADB.*

Adler, N. J., and A. Gundersen (2008*),* "International dimensions of organizational behavior" *Thomson South-Western:* Ohio.

Aghion, P. and P. Bolton (1997), "A Trickle-Down Theory of Growth and development with Debt Overhang", *Review of Economic Studies*. Vol. 64, pp. 151-72.

Aghion, P., Dewatripont, M., and P. Rey (1999), "Competition, Financial Discipline and Growth", *Review of Economic Studies.* Vol. 66, pp. 825-852.

Ahuja, R. and J. Jutting (2004), "Are the Poor too Poor to Demand Health Insurance?" *Journal of Micro Finance.* Vol. 6 (1).

Alderman, H. (2001), "Multi-tier Targeting of Social Assistance: The Role of Intergovernmental Transfers". *World Bank Economic Review.* Vol. 15(1), pp. 33-53.

Alderman, H. (2002), "Do Local Officials Know Something We Don't? Decentralization of Targeted Transfers in Albania". *Journal of Public Economics.* Vol. 83(3), pp. 375-404.

Alderman, H. and C. Paxson (1995), "Do the Poor Insure? A Synthesis of the Literature on Risk and Consumption in Developing Countries" In: Bacha, E. (ed.): Economics in a Changing World. New York: St. Martin's, pp. 48 – 78.

Alderman, H. and C. Paxson. (1994), "Do the Poor Insure? A Synthesis of the Literature on Risk Sharing Institutions in Developing Countries". *Economics in a Changing World*: Proceedings of the Tenth World Congress of the International Economics Association, Moscow.

Alderman, H. and T. Haque (2007), "Insurance against Covariate Shocks: The Role of Index-Based Insurance in Social Protection in Low-Income Countries of Africa". *Working Paper 95, the World Bank.*

Alderman, H., Hoddinott, J., and B. H. Kinsey (2006), "Long Term Consequences of Early Childhood Malnutrition". *Oxford Economic Papers*. Vol. 58(3), pp. 450-74.

Alila, P.O. (1991), "Informal and formal credit in rural Kenya, A case of Western Kenya grassroots borrowing and lending in an institutional development perspectives*". Institute for Development Studies, University of Nairobi*.

Anderson, D.R and J.R. Nevin (1975), "Determinants of young married life insurance purchasing behaviour; an empirical investigation" *Journal of Risk and Insurance.* Vol. 42, pp. 375-387.

Ando, A. and F. Modigliani (1963), "The life-cycle hypothesis of saving: Aggregate implications and tests". *American Economic Review.* Vol. 53(1), pp. 55-84.

Arestis, P., Demetriades, P., Fattaouh, B. A., and K. Mouratidis (2002), "The Impact of Financial Liberalization Policies on Financial Development: Evidence from Developing Economies", *International Journal of Finance and Economics.* Vol. 7 (2), pp. 109-121.

Armendáriz de Aghion, B. and J. Morduch (2005), "The economics of micro finance". *Cambridge, Mass.: MIT Press.*

Arun, T.G. and S. Steiner (2008), "Micro insurance in the context of social protection" Working Paper No.55. *Brooks World Poverty Institute.*

Arusha Declaration (1967), "The Arusha declaration and TANU's Policy on Socialism and Self-Reliance. *TANU Publicity Section*. Dar es Salaam.

Aryeetey E., H. Hettige, M. Nissanke and W. Steel (1997), "Financial market integration and reforms in Ghana, Malawi, Nigeria and Tanzania". *World Bank Economic Review.* Vol. 11(2), pp. 195–218.

Aryeetey, E. (1996), "Informal financial markets in Africa". In M. Matthew and G. Ngola, (eds.), *Forging Links: Economic Research and Policy Making in Sub-Saharan Africa*.

Aryeetey, E. and C. Udry (1997), "The characteristics of informal financial markets in sub-Saharan Africa" *Journal of African Economies*. Vol. 6 (1)

Azariadis, C. and J. Stachurski (2004), "Poverty traps. In Philippe Aghion and Steven Durlauf (Eds.). *Handbook of Economic Growth* .Vol.1. Amsterdam: North-Holland.

Baek, E. and S.A. DeVaney, (2004), "Assessing the baby boomers financial wellness using financial ratios and a subjective measure". *Family and Consumer Sciences Research Journal.* Vol. 32(4), pp. 321-348.

Bailey, C. (1994), "Extension of social security to small establishments and non-wage earning population. *ISSA African Series.* Vol. 14. Geneva.

Bakari, A. (1988), "Traditional social security as practiced in contemporary Tanzanian's urban centers" in Benda –Beckmann, *et al.* (1988). "Between Kinship and the state: social security law in developing countries" *Dordrecht, Foris Publication.*

Bals, K., Warner and S. Butzengeiger (2006), "Insuring the uninsurable: design options for a climate change funding mechanism" *Climate Policy*. Vol. 6, pp. 637–647.

Bandiera, O., Caprio, G., Honohan, P. and F. Schiantarelli (2000), "Does Financial Reform Raise or Reduce Saving?" *Review of Economics and Statistics*. Vol. 82(2), pp. 239-263.

Banerjee, A. and A. Newman (1993), "Occupational Choice and the Process of Development", *Journal of Political Economy.* Vol. 101, pp. 274-98.

Bardhan, P. and C. Udry (1999), "Development Microeconomics". Oxford: *Oxford University Press.*

Bardhan, P., Bowles, S. and H. Gintis (2000), "Wealth Inequality, Wealth Constraints and Economic Performance". In Anthony B. Atkinson and Francois Bourguignon (ed.) *Handbook of Income Distribution.* Vol. 1, pp. 541-603.

Barrett, C. B., Sherlund, S.M., and A. A. Adesina (2006), "Macroeconomic Shocks, Human Capital and Productive Efficiency: Evidence from West African Rice Farmers". *Journal of African Economies*. Vol.15 (3), pp. 343-72.

Beattie, R. (2000), "Social Protection for all, but how?" *International Labour Review*. Vol.139 (2).

Beck, T. and A. Demirguc-Kunt (2008), "Access to financial services, measurement, impacts and policies" *World Bank.*

Beck, T. and I. Webb (2003). "Economic, Demographic, and Institutional Determinants of Life Insurance Consumption across Countries," *World Bank Economic Review.* Oxford University Press.Vol. 17(1), pp. 51-88.

Beck, T. and R. Levine (2004), "Stock Markets, Banks and Growth: Panel Evidence", *Journal of Banking and Finance*, Vol.1, pp. 423-442.

Beck, T., Demirguc-Kunt A., and R. Levine (2000), "A New Database on Financial Development and Structure" *World Bank Economic Review.* Vol. 14 (3), pp. 597-605.

Beck, T., Demirguc-Kunt, A. and M. Peria (2008), "Banking services for everyone? Barriers to bank access and use around the world. *The World Bank Economic Review.* Vol. 22(3), pp. 397–430.

Beck, T., Demirguç-Kunt, A., and R. Levine (2004), "Finance, Inequality and Poverty: Cross-Country Evidence." *World Bank Working Paper 3338, Washington DC.*

Beck, T., Ross L., and N. Loayza (2000), "Finance and the sources of growth" *Journal of Financial Economics*. Vol. 58, pp. 261–300.

Beenstock, M., Dickinson, G. and S. Khajuria (1986), "The determination of life premiums: an international cross-section analysis 1970-1981", *Mathematics and Economics*. Vol. 5, pp. 261-70.

Bell, C. (1990), "Interactions between institutional and informal credit agencies in rural India" World *Bank Economic Review*. Vol. 4(3), pp. 297–327.

Benda-Beckmann, F., Benda-Beckmann, K., Casino, E., Hirtz, F., Woodman, G., and H. Zacher (1988), "Between Kinship and the state: social security law in developing countries" *Dordrecht, Foris Publication*

Bendig, M. and T. Arun (2011), "Enrolment in Micro Life and Health Insurance: Evidences from Sri Lanka" *IZA Discussion Papers 5427*, Institute for the Study of Labor.

Berman, P. (1998), "Rethinking Health Care Systems: private health care provision in India" *World Development.* Vol. 26 (8), pp. 1463-1479

Besley, T (1995a), "Economic Development in imperfect economies" Journal *of Political Economy*. Vol. 103 (5), pp. 903-37.

Besley, T. (1994), "How do market failures justify intervention in rural credit markets?" *The World Bank Research Observer,* Vol. 9 (1), pp. 27–47

Besley, T. (1995b), "Non-Market Institutions for Credit and Risk-Sharing in Low-Income Countries. *Journal of Economic Perspectivess*. Vol. 9(3), pp. 115-27.

Besley, T. (1995c), "Savings, Credit and Insurance". In Behrman, J. and Srinivasan, T., editors, Handbook of Development Economics, volume III A, chapter 36.

Besley, T. J. and S. Coate (1995), "Group lending, repayment incentives and social collateral. *Journal of Development Economics*. Vol. 46(1), pp. 1–18.

Besley, T., Coate, S. and G. Loury (1993), "The economics of rotating savings and credit associations". *American Economic Review*. Vol. 83(4), pp. 792– 810.

Bevan, D., Collier, P. and J.W. Gunning (1991), "Peasants and Governments" *Oxford: Oxford University Press.*

Bhat, R. and N. Jain (2006), "Factoring Affecting the Demand for Health Insurance in a Micro Insurance Scheme". *Indian Institute of Management,* Ahmedabad

Bhattamishra, R. and C. B. Barrett (2008), "Community-Based Risk Management Arrangements: An Overview and Implications for Social Fund Program Design". *Social Protection Discussion Paper, World Bank.*

Biesta, G. (2010), "Pragmatism and the philosophical foundations of mixed methods research". In A. Tashakkori & C. Teddlie (Eds.), Sage handbook of mixed methods in social and behavioral research (2nd ed., pp. 95-117). *Thousand Oaks, CA: SAGE.*

Blaikie, N. (1993), "Approaches to social enquiry" *Polity Press: Oxford*.

Blaikie, N. (2001), "Designing social research" *Blackwell Publishers: Cambridge*.

Blumberg L., Nichols, L.M. and J. S. Banthin (2001), "Workers Decision to Purchase Health Insurance." *International Journal of Health Care Finance and Economics*. Vol.1(3), pp. 305-325

Borch, K. L. (1960) ''The Safety Loading of Reinsurance Premiums,'' *Skandina¨ian Aktuarietidskrift* pp. 162 184.

Bossert, A. (1988), "Formal and informal social security: The case of study of Tanzania" in Benda-Beckmann, *et al.* 1988. "Between Kinship and the state: social security law in developing countries" *Dordrecht,* Foris *publication.*

BoT (1990, 1995, 2005, 2010), "Bank of Tanzania Quarterly and Annual Reports" *BoT. Dar es Salaam*.

Boucher, S. and C. Guirkinger (2007), "Risk, Wealth, and Sectoral Choice in Rural Credit Markets". *American Journal of Agricultural Economics.* Vol. 84 (4), pp. 991-1004.

Boucher, S., Guirkinger, C. and C. Trivelli (2005), "Direct elicitation of credit constraints: Conceptual and practical issues with an empirical application". *Mimeo, University of California-Davis.*

Braverman, A. and J.L. Guasch (1986), "Rural credit markets and institutions in developing countries: Lessons for policy analysis from practice and modern theory". *World Development*, Vol. 14, (10), pp. 1253–67.

Brown W. (2000), "Prospects and Perils of Micro insurance four questions MFI's should ask before developing a Micro insurance product" Paper presented at World Bank workshop on Risks, Poverty and Insurance, "Innovations for the Informal Economy" *Workshop Proceedings September 2000*.

Brown W. and M.J. McCord (2000), "Summary of Discussions, USAID MBP virtual Conference on micro insurance October 9-27, 2000. USAID: Washington, D.C see www.mip.org

Brown, L.D. and D. Ashman (1996), "Participation, social capital and intersectorial problem solving. Africna and Asian cases" *World Development.* Vol. 24 (9), pp. 1467-1479.

Brown, W. (2001), "Micro insurance: The risks, perils and opportunities". *Small Enterprise Development.* Vol. 12 (1), pp. 11-24.

Brown, W. and C. Churchill (1999), "Insurance Provision in Low-Income Communities, Part I, Primer on Insurance Principles and Products", *Toronto: Calmeadow*.

Brown, W. and C. Churchill (2000), "Insurance Provision in Low-Income Communities, Part II, Initial Lessons from Micro-Insurance Experiments for the Poor" *Bethesda, Md., USA: DAI,*. At http://www.micro financegateway.org/files/2460_file_02460.pdf.

Browne, M. and K. Kim (1993), "An international analysis of life insurance demand". *Journal of Risk and Insurance*. Vol. 60 pp. 616-634.

Bryant, W. and J. Macri (2005), "Does Sentiment Explain Consumption?" *Journal of Economic and Finance*. Vol. 29, pp. 97-111.

Bryman, A. (2006), "Integrating quantitative and qualitative research: how is it done?" *Qualitative Research.* Vol. 6(1), pp. 97–113.

Bryman, A. and E. Bell (2003), "Business research methods" *Oxford University Press*: Oxford.

Burke J.R. and A. Onwuegbuzie (2004), "Mixed methods research: a research paradigm whose time has come". *Educational Researcher.* Vol. 33(7), pp. 14–26.

Burnett, J.J. and B.A. Palmer (1984), "Examining Life Insurance Ownership through Demographic and Psychographic Characteristics". *The Journal of Risk and Insurance*, Vol. 51 (3), pp. 453-467

Cameron A, Trivedi P, Milne F, and J. Piggott (1988), "A micro econometric model of the demand for health care and health insurance in Australia". *Review of Economic Studies* LV, pp. 85–106.

Carrin, G, Waelken M, and B. Criel (2005), "Community based health insurance in developing countries; a study of its contributions to performance of health financing system". *Tropical medicine and International Health*. Vol.10 (8), pp. 799-811.

Carter, M.R., and C.B. Barrett (2006), "The Economics of Poverty Traps and Persistent Poverty: An Asset-Based Approach". *Journal of Development Studies*. Vol. 42 (2), pp. 178-199.

Carter, M.R., Little, P.D., Mogues, T. and W. Negatu. (2007), "Poverty Traps and Natural Disasters in Ethiopia and Honduras". *World Development*. Vol. 35(5), pp. 835-56.

CGAP (2003a), "Consultative Group to Assist the Poor. Working Group Study on Micro-Insurance. Preliminary Donor Guidelines for Supporting Micro-insurance" *ILO*.

CGAP (2003b), "Health Micro-insurance: A Comparative Study of Three Examples in Bangladesh. CGAP Working Group on Micro-insurance Good and Bad Practices. Case *Study No. 13*.

CGAP (2005), "Consultative Group Against poverty, Financial Access Team" *World Bank*

Chankova, S., Sulzbach, S. and F. Diop (2008), "Impact of mutual health organizations: evidence from West Africa. *Health Policy and Planning*. Vol. 23(4), pp. 264-276.

Chantarat, S. and C. B. Barrett (2008), "Social Network Capital, Economic Mobility and Poverty Traps" *Cornell University. Mimeo*.

Chinn, M. and H. Ito (2002), "Capital Account Liberalization, Institutions and Financial Development: Cross Country Evidence," *NBER Working Paper No. 8967*.

Chipeta, C. and M.L.C. Mkandawire (1992) "Links between the formal and informal/ semi-formal financial sectors in Malawi" *AERC Research Paper No. 14*.

Chiteji, N.S. (2002), "Promises Kept: Enforcement and the Role of Rotating Savings and Credit Associations in an Economy" *Journal of International Development.* Vol. 14, pp. 393-411.

Chui, A. and C. Kwok (2008), "National Culture and Life Insurance Consumption. *Journal of International Business Studies*. Vol. 39, pp. 88-101.

Churchil C. and L. Manje (2002), "The Demand for Risk Managing Financial Services in Low-income Communities Evidence from Zambia." *Working Paper No. 31. Social Employment Sector*. ILO. At www.ilo.org/socialfinance

Churchill, C. (2002), "Trying to understand the demand for micro insurance". *Journal of International development*. Vol. 14, pp. 381-387.

Churchill, C. (2006), "Protecting Poor. A micro insurance compendium (eds) Geneva" *Switzerland. International Labor Office.*

Churchill, C. (2006), "What is insurance for the poor? In Protecting the Poor, A micro Insurance Compendium". *International Labour Organisation*. Geneva.

Coady, D., Grosh, M. and J. Hoddinott (2004), "Targeting of Transfers in Developing Countries: Review of Lessons and Experience". *World Bank and IFPRI*, Washington, D.C.

Cohen M, Sebstad J, Millinga A, Mbaisi J, and S. Ahmed (2005), "Reducing vulnerability: The demand for micro insurance". *Journal of International Development* Vol. 17 (3), pp. 397-474.

Cohen, M. and J. Sebstad. (2005), "Reducing Vulnerability: The Demand for Micro insurance." *Journal for International Development*. Vol. 17(3), pp. 397- 474.

Cohen, M. and Sebstad, J. (2006), "The demand for micro insurance" in C. Churchill (ed.), Protecting the poor, A micro insurance compendium, *International Labour Organisation, Geneva.*

Conning, J. (1999), "Outreach, sustainability and leverage in monitored and peer-monitored lending". *Journal of Development Economics*. Vol. 60, pp. 51–77.

Cox, D. and E. Jimenez (1998), "Risk-Sharing and Private Transfers: What about Urban Households? *Economic Development and Cultural Change.* Vol. 46(3), pp. 621-39.

Cox, D., Hansen, B.E. and E. Jimenez (2004). "How Responsive are Private Transfers to Income? Evidence from a Laissez-Faire Economy. *Journal of Public Economics.* Vol. 88(9-10), pp. 2193-2219.

CPRIC (2004), "Chronic Poverty Research Institute Centre, the chronic poverty report, *Manchester Institute for Development Policy and Management.* University of Manchester.

Creswell, J. W. (1994), "Research design: Qualitative and Quantitative Approaches*". Thousand Oaks, CA: Sage.*

Creswell, J. W. (1998), "Qualitative inquiry and research design: Choosing among five traditions*". Thousand Oaks, CA: Sage*.

Creswell, J. W. (2007), "Qualitative inquiry, and research design: Choosing among five approaches" *Sage Publications: London*.

Creswell, J. W. (2010), "Mapping the developing landscape of mixed methods research". In A. Tashakkori and C. Teddlie (Eds.), Sage handbook of mixed methods in social & behavioral research (2nd ed., pp. 45- 68). *Thousand Oaks, CA: SAGE*.

Dalal, A. and J. Morduch (2010), "The Psychology of Micro insurance: Small changes can make a surprising difference" *Micro insurance paper no.5. ILO*

Daniels, L., C. Donald M., and M. Musinga (1995) "Employment and income in micro and small enterprises in Kenya survey" *KREP Research Paper No. 26. Nairobi*.

Das, A and S. Ghosh (2006), "Financial deregulation and efficiency an empirical analysis of Indian banks during the post reform period" *Review of Economic.* Vol.15. pp. 193-221

De Waal, Tumushabe, A.J., Mamdan, M., and B. Kilama (2004), "Changing vulnerability to crisis in Tanzania implication for children and UNISEF activities" *Report to UNISEF*.

De Weerdt, J. (2005), "Risk-sharing and Endogenous Network Formation. In Stefan Dercon(ed.) *Insurance against Poverty*. Oxford: Oxford University Press.

De Weerdt, J. and S. Dercon (2006), "Risk-Sharing Networks and Insurance Against illness. *Journal of Development Economics*. Vol. 81(2), pp. 337–356.

Deaton A. (1991), "Saving and liquidity constraints. Econometrica. Vol. 59 (5), pp. 1221-1248

Deaton A. (1992), "Understanding Consumption". *Oxford Clarendon Press*.

Deaton, A. (1997), "The Analysis of Household Surveys: A Microeconomic approach to development policy*". Baltimore: Johns Hopkins University Press*.

Deaton, A. (2005), "Measuring Poverty in a Growing World (or Measuring Growth in a Poor World" *Review of Economics and Statistics.* Vol. 87 (1), pp. 1–19.

Demirguc-Kunt, A. and V. Maksimovic (1998), "Law finance and firms growth" *Journal of Finance*. Vol. 5, pp. 2107-2137

Demirgüç-Kunt, A., Beck, T., and P. Honohan (2008), "Finance for All; Policies and Pitfalls in Expanding Access" *Washington, D.C.: The World Bank.* Available from http://siteresources.worldbank.org/INTFINFORALL/Resources/4099583-1194373512632/FFA_book.pdf

Dercon, S. (2001), "Assessing Vulnerability to Poverty" Mimeo, *Oxford. Oxford University*

Dercon, S. (2002), "Income Risk, Coping Strategies, and Safety Nets. *World Bank Research Observer*. Vol. 17(2), pp. 141-66.

Dercon, S. (2003), "Risk and Poverty: A selective Review (or Can Social Protection reduce poverty?" (Mimeo), *Department of Economics Oxford University*.

Dercon, S. (2005), "Risk, Insurance and Poverty: A Review. In Stefan Dercon (ed.) Insurance against Poverty". *Oxford University Press*.

Dercon, S. and P. Krishnan. (2000), "Vulnerability, Seasonality and Poverty in Ethiopia. *Journal of Development Studies*. Vol. 36 (6), pp. 25-53.

Dercon, S. and P. Krishnan. (2005), "Food Aid and Informal Insurance. In Stefan Dercon (ed.) Insurance against Poverty. *Oxford: Oxford University Press*.

Dercon, S., De Weerdt, J., Bold, T. and A. Pankhurst. (2006), "Group-Based Funeral Insurance in Ethiopia and Tanzania". *World Development.* Vol. 34(4), pp. 685-703.

Dercon, S., Hoddinott, J., Krishnan, P. and T. Woldehannnam (2008), "Collective action and vulnerability: Burial societies in rural Ethiopia," *CAPRi working papers 83, International Food Policy Research Institute (IFPRI).*

Diamond, P. (1996), "Proposals to Restructure Social Security" Journal of Economic Perspectives. Vol. 10 (3), pp. 67 – 88.

Dionne, G., and S.E. Harrington (eds) (1992), "Foundations of Insurance Economics, Readings in Economics and Finance" *Boston, Kluwer Academic Publishers*.

Dionne, G., Eeckhoudt, L. and E. Briys (1989), "Proportional Risk Aversion and Saving Decisions under Uncertainty". Universite de Montreal, Departement de sciences economies.

Dixon, A., J. Le Grand, J. Henderson, R. Murray, and E. Poteliakhoff (2007), "Is the British National Health Service equitable? The evidence on socioeconomic differences in utilization', *Journal of Health Services Research and Policy*. Vol. 12(2), pp. 104–109.

Doherty, N. A. and L. Eeckhoudt (1995), "Optimal Insurance without Expected Utility: The Dual Theory and the Linearity of Insurance Contracts". *Journal of Risk and Uncertainty*, 10(2), pp. 157-179.

Doherty, N. and H. Schlesinger (1990), "Rational Insurance Purchasing: Consideration of Contract Non-performance," *Quarterly Journal of Economics*, pp. 243-253.

Dowling, P. J., Festing, M. And Engle, A.D. (2008), "International human resource management" *Thompson: London*

Dror D.M., Radermacher, R. and R. Koren (2007), "Willingness to Pay for Health Insurance among Rural and Poor Persons: Field Evidence from Seven Micro Health Insurance Units in India" *Health Policy*, Vol. 82 (1).

Dror, D. and C. Jacquir (1999), "Micro-Insurance: Extending Health Insurance to the Excluded" *International Social Security Review.* Vol. 52 (1), pp. 71-97.

Duker, J.M. (1969), "Expenditure for Life Insurance Buying Strategies" Journal *of Risk and Insurance.* Vol. 36, pp. 525-533.

Easterby-Smith, M., Thorpe, R. and A. Lowe (2002): "Management Research. An Introduction, *Sage Publications, London, Second Edition*.

Enz, R. (2000), "The S-curve relation between per-capita income and insurance penetration" *Geneva Papers on Risk and Insurance*. Vol. 25(3), pp. 396-406.

Esho, N., Kirievsky, A., Ward, D. and R. Zurbruegg (2004), "Law and the determinants of Property-Casualty insurance" Journal *of Risk and Insurance*. Vol. 71(2), pp. 265-283.

Eswaran, M., and A. Kotwal (1990), "Implications of credit constraints for risk behaviour in less developed countries" *Oxford Economic Papers 42*. Oxford: Oxford University Press.

Feldstein, M. (1996), "The Missing Piece in Policy Analysis: Social Security Reform" *American Economic Review.* Vol. 86 (2), pp. 1 – 14.

Finscope (2006), "Finscope survey Tanzania". Funded by Financial Sector Deeping Trust

Foster, A. (1995), "Prices, credit markets and child growth in low-income rural areas. *Economic Journal*. Vol. 105(430), pp. 551-570.

Francesco, A.M. and B.A. Gold (2005), "International organizational behaviour" Prentice Hall: London.

Friedman, M. (1957), "A Theory of the Consumption Function. *Princeton, N.J, Princeton University Press.*

Galor, O. and J. Zeira (1993), "Income Distribution and Macroeconomics", *Review of Economic Studies*. Vol. 60, pp. 35-52

Garven, J. (2003), "The Demand for Reinsurance: Theory and Empirical Tests," *Insurance and Risk Management.* Vol. 7(3), pp. 217-238.

GDP for Tanzania see: http://www.state.gov/r/pa/ei/bgn/2843.htm

Giesbert, L., Steiner, S., and M. Bendig (2011), "Participation in Micro Life Insurance and the Use of Other Finacial Services in Ghana". *The Journal of Risk and Insurance.* Vol. 78(1), pp. 7-35.

Gillion, C. (1997), "Issues in the Reform of Social Security: A Perspectives from the International Labour Office" *Sustaining Social Security*. New York: United Nations, pp. 22 – 39.

Gine, X. and D. Yang, (2009), "Insurance, Credit, and Technology Adoption: Field Experimental Evidence from Malawi". *Journal of Development Economics*. Vol. 89(1), pp. 1-11.

Gine, X., Townsend, R.M and J. Vickery (2007), "Statistical Analysis of Rainfall Insurance Pay-out in Southern India" *American Journal of Agricultural Economics*. Vol. 89(5), pp. 1248-1254.

Gine, X., Townsend, R.M. and J. Vickery, (2008), "Patterns of Rainfall Insurance Participation in Rural India". *World Bank Economic Review*. Vol. 22(3), pp. 539-566.

Ginnekin, W. (2005), "Managing risk and minimizing vulnerability: the role of social protection in pro-poor growth", second draft of paper produced for Development Assistance Directorate (DAC). *Poverty Reduction Network (POVNET) Task Team on Risk, Vulnerability and Pro-Poor Growth*, ILO, Geneva.

Goldsmith, A. (1983), "Household Life Cycle Protection: Human Capital versus Life Insurance". *The Journal of Risk and Insurance*. Vol. 50(1), pp. 33-43.

Goldstein, M., Alain de J. and E. Sadoulet (2005), "Is a Friend in Need a Friend Indeed? Inclusion and Exclusion in Mutual Insurance Networks in Southern Ghana". In Stefan Dercon (ed.) *Insurance against Poverty*. Oxford: Oxford University Press.

Grameen Bank (1998), "Micro finance-Credit lending models" at http://www.grameeninfo. (11.01.2011)

Greene, J. C. (2008), "Is mixed methods social inquiry a distinctive methodology? *Journal of Mixed Methods Research.* Vol. 2(1), pp. 7-22.

Grimard, F. (1997), "Household Consumption Smoothing through Ethnic Ties: Evidence from Cote d'Ivoire" Journal *of Development Economics*. Vol. 53(2), pp. 391-422.

Gurenko, E.N. (2004), "Building effective catastrophe insurance programs at the country level: a risk management perspectives. In: E.N. Gurenko, Editor, *Catastrophe Risk and Reinsurance - A Country Risk Management Perspectives*. Risk Books, London.

Healy, M. and C. Perry (2000), "Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm". *Qualitative Market Research - An International Journal.* Vol. 3 (3), pp. 118-126.

Helms, B. (2006), Access for All: Building Inclusive Financial Systems. Washington, D.C. *Consultative Group to Assist the Poor*. Available from http://www.cgap.org/portal/binary/com.epicentric.contentmanagement.servlet.ContentDeliveryServlet/Documents/Book_AccessforAll.pdf

Hess, U. and J. Sykora (2005), "Weather-based Insurance in Southern Africa. The Case of Malawi. Agriculture and Rural Development" *Discussion Paper 13. The World Bank.*

Hochrainer, S., Mechler, R., and G. Pflug, (2007), "Climate change and weather insurance in Malawi: assessing the impact" In: P. Suarez, J. Linnerooth-Bayer and R. Mechler, Editors, *Feasibility of Risk Financing Schemes for Climate Adaptation*, DEC-Research Group, Infrastructure and Environment Unit. The World Bank (2007), pp. 53–86.

Hoeppe, P., and E.N. Gurenko (2006), "Scientific and economic rationales for innovative climate insurance solutions, *Climate Policy*, pp. 607–620.

Hofstede, G. (2001), "Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations across Nations". *2nd edition, Thousand Oaks, CA: Sage Publications.*

Hofstede, G. (1980), "Culture's consequences: International differences in work-related values" *Sage: Beverly Hills, CA.*

Hofstede, G. (1995), "Insurance as a Product of National Values" *Geneva Papers on Risk and Insurance.* Vol. 77(20), pp. 423-429.

Hogset, H. (2005), "Social Networks and Rural Development Theory and Applications in the Kenyan Highlands". Ph.D. dissertation. Department of Applied Economics and Management, Cornell University.

Holzman, R. and S. Jorgensen (1999), "Social protection as social risk management: conceptual underpinnings for the Social Protection Sector Strategy Paper", *Journal of International Development*. Vol. 11, pp. 1005-1027.

Holzmann, R. (2001) "Risk and Vulnerability: The Forward Looking Role of Social Protection in Globalizing World." *Social Protection Discussion papers No 0109.* World Bank Washington DC. See www.worldbank.org/sp

Holzmann, R. and S. Jorgensen (2004), "Social Risk Management" A New Conceptual framework for Social Protection and beyond. *International Tax and Public Finance,* Springer Netherlands.

Honda, E. (2003), "Financial deregulation in Japan" *Japan and the World Economy*. Vol.15(1), pp. 135-140.

Honohan, P. (2004), Financial Sector Policy and the Poor: Selected Issues and Evidence, *World Bank Working Paper No. 43, Washington DC.*

Honohan, P. (2005), "Measuring Micro finance Access: Building on Existing Cross-Country Data." *World Bank Policy Research Working Paper 2606*.

Honohan, P., and T. Beck, (2007), "Making Finance Work for Africa". Washington, D.C.: *The World Bank.* Available from http://siteresources.worldbank.org/AFRICAEXT/Resources/Africa_Finance_report.pdf

Hossain, F., and T. Knight (2008), "Can Micro credit improve the livelihood of the poor and disadvantaged? Empirical observation from Bangladesh" *International Development Planning Review.* Vol.30 (2), pp. 55-175

Hossain, F., and Z. Rahman (2001), "Micro Finance and Poverty contemporary perspectivess" Tamperer Finland. *University of Tampere.* Department of Administrative Science.

Hossain, M. (1988), "Credit for the alleviation of rural poverty: The Grameen Bank in Bangladesh". *IFPRI Research Report No. 65*.

Howe, K. R. (1988), "Against the quantitative-qualitative incompatibility thesis or dogmas die hard. *Educational Researcher*. Vol.17, pp. 10-16.

Hulme, D. and A. Shepherd (2003), "Conceptualizing Chronic Poverty" *World Bank.* Vol.31 (3), pp. 403-24

Hussey, J. and R. Hussey (1997), "Business Research, A practical guide for undergraduate and Postgraduate students" *Palgrave, Hampshire.*

Hwang, T. and B. Greenford (2005), "A Cross-Section Analysis of the Determinants of Life Insurance Consumption in Mainland China, Hong Kong, and Taiwan." *Risk Management and Insurance Review*. Vol. 8(1), pp. 103-125.

Hwang, T. and Gao, S. (2003), "The Determinants of Demand for Life Insurance in An Emerging Economy - The Case of China. *Managerial Finance.* Vol. 29 (5), pp. 82-96.

IADB (2000), "Inter- American Development Bank, Social Protection for Equity and Growth" *IADB.*

Iimi, A. (2004), "Banking sector reforms in Pakistan: economies of scale and scope, and cost complementarities" *Asian Economics*. Vol. 15(3), pp. 507-528.

ILO (1972), "Employment, Income and Equality, A Strategy for Increasing Productive Employment in Kenya" *International Labour Office,* Geneva.

ILO (1991), "Dilemma of the informal sector". Report of the Director-General presented at the 78th International Labour Conference. *International Labour Office,* Geneva.

ILO (1996), "International Labour Organization Tanzania Report to the Government on the development of social security, report written for Project ILO/UNDP/Tanzania. *Review of policy recommendations.* Geneva.

ILO (1997), "Social Security for the informal sector, investigating the feasibility of pilot projects in Benin, India, El-Salvador and Tanzania" *Social Security Discussion Paper No.5*

ILO (1998), "Social Security for all Indians" *New Delhi Oxford University Press*

ILO (1999), "Social Security for the informal sectors: A new challenge for the developing countries" *International Social Security Review ISSA.* Vol. 52 (1), pp. 49-69

ILO (2000), "Income Security and Social Protection in Changing World" *ILO, Geneva.*

ILO (2001), "Social Security, A New Consensus" *International Labour Office.*

ILO (2002), "Decent Work and the informal economy". Report of the Director-General presented to the 90th International Labour Conference. *International Labour Office*. Geneva.

ILO (2008), "Social Protection Expenditure and Performance Review and Social Budget" *Social Security Department, Geneva*

ILO-SAAT (1996): Social Protection for the unorganized sector in India. Report prepared for the UNDP (New Delhi)

IMF (2009), "Financial Access Survey" visit at: http://fas.imf.org/

Islam, N. and M. Mamun (2005), "Factors for Not Buying Life Insurance Policies in a Developing Country. A Case of Bangladesh". *Journal of Business Administration.* Vol. 31 (1), pp.1-22. University of Dhaka, Bangladesh.

Islam, N., and M. Mamun (2006), "Prospects of health Insurance Initiatives in Bangladesh: An Empirical Study, *Proceedings of the Tenth Annual Conference of Asia-Pacific Risk and Insurance Association (APRIA)*. Meiji University, Tokyo, Japan.

Ito, S. and H. Kono, (2010), "Why Is the Take-up of Micro insurance So Low? Evidence from a Health Insurance Scheme in India". *Developing Economies*. Vol. 48(1), pp. 74-101.

Jalan, J. and M. Ravallion (1999), "Are the Poor Less Well Insured? Evidence on Vulnerability to Income Risk in Rural China". *Policy Research Working Paper* 1863. Washington, DC: World Bank.

Jenkins, M. (1993), "Extending Social Protection to the Entire Population: Problems and Issues" *International Social Security Review.* Vol. 46 (2), pp. 3 – 20.

Jim R., McCord, M.J. and D. Liber (2007), "The landscape of Micro insurance in the World's 100 poorest countries"

Johnson, R. B. and R. Gray (2010), "A history of philosophical and theoretical issues for mixed methods research. In A. Tashakkori and C. Teddlie (Eds.), Sage handbook of mixed methods in social and behavioral research (2nd ed., pp. 69-94). *Thousand Oaks, CA: SAGE*.

Kahneman, D. and A. Trersky (1979), "Prospect Theory, An Analysis of Decision Making Under Risks". *Econometrica*. Vol. 47, pp. 263-291.

Kazianga, H. and C. Udry (2006), "Consumption Smoothing? Livestock Insurance and Drought in Rural Burkina Faso". *Journal of Development Economics.* Vol. 79 (2), pp. 413-446.

Khandker, S.R. (2007), "Coping with flood: role of institutions in Bangladesh". *Agricultural Economics*. Vol. 36(2), pp. 169-180.

Khandker, S.R. (2009), "Poverty and income seasonality in Bangladesh" Policy Research Working Paper Series 4923, *The World Bank.*

Kirigia J. M. *et al.* (2005), "Determinants of Health Insurance Ownership among South African. Women". *BMC Health Services Research*. Vol. 5 (17), pp. 1-10.

Knack, S. and P. Keefer (1997) "Does social capital have an economic payoff?" *Quarterly Journal of Economics*. Vol. 112, pp. 1251-1288.

Koptis, G. (1993), "Reforming Social Security Systems" Finance and Development. Vol. 30 (2), pp. 21 – 23.

Kruger, D., Vakis R., and D. Mason (2003), "Shocks and Coffee: Lessons from Nicaragua" *Social Protection Discussion Paper No. 0415, World Bank.*

Kunreuther, H. (1984) ''Causes of Underinsurance against Natural Disasters,'' *The Gene¨a Papers on Risk and Insurance*. Vol. 31, pp. 206 -220.

Kunreuther, H. (1996) ''Mitigating Disaster Losses through Insurance,'' *Journal of Risk and Uncertainty*. Vol. 12, 171-187.

Lam, W. (1996), "Institutional Design of Public Agencies and Coproduction: A Study of Irrigation Associations in Taiwan" *World Development.* Vol. 24 (6), pp. 1039 – 1054.

Lancaster, K (1966), "A New Approach to consumer theory" *Journal of political economy.* Vol. 74(1), pp. 132-157.

Lee, S. (1999), "A compendium of Micro-Insurance Schemes" *Social Security Department. International Labor Organization.*

Leftley, R and S. Mapfumo (2006), "Effectiveness of Micro-Insurance Programs to Reduce Vulnerability" *Opportunity International Network*. available at: http://www.microcreditsummit.org/papers/Workshops/11_MapfumoLeftley.pdf

Lentz, E. and C.B. Barrett (2005), "Food Aid Targeting, Shocks and Private Transfers Among East African Pastoralists". Mimeo.

Levine, R (2005), "Finance and Growth: Theory and Evidence." In *Handbook of Economic Growth*, ed. Philippe Aghion and Steven Durlauf. Amsterdam: North-Holland Elsevier Publishers.

Levine, R. (1997), "Financial Development and Economic Growth: Views and Agenda", *Journal of Economic Literature.* Vol. 35, pp. 688-726.

Levine, R. (1998), "The Legal Environment, Banks, and Long-Run Economic Growth", *Journal of Money, Credit, and Banking.* Vol. 30, pp. 596-613.

Lewis F.D. (1989), "Dependants and the Demand for Life Insurance". *American Economic Review*. Vol. 79(3), pp. 452-467.

Li, D., Moshirian, F., Nguyen, P., and T. Wee (2007), "The Demand for Life Insurance in OECD Countries, *Journal of Risk and Insurance.* Vol. 74, pp. 637-652.

Lieber, E. and T.S. Weisner (2010), "Meeting the practical challenges of mixed methods research. In A. Tashakkori and C. Teddlie (Eds.), Sage handbook of mixed methods in social and behavioral research (2nd ed., pp. 559-579). *Thousand Oaks, CA: SAGE*.

Lin, Y. and M.F. Grace (2007), "Household Life Cycle Protection: Life Insurance Holdings, Financial Vulnerability, and Portfolio Implications" *Journal of Risk and Insurance.* Vol.74 (1), pp. 141-173.

Linnerooth-Bayer, J. and R. Mechler (2006), "Insurance for assisting adaptation to climate change in developing countries" *Climate Policy*, pp. 621–636.

Lipumba, N.H.I. and B.J. Ndulu. (1989) "Long-term trends in exports". *Tanzania Economic Trends.* Vol. 2 (1), pp. 11–23.

Loewe, M. (2002), "The Third Way in Social Protection. Group based Schemes and the Potential of Micro insurance" Seminar on Social protection for the poor in Asia, ADB, Manila, 21-25 October.

Loewe, M. (2006), "Downscaling, upgrading or linking? Ways to realize micro-insurance". *International Social Security Review*. Vol. 59 (2), pp. 37-58.

Lucas, R.E. (1988), "On the Mechanics of Economic Development". *Journal of Monetary Economics.* Vol. 22 (1), pp. 3-42.

Lybbert, T.J., Barrett, C.B., Desta, S. and D. Coppock (2004), "Stochastic Wealth Dynamics and Risk Management among a Poor Population". *Economic Journal*. Vol. 114 (498), pp. 750-777.

Magnoni, B. and E. Zimmerman (2011), "Do clients get value from Micro insurance? A systematic Review of recent research" *Micro insurance centre.*

Maleika and A. Kuriakose (2008), "Micro insurance; extending pro-poor risks management through social fund platform. *World Bank Social Protection series.* Vol. 2

Mataba, M.S.L. (1983), "The Social and Economic consequences of old age and compulsory retirement" University *of Dar es Salaam*.

Matul, M. (2005), "Demand for micro insurance in Georgia: quantitative study results", presented at the 8th Annual Conference on Micro finance Institutions, Bucharest.

Maxwell, S. (2007), "The Washington Consensus is dead! Long live the meta-narrative" *Overseas Development Institute*, U.K.

Mayer, D. and C.Smith (1983), "The interdependence of Individual Portfolio Decisions and Demand for insurance". *Journal of Political Economy.* Vol. 91, pp. 304 -311

McCord, M.J. (2001), "Health Care Micro insurance: Case studies from Uganda Tanzania, India and Cambondia. *Small Enterprise Development.* Vol.12 (1), pp. 5-38.

McCord, M.J. (2008), "Visions of the future of micro insurance and thoughts on getting there". *Micro Insurance Note No. 9: pp. 1-35*. USAID/DAI, Washington, DC.

McCord, M.J. and C. Churchill (2005), "Delta lifeBangladesh, CGAP working group on Micro insurance, good and bad practices" Case study No.7, *World Bank.*

McCord, M.J. and S. Osinde (2005), "Reducing vulnerability: the supply of health insurance in East Africa". *Journal for International Development*. Vol. 17(3), pp. 327-81.

McCord, M.J., Zenklusen, O., and R. Steinmann (2011), "Not so fast, towards realistic expectation in Micro insurance. *Micro insurance center.* Washington D.C.

Mchomvu, A., Tungaraza, F., and S. Magimbi (2002), "Social Security in Tanzania" *Journal of Social Development in Africa*. Vol.17 (12)

McKinnon, R. (1991), "The Order of Economic Liberalization: Financial Control in the Transition to a Market Economy" *Baltimore: John Hopkins University Press*.

McPeak, J. (2004), "Contrasting Income Shocks with Asset Shocks: Livestock Sales in Northern Kenya". *Oxford Economic Papers*. Vol. 56(2), pp. 263-284.

Mesa-Lago, C. (1991), "Social Security in Latin America and the Carribbean: A Comparative Assessment. In: Ahmad, Drèze, Hills, Sen (eds): Social Security in Developing Countries. Wider Studies in Development Economics. *Oxford: Clarendon Press*, pp. 356 – 394.

Mesa-Lago, C. (1994), "Changing social security in Latin America: Towards alleviating the social costs of economic reforms". *Boulder, Colorado and London* Lynner Rienner Publishers.

Meyer, R. L. (2002), "Track Record of Financial Institutions in Assisting the Poor in Asia" ADB *Institute Research Pape*r, No 49.

Midgley J. (1984), "Social Assistance: An alternative form of social protection in developing countries". *International Social Security Review*. Vol. 37 (3), pp. 247-264. ISSA- Geneva.

Midgley, J. and M.B. Tracy (1996), "Challenges to Social Security. An International Exploration". *Aurburn House,* West Port, pp. 1-19; 103-123.

Miles, M.B., and A.M. Huberman (1994), "Qualitative Data Analysis: An expanded sourcebook" (2nd edn.), Sage:London.

Millinga, A. (2002), "Assessing the demand for Micro insurance in Tanzania*" Micro Insurance Center*. MicroSave-Africa an Initiative of Austria/CGAP/DFID/UNDP.

Miyazaki, H. (1977), ''The Rat Race and Internal Labor Markets'' *The Bell Journal of Economics.* Vol. 8, pp. 394 - 418.

Modigliani, F. (1975), "The life-cycle hypothesis of saving twenty years later," in Michael Parkin, ed., *Contemporary Issues in Economics,* Manchester. *Manchester University Press*, pp. 2–35.

Modigliani, F. (1976), "Life-cycle, individual thrift, and the wealth of nations," *American Economic Review*, Vol. 76(3), pp. 297–313.

Modigliani, F. (1992), "Saving in developing countries: growth, income, and other factors". *Pacific Basin Capital Markets Research.* Vol. 3, pp. 23–35.

Modigliani, F., and R. H. Brumberg (1990), "Utility analysis and aggregate consumption functions: an attempt at integration". In: Andrew Abel, ed., *The Collected Papers of Franco Modigliani: Volume 2, The Life Cycle Hypothesis of Saving*, Cambridge, MA. The MIT Press, pp. 128– 197

Monique C., McCord, M.J., and J. Sebstad (2003), "Reducing Vulnerability. Demand for and supply of Micro-Insurance in East Africa" A synthesis report, An Initiative of Austria/CGAP/DFID/UNDP. *Micro save*

Moore, T., Green, J. C., and V. Murinde (2006), "Financial Sector Reforms and Stochastic Policy Simulations: A flow of funds model for India" *Policy Modeling*, Vol. 28 (3), pp. 319-333.

Morduch, J and M. Sharma (2001), "Safety Nets, Non-formal Insurance, and Micro finance", Social Protection Unit. *Human Development Network, the World Bank:* Washington D.C Mimeo.

Morduch, J. (1995), "Income Smoothing and Consumption Smoothing" *Journal of Economic Perspectivess*. Vol. 9(3), pp. 103-114.

Morduch, J. (1998), "The Micro finance Schisms "paper 626, Harvard Institute for International Development" Available at: http://ideas.repec.org/e/pmo75.html

Morduch, J. (1999a), "Between the State and the Market: Can Informal Insurance Patch the Safety Net?" *World Bank Research Observer*. Vol. 14(2), pp. 187-207.

Morduch, J. (1999b), "The micro finance promise". *Journal of Economic Literature*. Vol. 37(4), pp. 1569–1614.

Morduch, J. (2005), "Consumption Smoothing Across Space: Tests for Village-Level Responses to Risk. In Stefan Dercon (ed.) Insurance against Poverty. *Oxford University Press.*

Morgan, D. L. (1998), "Practical strategies for combining qualitative and quantitative methods: Applications to health research" *Qualitative Health Research.* Vol. 3, pp. 362–376.

Morgan, D.L. (2007), "Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research*. Vol.1, pp. 48-76.

Moser, C. (1998), "The Asset Vulnerability Framework: Reassessing Urban Poverty Reduction Strategies" World Development, Vol. 26 (1), pp. 1-19.

Mosley, P., and R. Krishnamurthy (1995), "Can crop insurance work? Evidence from the Indian Comprehensive Crop Insurance Scheme", *Journal of Development Studies.* Vol. 31, pp. 428-450.

Mossin, J. (1968), "Aspects of rational insurance purchasing. Journal of Political Economy. Vol. 76, pp. 553-68.

MRF (2006), "Munich Re Foundation. Into Action. Micro-insurance making insurance work for the poor" *Munich Re Foundation*.

Msuya, J.M., Jutting, J.P., and A. Asfaw (2007), "Impact of Community Health Funds on the Access to Health Care. Empirical Evidence from rural Tanzania". *International Journal of Public Administration*. Vol.30 (8), pp. 813-833.

Narayan, D., and L. Pritchett (1997), "Cents and Sociability: Households Income and Social Capital in Rural Tanzania" *The World Bank Development Research Group,* Policy Research Working Paper No. 1796, Washington D.C.

NIC (2006), "National Insurance Cooperation Annual Report" *NIC, Dar es Salaam.*

Norton, E. (2000), "Long-term Care." In AJ Culyer and JP Newhouse (eds) *Handbook of Health Economics*. Vol 1, ch 17. Elsevier Science.

Onwuegbuzie, A. J. and C. Teddlie (2003), "A framework for analyzing data in mixed methods research. In A. Tashakkori and C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioural research* (pp. 351–383). Thousand Oaks, CA: Sage.

Osei K.A. and A. Gemegah (2011), "The demand for micro insurance in Ghana. *Journal of Risk Finance*. Vol. 12 (3), pp. 182-194.

Osgood, D. and D. Warren (2007), "Drought insurance in Malawi" In: M. Hellmuth, A. Moorhead, M.C. Thomson and J. Williams, Editors, *Climate Risk Management in Africa: Learning from Practice. International Research Institute for Climate and Society (IRI)*, Columbia University, New York (2007), pp. 75–88.

Ostrom, E. (1996), "Crossing the Great Divide: Coproduction, Synergy and Development" *World Development*. Vol. 24 (6), pp. 1073 – 1087.

Outreville, J. F. (1996), "Life Insurance Markets in Developing Countries", *Journal of Risk and Insurance*. Vol. 63(2), pp. 263-278.

Park, S.C. and J. Lemaire (2011), "The Impact of Culture on the Demand for Non-Life Insurance", University of Pennsylvania, *Wharton School Working Paper* IRM 2011-02.

Patton, M. Q. (1990), "*Qualitative evaluation and research methods"* (2nd ed.). Newbury Park, CA: Sage.

Pauly, M. (1974), "Over insurance and Public Provision of Insurance: The Roles of Moral Hazard and Adverse Selection," *Quarterly Journal of Economics*, pp. 44-62.

Pauly, M. (1990), "The Rational Non- purchase of Long-Term-Care Insurance" *Journal of Political Economy*. Vol. 98(1), pp. 153-168.

Peachey, S. and A. Roe (2006), "Access to Finance: Measuring the Contribution of Savings Banks." *World Savings Banks Institute, Brussels, Belgium*.

PHC (2002), "Population and Housing Census" *United Republic of Tanzania, Government printers*.

Platteau, J.P. (1991), "Traditional Systems of Social Security and Hunger Insurance: Past Achievements and Modern Challenges" In: Ahmad, Drèze, Hills, Sen (eds): Social Security in Developing Countries. Wider Studies in Development Economics. *Clarendon Press,* pp. 112 – 170.

Prahalad, C. K. (2005), "The fortune at the bottom of the pyramid: Eradicating poverty through profits" *Upper Saddle River, NJ, Wharton School Publishing.*

Preker, A.S., Carrin, G., and D. Dror (2002), "Effectiveness of community health financing in meeting the cost of illness". *Bull World Health Organ*. Vol. 80 (2), pp. 143-150. At http://www.scielosp.org

Priest, G. L. (1996), 'The Government, the Market and the Problem of Catastrophic Loss', *Journals of Risk and Uncertainty*, Vol. 12, pp. 219-237.

Propper, C. (1989), "An econometric analysis of the demand for private health insurance in England and Wales". *Applied Economics*. Vol. 21 (6), pp. 77.

Putnam, R. (1993), "Making Democracy Work" Princeton *University Press, Princeton*.

Radermacher, R., Dror, I and Norble, G (2006): Challenges and strategies to extend health insurance to the poor, in C. Churchil (ed), protecting the poor, A Micro insurance compendium, International Labour Organization. Geneva.

Rahman H. Z. and M. Hossain (1995), "Re-Thinking Rural Poverty a Case for Bangladesh. Analysis of Poverty Trends Project". *Bangladesh Institute of Development Studies*, Dhaka.

Rajan, R. and L. Zingales (1995), "What Do We Know About Capital Structure? Some Evidence from International Data" *Journal of Finance*, Vol. 50, No. 5, pp. 1421–60.

Rajan, R. G. and L. Zingales (1998), "Financial Dependence and Growth", *American Economic Review*. Vol. 88, pp. 559-586.

Rajan, R. G. and L. Zingales (2003), "Saving Capitalism from the Capitalists", *New York, NY: Random House.*

Reinhart, C.M and I. Tokatlidis (2003), "Financial Liberalization: The African Experience" *African Economies*. Vol. 12 (2), pp.53-88.

Remenyi, D., William, B., Money, A., and E. Swartz (1998), "Doing Research in Business and Management" Sage *publication, London*.

Robinson, J. (1952), "The Generalization of the General Theory, in the Rate of Interest and Other essays. *London Macmillan*.

Robinson, M and G. White (1997), "The Role of Civic Organization in the Provision of Social Services Towards Synergy. World Institute for Development Economics Research. *Research for Action 37. Helsinki.*

Robinson, M. (2001), "The Micro finance Revolution: Sustainable finance for poor" *World Bank.*

Rosenzweig, M. (1988), "Risk, Implicit Contracts and the Family in Rural Areas of Low- Income Countries" Economic Journal. Vol. 98, pp. 1148 – 1170.

Roth, J. (2001), "Informal Micro insurance Schemes: The Case of Funeral Insurance in South Africa. *Small Enterprise Development.* Vol. 12(1), pp. 39-50.

Rothschild, M. and J. Stiglitz (1976), "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information," *Quarterly Journal of Economics*. Vol. 90, pp. 629-650.

Rutherford, S. (2000), "The Poor and Their Money". New Delhi: *Oxford University Press/India*.

Sandelowski, M. and M.B. Happ (2010), "Current practices and emerging trends in conducting mixed methods intervention studies. In A. Tashakkori & C. Teddlie (Eds.), Sage handbook of mixed methods in social & behavioral research (2nd ed., pp. 725-747). *Thousand Oaks, CA: SAGE.*

Sandelowski, M., and M.B. Happ (2010), "Current practices and emerging trends in conducting mixed methods intervention studies" In A. Tashakkori & C. Teddlie *(Eds.),* Sage handbook of mixed methods in social & behavioral research *(2nd ed., pp.* 725-747*). Thousand Oaks, CA*: *SAGE*

Santos, P. and C.B. Barrett (2007), "Understanding the Formation of Social Networks" *Cornell University. Mimeo.*

Sapsford R. and V. Jupp (1996), "Data Collection and Analysis". *Sage publication*

Saunders, M., Lewis, P. and A. Thornhill (2007), "Research methods for business students" 4th (eds.) *London: Prentice Hall.*

Savage, E., and D. Wright (1999), "Health insurance and health care utilization: theory and evidence from Australia 1989-90", *Mimeograph B2 – Mimeograph, University of Sydney,* Sydney.

Schmidt, R.H., and E. Kropp. (1987), "Rural finance guiding principles". *GTZ, Eschborn*

Schmidt, S. (1995), "Social Security in Developing Countries: Basic Tenets and Fields of State Intervention" *International Social Work, London: SAGE Publications*.

Schrieder. G.R. and C.E. Cuevas, (1992), "Informal financial groups in Cameroon". In D.W. Adams and D.A. Fitchett, eds., *Informal Finance in Low Income Countries*. Boulder: Westview Press.

Schwarcz, D. (2010a), "Regulating Consumer Demand in Insurance Markets. *3 Erasmus Law Review.*

Schwarcz, D. (2010b), "Insurance Demand Anomalies and Regulation. *Journal of Consumers Affairs*. Vol. 44

Scotton, R.B. (1969), "Membership of voluntary health insurance." *Economic Record*. Vol. 45: 69-83.

Sebstad, J. and M. Cohen (1999), "Making micro finance more client-led. *Journal of International Development.* Vol.14.

Sebstad, J. and M. Cohen, (2001), "Micro finance, Risk Management and Poverty". *CGAP, World Bank.* Washington D.C

Sebstad, J., Cohen, M., and E. McGuinness (2006), "Guidelines for market research on the demand for micro insurance", For USAID under the *Accelerated Microenterprise Advancement Project (AMAP).*

Shaw, I. (1999), "Qualitative Evaluation" London: Sage.

Siebert, H. (1998), "Pay-as-You-Go versus Capital-Funded Pension Systems: The Issues" In: Siebert, H. (ed.): Redesigning Social Security. Institut für Weltwirtschaft an der Universität Kiel. Tübingen: Mohr Siebeck.

Siegel, P., Alwang, J. and Canagarajah (2001), "Viewing Micro insurance as a Social Risk Management Instrument". *Social Protection Discussion Paper Series No. 0116.*

Siegel,P. and J. Alwang (1999), "An asset-based approach to social risk management. Ac onceptual framework" *Social protection Discussion Paper No.9926.* World Bank, Washington, DC. See www.uncdf.org

Singh, H. (1994), "ISSA Studies on Extension of Social Security to Unprotected Groups in Asia and the Pacific. In: Sankaran, T. *et al*. (eds): Social Security in Developing Countries" *Friedrich-Ebert-Stiftung. New Delhi: Har-Anand Publications.*

Sinha, S. (2002), "Strength in Solidarity: Insurance for Women Workers in the Informal Economy" *Self Employed Women's Association (SEWA).* Ahmedabad.

Skees, J. R. and B. J. Barnett (1999) "Conceptual and Practical Considerations for Sharing Catastrophic/Systemic Risks" *Review of Agricultural Economics.* Vol. 21, pp. 424–441.

Smith, V. (1968) ''Optimal Insurance Coverage,'' *Journal of Political Economy.* Vol. 76, pp. 68-77.

Spiegel, M.M. and N. Yamori, (2003), 'The impact of Japan's financial stabilization laws on bank equity values" *Japanese and International Economies.* Vol.17(3), pp. 263-282.

Steel, W., Aryeetey E., Hettige H. and M. Nissanke (1997), "Informal financial markets under liberalization in four African countries". *World Development*. Vol. 25(5), pp. 817–830.

Steinwachs, L. (2002), "Extending health protection in Tanzania networking between health financing mechanisms". *Social Security Policy and Development*. Vol. 7. ILO. Geneva.

SWD (2009), "Social Welfare Department Annual Report" *Ministry of health and social welfare, Dar es Salaam.*

Tashakkori A. and J.W. Creswell (2007), "The new era of mixed methods. *Journal of Mixed Methods Research.* Vol. 1:3-7.

Tashakkori, A. and C. Teddlie (1998), "Mixed methodology: Combining qualitative and quantitative approaches. *Applied Social Research Methods Series.* Vol. 46. Thousand Oaks, CA: Sage.

Tashakkori, A. and C. Teddlie (2009), "The foundations of mixed methods research: Integrating quantitative and qualitative techniques in the social and behavioral sciences. Thousand Oaks, CA: SAGE.

Tashakkori, A. and C. Teddlie (2010), "Overview of contemporary issues in mixed methods research". In A. Tashakkori & C. Teddlie (Eds.), Sage handbook of mixed methods in social and behavioural research (2nd ed., pp. 1-41). Thousand Oaks, CA: SAGE.

Thorbecke, E. (1993), "Impact of State and Civil Institutions on the Operation of Rural Markets and Nonmarket Configurations" *World Development*. Vol. 21 (4), pp. 591 – 605.

TIB (2010), "Tanzania Institute of Bankers Annual Report". *TIB, Dar es Salaam*

TIRA (2009), "Tanzania Insurance Regulatory Authority; Insurance Act No.10" Gazetted and put in use since July 1st 2009. *United Republic of Tanzania Publications*.

TIRA (2010), "Tanzania Insurance Regulatory Authority annual report" *TIRA, Dar es Salaam.*

Townsend, R. M. (1995b), "Financial Systems in Northern Thai Villages" *Quarterly Journal of Economics*. Vol. 110 (4), pp. 1011–1046.

Townsend, R.M. (1994), "Risk and Insurance in Village India. *Econometrica.* Vol. 62 (3), pp. 539–591.

Townsend, R.M. (1995a): consumption insurance: an evolution of Risk-Bearing system in low income economies. Journal of Economic perspectivess.

Townsend, R.M. and K. Ueda (2006), "Financial Deepening, Inequality and Growth: A Model-Based Quantitative Evaluation" *Review of Economic Studies.* Vol. 73 (1), pp. 251–93.

Trecy M.B (1996), "Challenges to social security: An International exploration" *Westport, Connecticut, Auburn House.*

Treerattanapun, A. (2011), "The impact of culture on non-life consumption" *Wharton Research Scholars Journal, Vol. 78*

Trersk A. and D. Kahneman (1992), "Advances in prospect theory; cumulative representation of uncertainty. *Journal of Risk Management*. Vol. 5, pp. 297-323.

Truett, D. and L. Truett (1990), "The Demand for Life Insurance in Mexico and the United States" A Comparative Study. *Journal of Risk and Insurance.* Vol. 57, pp. 321-328.
Tucker, P. (2007), "Micro insurance for mega disasters". *The futurists*. Vol. 41 (3), pp. 16-17

Tungaraza F.S.K (1994), "Changes in Traditional Social Protection Systems and their impact on woman in Tanzania. *Friedrich Ebert stiftung.* Dar es Salaam.

Tversky, A. and Kahneman, D. (1992), "Advances in Prospect Theory: Cumulative Representation of Uncertainty," *Journal of Risk and Uncertainty*. Vol. 5, pp. 297-323.

Udry, C. (1990), "Credit Markets in Northern Nigeria: Credit as Insurance in a Rural Economy". *World Bank Economic Review.* Vol. 4 (3), pp. 251–271.

Udry, C. (1993), "Credit Markets in Northern Nigeria: Credit as Insurance in a Rural Economy". In Hoff, Karla, Avishay Braverman and Joseph Stiglitz (eds). *The Economics of Rural Organization*. Oxford University Press.

UNCDF (2000), "The Round table on Micro-Insurance services in the informal sector. The role of Micro-Insurance Institutions" See www.uncdf.org

United Nations (2006), "Building Inclusive Financial Sectors for Development" *New York: United Nations.*

Uphoff, N. (1993), "Grassroots Organizations and NGOs in Rural Development: Opportunities with Diminishing States and Expanding Markets" *World Development*. Vol. 21 (4), pp. 607 – 622.

URT (2001), "United Republic of Tanzania, National Micro Finance Policy" *Ministry of Finance and Economic affairs, Dar es Salaam.*

URT (2003), "United Republic of Tanzania: The National Social Security Policy". *Ministry of labour, youth development and sports*. Dar es Salaam.

URT (2005), "United Republic of Tanzania National Strategy for Growth and Reduction of Poverty" Government *policy document.* Dar es Salam.

URT (2010), "United Republic of Tanzania, the economic survey" *Ministry of Finance and Economic Affairs. Dar es Salaam.*

Van Ginneken, W. (1997), "Social Security for the Informal Sector: Issues, Options and Tasks Ahead". *Working Paper*. ILO-Geneva.

Van Ginneken, W. (1998), "Social security for all Indians" New *Delhi, Oxford University Press.*

Van Ginneken, W. (1999), "Social Security for the Informal Sector. A new Challenge for the developing countries*". International Social Security Review*. Vol. 52(1), pp. 49-71.

Wachtel, P. (2001), "Growth and Finance, what we know and how do we know it?" *International Finance*. Vol. 4 (3), pp. 335-362.

Wagstaff A. (2009), "Social health insurance re-examined". *Health Economics*. Vol. 19, pp. 503-517.

Wagstaff, A. (2010), "Estimating health insurance under unobserved heterogeneity: The case of Vietnams Health Care Fund for the Poor" *Health Economics*. Vol. 19, pp. 189-208.

Wangwe S. and P. Tibendebage (1999), "Towards social security policy and reform in Tanzania" Unpublished Paper prepared for the National Social Security Fund Symposium. Dar es Salaam.

Wilson, C. (1977) ''A Model of Insurance Markets with Incomplete Information'' *Journal of Economic Theory.* Vol. 97, pp.167-207.

Wood, G. (2003), "Staying Secure, Stay poor" The *World Bank Development*. Vol.31 (3), pp. 455-71

World Bank (1994), "Averting the Old Age Crisis" Washingtion D.C.

World Bank (2000), "World Development Report 2000/1. *Oxford University Press.*

World Bank (2001), "Social Protection Sector Strategy: From Safety Net to Spring Board, Sector Strategy Paper" *World Bank,* Washington DC.

Yaari, M. (1965), "Uncertain Lifetime, Life Insurance and the Theory of the Consumer" *Review of Economic Studies*. Vol. 32(2), pp. 137-150.

Yakub, S. (2002), "Chronic Poverty: Scrutinizing Estimates, Patterns, Correlates and Explanation" Manchester Institute for Development Policy and Management. *University of Manchester*.

Yin, R. (2009), "Design and Methods applied social research methods 4th (ed). Sage publications

Young, P. (2006), "Micro insurance: Exploring ways to assess its impact" *Micro finance Opportunities.* Washington D.C

Zeller, M. (1994), "Determinants of credit rationing: A study of informal lenders and formal credit groups in Madagascar". *World Development, Vol. 22* (12), pp. 1895-1907.

Zeller, M. and R.L. Meyer (2002), "Improving the performance of micro finance: Financial sustainability, outreach and impact, in: Zeller, M. and Meyer, R. L.: The triangle of micro finance pp. 1-18, Baltimore: *The Johns Hopkins University Press.*

Zeller, M.G., Schrider, J., Von Barun and F. Heidhues (1997), "Rural finance for Food Security for the poor: Implications for research and Poverty" *Food Policy Review*. Vol. 4. Washington D.C

Zietz, E. N. (2003), "An Examination of the Demand for Life Insurance. *Risk Management and Insurance Review*. Vol. 6 (2), pp. 159-191.

Appendix A: Tanzania Economic Performance Indicator

Economic Performance indicators			
	2008	2009	2010
Population (Mil.)	39.3	40.7	43.7
Birth Rate	34.29 births/1000 population (2009 est.)		
Death Rate	12.59/1000 population (2008 est.)		
GDP at current price (TZS Bil.)	24,754.46	29,510.50	33,087.92
GDP per Capital at current price	622,858.94	727,968.68	800,212.7
GDP Growth Rates (%)	7.44	5.48	6.18
GDP (PPP)	1.353	1.415	1.484
Inflation (consumer Price Index) (%)	10.28	12.14	7.82
Life expectancy at birth	52 years (2009 est.)		
Infant Mortality rate	69.28 death/1000 live births (2009 est.)		
Total fertility rate	4.46 children born/woman (2009 est.)		

Appendix B: Number of Insurance companies and intermediaries in Tanzania

	2005	2006	2007	2008	2009	2010
Registered Insurers	14	17	18	20	24	24
Broking firms	47	57	54	64	65	80
Insurance Agents	348	397	429	456	458	488
Loss adjusters	35	39	40	33	33	36

Appendix C: Risk Exposures affecting income in the informal sector in Tanzania

Type of risks exposure	Frequency	Percent
Injuries and accidents	124	16.2
Illness	124	16.2
Education Fee	96	12.5
theft	81	10.6
other (flood, fire, etc)	8	1.0
child birth	175	22.8
Divorce	74	9.7
Retirement	14	1.8
food expenses	159	20.8
Death of family member	78	10.2
electricity bills	24	3.1
Building a house expenses	179	23.4
Dependents	30	3.9
removal by authority	134	17.5
increase in prices of goods	38	5.0
forced contribution and tax	11	1.4

Source: Household survey data

Appendix D: Focus Group Discussion views about Insurance Products

Negative views:

"Insurance is an additional cost; I would rather cope with a crisis with savings, especially saving in the form of assets. This has worked well for me so far. Every time I have surplus funds, I simply buy assets which I can sell when I am faced with a pressing crisis."

"For now, I would rather work towards increasing my income, asset base and livelihood, only then can I think of insurance." "The money that I have should not be spent on something that I will only benefit from when struck by a crisis. I have many needs and some other event may occur which I have not insured". "It takes long to receive the benefit after a claim. Although I have not personally accessed insurance, this seems to be the major complaint I have heard. This makes me not even think about insurance."

"I would prefer savings to insurance because I can get the money whenever I need it." "In as much as I would want to save now, I am no longer saving because of inadequate funds, but I would still

prefer savings to insurance. Insurance is a long process—verifying whether the event occurred and the like. When faced with a crisis, I usually borrow from friends." "I think insurance is for people with a lot of money." "I see insurance as an expense where the event does not occur until your death."

"I see insurance as an expense where the money cannot be redeemed; it takes long to receive payments after claims." "I find it difficult to save because of meager profits I make from my business; I cannot even afford to maintain a savings account in a bank. I see insurance as an unnecessary expense for a risk that does not normally happen. This money used for insurance can be used for other things." "I cannot afford insurance because of inadequacy in terms of money, but I can easily manage savings." "Insurance is really an expense that can be avoided."

Positive Views*

"My business is poultry; rearing chickens, I would really like to insure my chickens against theft." "I would be interested in insurance, but it is something new to me. I am willing to consider it if I can receive a lot of education on it."

**Note: These are positive views expressed during data collection phases for FGDs and unstructured interviews.*

Affordability Issue

"Insurance should be accessed by all who can afford to pay the premiums to protect themselves and their property against fire, theft, accident, disease and death." "Insurance is something that needs a lot of money. People who have money can insure against accident, fire and theft." "It is good especially when you have a big business, but when the business is small, it becomes a big burden to be making contributions to the insurer. Anyone who has a strong business must access insurance against theft, damages, or injury to themselves or their households."

Applicability Issue

"Insurance is good if you have valuable goods which might be stolen or damaged. But if you don't have valuable assets and money, it is not important to insure." "Is available for those who have a lot of assets such as cars, houses and big household assets

Appendix E: Parameters Definition and measurement of the variables

Variable	Hypothesis	Definition
AGE	+/-	This is a measure of the age of the owner of an informal business.
PEDU	-	The education variable measures the level of formal education of a respondent PEDU=None and Primary level
SEDU	+	The education variable measures the level of formal education of a respondent. SEDU 2=Secondary and vocational level
UEDU	+	The education variable measures the level of formal education of a respondent. UEDU3=University level
SEMPL	+/-	Is an independent variable and measures how self-employment

		influences his/her micro-insurance demand.
WEMPL	+	Is an independent variable and measures how waging employment influence his/her micro-insurance demand.
HRIA	+	Is an independent variable and measures how household exposure to injuries and accidents influences his/her micro-insurance demand.
HRMI	-	Is an independent variable and measures how household exposure to minor illness influences his/her micro-insurance demand
HRSI	+	Is an independent variable and measures how household exposure to serious illness influences his/her micro-insurance demand
EER	+	Is an independent variable and measures how household exposure to education expenses influences his/her micro-insurance demand.
HBER	+	Is an independent variable and measures how household's exposure to housing expenses influences his/her micro-insurance demand
DHMR	+	Is an independent variable and measures how household exposure to death of family member influences his/her micro-insurance demand
MARRIED	+	The marital status variable is a measure of whether a person is or not, it measures how marital influences his/her micro insurance demand
INCOME	+/-	Explanatory variable which measures how a level income of a respondent will influence his/her micro-insurance demand.
HOUSE	+	Is an independent variable and measures how one's house ownership influences his/her micro-insurance demand.
LIQ.ASSET.	-	Is an independent variable and measures how one's level of liquid assets holding may influence his/her micro-insurance demand.
FIXED ASS.	+	Is an independent variable and measures how one's level of fixed assets holding may influence his/her micro-insurance demand.
UMFISERV	+	Is an independent variable and measures how one's use of MFI services (any) influences his/her micro-insurance demand.
UBSERV	+	Is an independent variable and measures how one's use banks service (any) influences his/her micro-insurance demand.
INSKNOWL	+	Is an independent variable and measures how one's insurance knowledge influences his/her micro-insurance demand.
INSTRUST	+	Is an independent variable and measures how one's trust on insurance influences his/her micro-insurance demand.

Note: Variables with (+) has positive influence on the demand for micro insurance (-) has negative influence on the demand for micro insurance while (+/-) relationship is uncertain.

Appendix F: Survey questionnaires, demand for micro insurance in Tanzania.

Introduction

My name is Abdallah N. Saqware, I am a PhD student at Lancashire Business School in UK; I would like to ask you some questions about you, your households, risks you face and activities you are engaged in. In addition, I would like to discuss your household needs for financial service, and especially insurance. All the gathered information will be combined with information from other respondents and used to analyze demand for micro insurance for informal households in Tanzania. Please remember that your answers/details and data for this research will be used for academic purposes and kept confidential presented on the statistical table. Please also remember there are no rights or wrong answers and only your honest opinions are important for me.

Counset: Do you agreed to be interviewd Yes/NO

If Yes, Continue: If NO: End of Session

Basic information

Interview No:_____

Date:_____

Address of the respondent (Districts):

1. Ilala
2. Temeke
3. Kinondoni

Question 1: Household details

INT: To start with I would like to talk with you about your household. By household I mean all the people living in the same place and sharing expenditures for food. I would like to talk about all the household members that are currently present or left for short period of time (less than 6 months).

INT: HEAD OF THE HOUSEHOLD = the person who brings the biggest income to the household.

1.1.	Please give names of all your household members. WRITE A NAME(S).	1.2. Relation to the household head *1 – household head* *2 – spouse / partner* *3 – child* *4 – parent* *5 – other person*	1.3. Gender *1 – male* *2 – female*	1.4. Age *AGE OF THE PERSON*	1.5 Employment status 1. Employer 2. permanent 'yee 3. Temporary'yee 4. Self-Employee 5. Unemployed 6. Retired 7. Student 8. Other (specify)	1.6. Marital status *1 – single* *2 – married* *3 – separated / divorced* *4 – widow(er)*	1.7. Education grade completed *1 – none* *2 - primary* *3 - secondary* *4 – vocational (technical)* *5– higher (university, PhD)*	1.8. Disability (cannot work) *1 – Yes* *0 - No*	1.9 Member of MFI 1. Yes 0. No
1									
2									
3									
4									
5									

Question 2: Household economic activities, Assets and income sources

INT: I would like to talk with you about your households economic activities, all those undertaken by adult household members that generate income for your household.

Asset type and code	Number owned	Resale value at current market price (Tsh)	Today do you earn more/ less/ the same amount of this asset compared to 3 years ago 1 More 2 Less 3 The same
	1	**2**	**3**
A) Livestock			
1. cattle			
2. buffalo			
3. poultry			
4. pigs			
5. Goats			
6. Other (specify)			
B) Property/ Transport/ Agricultural equipments and Jewellery			
7 Motor vehicles (Car, Lorry, bus, three-wheeler)			
8 Motorcycles			
9 Bicycles			
10 Tractors , harvester or digging			
11 Carts			
12 Boats			
13 Jwellery			

C) Domestic appliances			
14. Refrigerators			
15 microwave			
16 freezer			
17 Kerosene stove			
18 Electric stove			
19 Gas stove			
20 Other stove			
21 Hot plates			
22 Sewing machine			
23 Electric iron			
24 Kettles/ Water heater			
25 Fan			
D) Media appliances and communication			
26 Televisions			
27 Video /DVD player			
28 Radio cassette player			
29 Computer/ Laptop for household use			
30 Fixed telephone			
31 Mobile Phone			
E) Furniture			
32 Table			
33 Chair			
34 Sofa Set			
35 Bed			
36 Wardrobe			
37 Cupboard			
38 Clock			
39 Other			
Total movable asset value			

F) Immovable Assets

40 House/ Part of a house/ Apartment (only if owned)			
41. Land (only if owned)			
Total immovable asset value			

I will read to you different sources of income. Please tell me from which sources did your household receive income in the last 12 months?			
		1 - yes	**0 - no**
	Wage employment		
A	Permanent job	1	0
B	Temporal small jobs (usually of seasonal character)	1	0
	Self-employment (registered and unregistered)		
C	Trade activities (other than selling self-produced agriculture goods, those are under F)	1	0
D	Service provision (This includes renting car, equipment, apartment, etc.)	1	0
E	Production activities (not including processing of agriculture goods, these are in F and G)	1	0
	Agriculture (only income generating)		
F	Agriculture production (crops, vegetables, fruits, other and its processing)	1	0

G	Livestock breeding (including selling meat, milk, and other processing)	1	0
	Other sources		
H	Pension	1	0
I	Social benefits	1	0
J	Money received on a regular basis from somebody living and working abroad	1	0
K	Money received on a regular basis from somebody living and working in Tanzania		
L	OTHER: _____ *Use only when cannot classify in the categories above*	1	0

In the past 12 months, did you or any other members of your household receive any other type of income that we have not already listed?

IF THERE IS NO INCOME (ONLY ANSWERS 'NO' TO ALL QUESTIONS H1) GO TO THE NEXT SECTION I.

IF IN A OR B RESPONDENT ANSWERED YES GO TO QUESTION H2, AND

IF IN C OR D OR E RESPONDENT ANSWERED YES GO TO QUESTION H5, AND

IF IN F OR G RESPONDENT ANSWERED YES GO TO QUESTION H8, AND

IF IN H OR I OR J OR K OR L RESPONDENT ANSWERED YES GO TO QUESTION H11, AND

	H2. Please list all the members (by names) who have **wage employment** (permanent or temporal)	**H3.** Number of months during the	**H4.** Net income per average month

		last year the income is generated	(ENTER AMOUNT in GEL)
	PERMANENT		
A			[_____] Tsh. 99 – refuse to answer
B			[_____] Tsh. 99 – refuse to answer
C			[_____] Tsh. 99 – refuse to answer
D			[_____] Tsh. 99 – refuse to answer
E			[_____] Tsh. 99 – refuse to answer
	TEMPORAL		
F			[_____] Tsh. 99 – refuse to answer
G			[_____] Tsh. 99 – refuse to answer
H			[_____] Tsh. 99 – refuse to answer

I			[_____]Tsh. 99 – refuse to answer
J			[_____]Tsh. 99 – refuse to answer

	H5. Please list all the **self-employment activities** providing income (by activity)? PUT ALL DISTINCTIVE SELF-EMPLOYMENT ACTIVITIES IDENTIFIED IN H1 BY ADDING A SHORT DESCRIPTION BELOW	**H6.** Number of months during the last year the income is generated	**H7.** Net income per average month (AMOUNT in Tsh.)
A	Trade1 _____		[_____] Tsh. 99 – refuse to answer
B	Trade2 _____		[_____]Tsh. 99 – refuse to answer
C	Trade 3 _____		[_____]Tsh. 99 – refuse to answer
D	Services1 _____		[_____] Tsh. 99 – refuse to answer
E	Services2 _____		[_____] Tsh. 99 – refuse to answer

F	Services3 _____		[_____] Tsh. 99 – refuse to answer
G	Production1_____		[_____] Tsh. 99 – refuse to answer
H	Production2_____		[_____] Tsh. 99 – refuse to answer
I	Production3_____		[_____]Tsh. 99 – refuse to answer
J			[_____] Tsh. 99 – refuse to answer
K			[_____] Tsh. 99 – refuse to answer

	H8. Please list all the **agriculture activities** providing income (by members or by type of activity)? PUT ALL DISTINCTIVE AGRICULTURE ACTIVITIES IDENTIFIED IN H1 BY ADDING A SHORT DESCRIPTION BELOW	**H9.** Number of months during the last year the income is generated	**H10.** Net income per average month (AMOUNT in Tsh.)
A	Agriculture production1 _____		[_____] Tsh. 99 – refuse to answer

B	Agriculture production2 _____		[_____] Tsh. 99 – refuse to answer
C	Agriculture production3 _____		[_____] Tsh. 99 – refuse to answer
D	Agriculture production4 _____		[_____]Tsh. 99 – refuse to answer
E	Agriculture production5 _____		[_____] Tsh. 99 – refuse to answer
F	Agriculture production6 _____		[_____] Tsh. 99 – refuse to answer
G	Livestock breeding1 _____		[_____] Tsh. 99 – refuse to answer
H	Livestock breeding2 _____		[_____]Tsh. 99 – refuse to answer
I	Livestock breeding3 _____		[_____] Tsh. 99 – refuse to answer
J	Livestock breeding4 _____		[_____] Tsh. 99 – refuse to answer

K			[_____] Tsh. 99 – refuse to answer

	H11. Please list all the members who obtain income from **other sources**?	**H12.** Number of months during the last year the income is generated	**H13.** Net income per average month (AMOUNT in Tsh.)
	PENSION		
A			[_____] Tsh. 99 – refuse to answer
B			[_____] Tsh. 99 – refuse to answer
C			[_____] Tsh. 99 – refuse to answer
	SOCIAL BENEFITS		
D			[_____] Tsh. 99 – refuse to answer
E			[_____] Tsh. 99 – refuse to answer
F			[_____] Tsh. 99 – refuse to answer

G			[_____] Tsh. 99 – refuse to answer
H			[_____] Tsh. 99 – refuse to answer
	Money received on a regular basis from somebody living and working abroad		
I			[_____] Tsh. 99 – refuse to answer
J			[_____]Tsh. 99 – refuse to answer
K			[_____]Tsh. 99 – refuse to answer
	Money received on a regular basis from somebody living and working in Tanzania		
L			[_____] Tsh. 99 – refuse to answer
M			[_____] Tsh. 99 – refuse to answer
N			[_____] Tsh. 99 – refuse to answer

	OTHER		
O			[_____]Tsh. 99 – refuse to answer
P			[_____] Tsh. 99 – refuse to answer

Question 3: Dwelling characteristics of the household

Question code	Question	Response	Codes
I	Is your house owned or rented, or other?		1 Owned 2 Rented 3 Used without payment (e.g. on squatter land) 4 Given by family without payment 5 Provided by government 6 Other (Specify)
II	How many rooms does your house have? (incl. detached rooms in same compound, excl. kitchen and toilet)		
III	What is the main source of energy used for cooking?		1 Firewood 2 Kerosene 3 Electricity 4 Liquid gas 5 Other (Specify)
IV	What is the main source of lighting?		1 Kerosene 2 Electricity 3 Other (Specify)
V	What is the main source of drinking water?		1 Pipe in the dwelling 2 Public pipe / Piped water from somewhere else 3 Stream/River

			4	Well water
			5	Rain water
			6	Other (Specify)
VI	What is the main material of the walls of the house?		1	Mud
			2	Bricks / Concrete
			3	Stone
			4	Blocks
			5	Timber
			6	Wood / Palm leaves / Bamboo
			7	Other (Specify)
VII	What is the main material of the roof of the house?		1	Iron sheets
			2	Tiles
			3	Asbestos
			4	Thatch / Palm leaves
			5	Other
VIII	What is the main material of the floor of house?		1	Cement
			2	Tiles / Terrazzo
			3	Mud
			4	Other
IX	What kind of toilet facility does your house have?		1	Pit latrine
			2	Backet
			3	Flush toilet
			4	No facilities
			5	Other (Specify)

Question 4: Households Health Conditions

	I	II	III	IV		V	(Use IV) Codes
Person ID	Which vaccinations has (Name) ever received? (Code) (multiple answers allowed)	If you have received vaccination, who paid for the vaccination? (Code) (multiple answers allowed)	If you have never received vaccination, why not? (Code)	If female: have you ever received any pre-natal care during pregnancies? (Code)	Who paid for this care? (multiple answers allowed) (Code)	During the last 12 months has (Name) suffered from illness or injury? (Code)	If there were any treatment costs (for consultation and medicine), who took over these costs? (multiple answers allowed) (Code)
1							
2							
3							

Column 2 : Vaccination

BCG (Baccille Calmette Guerin Vaccine 1

DTP 1 (First dose of diphtheria toxoid, tetanus toxoid and pertussis vaccine) 2

DTP 3 (Third dose of diphtheria 3

Column 3, 6 & 8 : paid by

1 Himself/herself

2 Other hh member

3 Other relatives

Column 4: why not received?

1 Too young

2 Did not know about vaccinations

3 No supply of vaccination

Column 5:

1 Yes

2 No

3 No pregnancies

toxoid, tetanus toxoid and pertussis vaccine)					
	4		4	Health centre too far	4
HepB3 (Third dose of hepatitis B vaccine)		Government			
	5		5	Too expensive	5
Hib 3 (Third dose of Haemophilus influenza type B vaccine)		Employer			
	6		6	Don’t know	6
MCV (Measles-containing vaccine)		Health Insurance			
				Other (specify)	7
	7				
MCV 2 (Measles-containing vaccine 2nd does)		Did not have to pay	7		
	8		8		
Pol3 (Third dose of polio vaccine)		Other / don’t know			
	9				
TT2+ (Second and subsequent doses of tetanus toxoid)					
	10	**Column 7**			
VAD1 (Vitamin A doses by 12 months)					
	11	Neither	1		

YFV (Yellow fever vaccine)

	12	Illness	2
Non			
	13	Injury	3
Don't know			
		Both	4

Question 5: Risks and Risk Management Strategies

5.1 What were the risks faced by you and your household in **last 3 years**?

Nature of Risk	**Tick if affected**	Rank them according to the severity	When Occurred (yyyy/mm)	Made claims to an Insurance	Mobilize family labour	Shift from on farm to off farm labour	Diversify income source	Loan from formal institutions	Loan from Informal sources	Support from relative/ family member	withdrawing savings	Selling/ pawning/ mortgaging assets	Reduction of HH Consumption	recover from the shock (i.e. reach the position before the shock
1	**2**	**3**	**4**	5	6	7	8	9	10	11	12	13	14	**20**

A) Weather related and environmental shocks														
1. Floods														
2. Hurricanes														
3. Landslides														
4. Drought														
5. Tidal Waves														
6. Fire														
7. Animal Threats														
8. Crop failure														
B) Family related shocks														
9. Death of working adult household member														
10. Death of other household member														

11. Serious illness of working adult hh member														
12. Serious illness of other hh member														
13. Disablement of working household member														
14. Disablement of other household member														
15. Disputes with extended family members regarding land or other assets														
16. marriage														
17. Childbirth														
18. Divorce														
C) Banditry														

and crime														
19. Destruction, confiscation or theft of tools or inputs for production														
20. Theft of cash														
21. Theft of stored crops or livestock														
22. Destruction of housing or housebreaking														
23. Destruction or theft of other assets (cars, jewellery, media appliances, etc.)														
D) Economic shocks														

24. Dramatic increase in input prices														
25. Dramatic decrease in output prices														
26. Inability to sell agricultural products														
27. Inability to sell non-agricultural products														
28. Loss of job														
E) Negative political, social or legal events														

29. Resettlement or forced migration														
30. Forced contributions or arbitrary taxation														
31. Discrimination for political reasons														
32. Discrimination for social or ethnic reasons														
33. War/Terrorism														

Code:

Column 20: Time take to recover

Up to one month	1
Up to six months	2
Up to one year	3
Up to two years	4
Up to five years	5
Not yet recovered	6

5.2 Where would you go to get money in an emergency?

1. MFI [ ] 5. Other (specify) [ ]
2. CBO [ ] ……..
3. Friends and Family [ ]
4. Money Lender [ ]

5.3 What was the most important coping mechanism[48] you used immediately after the risk happened last time?

List of coping mechanisms:
▪ No coping action (i.e. neglecting the illness, not re-building the stolen assets, etc.)
▪ Insurance
▪ Using own funds, depleting savings, etc.
▪ Reducing consumption
▪ Getting additional job (or working more)
▪ Getting free of charge help from government (benefits, ad-hoc help)
▪ Getting help from local associations you belong to or private persons (local businessmen, etc.)
▪ Getting free of charge help from relatives/friends (not to be repaid)
▪ Getting help that we have to give back (borrowing without interest)
▪ Buying necessary things (medicines, materials, etc.) with delayed payment (no interest rate)
▪ Buying necessary things (medicines, materials, etc.) on credit (with interest rate)
▪ Borrowing with low interest (up to 5% per month) from relatives/friends

[48] The one that contributed the most to generate the necessary amount of money.

▪ Borrowing from micro finance institutions (PRIDE Tanzania, FINCA, etc.)
▪ Borrowing from banks
▪ Borrowing with higher interest (more than 5% per month) relatives/friends
▪ Borrowing with higher interest (more than 5% per month) moneylenders (wealthy private persons)
▪ Selling animals
▪ Selling wood
▪ Selling fruits and other stored agricultural products (including barter arrangements)
▪ Pledging household assets in pawnshops (including jewellery, household consumer durables, etc.)
▪ Selling household assets (including jewellery, household consumer durables, land, transport vehicles, etc.)
▪ other _____

Question 6: Evaluation of own risk situation and attitude towards risk

Question code		Réponse			Codes
I	Looking ahead, which are the three most important risks that your household is exposed to in the next five years? Please, rank in order!	a)First	b)Second	c)Third	See codes above!
II	In your opinion, are your household more or less exposed to health shocks/ family related shocks compared to other households in your village?				1 Much more 2 A bit more 3 About the same 4 A bit less 5 Much less 6 Don't know
III	In your opinion, is your household more or less exposed to weather and environmental related shocks compared				1 Much more 2 A bit More 3 About the same

	to other households in your village?		4 A bit Less 5 Much less 6 Don't know
IV	In your opinion, is your household more or less exposed to economic shocks compared to other households in your village?		1 Much more 2 A bit More 3 About the same 4 A bit Less 5 Much less 6 Don't know
V	How do you see yourself: Are you rather willing or unwilling to take risks? (Imagine a case, where at a certain cost you may receive a benefit, but which is not certain)		1=extremely dislike 2=dislike 3= neutral 4=like 5 extremely like

Question 7: Use of financial services

7.1

(a) Do you have any savings?

Yes 1 No 2

If yes, provide details below

Name of Institution/Society	Type of the Institution (Code)	Compulsory =1 or Voluntary=2	Outstanding balance (Tsh)	Interest Rate (per annum)	Are you satisfied with the savings products? Yes 1 No 2	If not, what is the main reason for your dissatisfaction? (Code)
	(b)	(c)	(d)	(e)	(f)	(g)

Column 2

State Bank	1	Financial Leasing Company	9
Development Bank	2	Other (Specify)	10
Domestic private Bank	3		
Foreign private Bank	4		
MFI	5		
NGO	6		
Farmers' Organization	7		
Women Organization	8		

Column 7

Does not cover needs	1
Application requirements too demanding	2
Approval of product too slow	3
Not informed about own rights	4
Interest rate too low	5
Other (Specify) ……..	6

7.3 What is the usual frequency at which you save?

1 – Once in a year

2 - Every 6 months

3 – Every 3 months

4 – Every month

5 – Every week

6 – Every day

7.4 What is the usual amount of money you manage to put aside at given frequency?

_____Tsh.

99 – Refuse to answer

7.5 Do any of you family members have any bank account now?

0 – no

1 – Yes

99 – hard to say

7.6 Have you or any of your family members had any bank account during the last 3 years?

0 – no

1 – yes

99 – hard to say

7. 7 To what extent do you trust banks?

1 - definitely not

2 – rather not

3 – neither yes nor not

4 – rather yes

5 – definitely yes

99 – hard to say

7.8 (a)Have you obtained any loans from any financial institution during the last 3 years? ☐

Yes (1) No (2)

If yes, provide details below

Name of Institution/Society	Type of the Institution (Code)	Amount of the Loan (Tsh)	Purpose (Code)	Collateral Code)	Annual Interest Rate (%)	Average Monthly Install. (Tsh)	Frequency of payments(Code)	Outstanding balance (Tsh)	Month and Year of Disbursement (dd/mm/yyyy)	Are you satisfied with the savings products?	If not, what is the main reason for your dissatisfaction? (Code)
	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)

Column 2: Type of Institution 1

		Column 4: Purpose		**Column 5:colleterals**	
State Bank	1	Agriculture/Livestock/Fishery	1	No Collaterals	2
Development Bank	2	Business/enterprises	2	Land	3
Domestic private Bank	3	Construction/housing	3	Building/ Property	4
Foreign private Bank	4	To buy assets/durables	4	Jewellery	5
MFI	5	Consumption	5	Vehicle	6
NGO	6	Ceremonial/Ritual	6	Household item	7
Farmers' Organization	7	Settlement of loan	7	Personal guarantee	8
Fishermen's Organization	8	Emergencies	8	Group Guarantee	9
Women Organization	9	Medicines	9	Past loan record	10
Financial Leasing Company	10	Other (Specify) ……..	10	Other (specify) ……..	11
Other (Specify) ……..	11				

Column 8 : Frequency of Payment		**Column 12: Reasons for dissatisfaction**	
Weekly	1	Does not cover needs	1
Fortnightly	2	Application requirements too demanding	2
Monthly	3	Approval of product too slow	3
Quarterly	4	Not informed about own rights	4
annually	5	Interest rate too high	5
Other (specify) …….	6	Other (Specify) ……	6

7.9 From how many people your family can borrow Tsh. 10,000 for one month without interest? I_____I people	**7.10** From how many people your family can borrow Tsh. 100,000 for one month without interest? I_____I people	**7.11** From how many people your family can borrow Tsh. 1,000,000 for one month without interest? I_____I people

Question 8: Insurance – knowledge, use and attitude

8.1 Whether or not you ever obtained an insurance coverage, do you know the idea behind insurance?

- Yes 1 No 2 don't know 3

What insurance services do you know (heard about)?

Insurance services (Heard one of this)	
A	Health (including illness and accidents)
B	Disability (death and disability)
C	Property
D	Motor Insurance
E	Civil liability/Public Liability
F	Obligatory policies, including former state insurance

8.2 Could you list names of existing insurers in Tanzania?

IF NOT ABLE TO MENTION ANY PUT '0'

1- National Insurance Cooperation	9- Imperial Insurance Company
2- Jubilee Insurance Company	10- Strategies Insurance Company
3-Alliance Insurance Company	11. Tanzindia Insurance Company
4-Zanzibar Insurance Company	12. African Life Assurance
5-Heritage Insurance Company Cooperation	13. Tanzania Reinsurance
6 – Reliance Insurance company	14. MGEN Insurance Company
7 – Lions of Tanzania Insurance Company	15. NIKO Insurance Company
8- Royal Insurance Company	

8.3 To what extent do you trust the insurance companies you mentioned?

1- I trust them completely

2- I trust them

3- I have no reason to trust them or not

4- I do not trust them

5- I do not trust them at all

99 – hard to say

8.4 In your opinion, what is the main reason to purchase insurance?

To protect you from future losses	1
To share possible losses within a group against regular contribution	2
To provide you with investment opportunities	3
To protect you from becoming sick	4
To save money for the future	5
Don't know	6

8.5 Have you or any of your family members had a voluntary insurance policy during the last 3 years?[49]

0 – no GO TO QUESTION 8.6

1 – Yes (used to have or have now) GO TO QUESTION 8.7

99 – Hard to say GO TO QUESTION 8.7

Which types of insurance have you purchased? (Multiple answers allowed) ?

		1-yes	**0 -no**
A	Health (including illness and accidents)	1	0
B	Life (including death and disability)	1	0
C	Property	1	0
D	Motor Insurance	1	0
E	Civil liability	1	0
F	Obligatory policies, including former state insurance	1	0

[49] Only voluntary policies, the previous government insurance scheme does not count here.

8.6. Why not?

1 - Never heard of insurance / do not have enough information / do not know how it works
2 - I do not know where to find insurance
3 - The insurance agents are too far from the place I live
4 - My household has not needed insurance – I think nothing serious will happen to my family or me
5 - My household has not needed insurance because we can manage problems ourselves
6 - Insurance is too expensive for me
7 - Heard it is a long / bureaucratic process to realize claim
8 - No trust in insurer - heard that insurers do not pay (manipulate with conditions, etc.)
9 - No trust in insurance companies – they can go bankrupt or run away stealing my money
OTHER: _____

99 – hard to say

Question 9: Product concept I – Health insurance

INT: I would like to talk to you about health insurance. Choosing to buy health insurance is a way to protect members of one's family from financial shocks related to the health care costs created by an accident or sudden (not prolonged) illness of any of those family members. For each of the family members you would like to insure you pay a fixed fee every month or once a year. If the policy holder gets ill or has an accident, a claim is made and the policyholder receives in a timely manner a cash benefit payment sufficient to cover selected or all health care costs.

I will read you a concept of a new health insurance product, and then I would like to ask for your opinion about it.

Coverage: This is the risk-management product that covers health care costs of the policyholder, including all expenses related to emergency service (incl. transportation) and all expenses related to emergency hospitalization (including therapeutic and surgical cases).

Benefit: includes amount of money to cover fully official (according to the government list) and informal costs. Money is given in cash to the policyholder (or other family member) by an insurance agent at the hospital.

Claim processing: within 3 days all the benefits are transferred to the client (in cash).

Provider: The service is provided by one of the biggest Tanzania private insurance companies.

Proximity: The service is available in the nearest town.

Price: Tsh. 480 per month

Frequency of premium payment: payments can be done on a monthly basis or up-front.

9.1. What are up to 2 things you like the most about this product? MAX. 2 ANSWER POSSIBLE.	1. coverage 2. benefit (amount obtained) 3. claim processing 4. provider 5. proximity 6. price (premium) 7. frequency of premium payment OTHER: …….... *99 – hard to say*

9.2. What are up to 2 things you dislike the most about this product? MAX. 2 ANSWER POSSIBLE.	1. coverage 2. benefit (amount obtained) 3. benefit (not receiving anything if nothing happens) 4. claim processing 5. provider 6. proximity 7. price (premium) 8. frequency of premium payment OTHER: …….... *99 – hard to say*
9.3 How willing would you be to buy this product?	1 – definitely not willing – **GO TO 9.5** 2 – rather not wiling – **GO TO 9.5** 3 – rather willing - GO TO NEXT QUESTION 4 – definitely willing - GO TO NEXT QUESTION *99 – hard to say*
9.4. How many people in your household would you like to insure? (including respondent)	[_____] *99 – hard to say (do not read)*
ONLY THOSE NOT WILLING TO BUY **9.5.** Why not? NOT READ ANSWERS.	1. I do not need this insurance 2. I had bad experience with insurance 3. I do not trust insurers 4. coverage 5. benefit (amount) 6. benefit (loosing money) 7. claim processing 8. provider 9. proximity 10. price (premium) 11. frequency of premium payment OTHER: …….... *99. hard to say*

ONLY THOSE NOT WILLING TO BUY **9.6.** And if the premium is lowered to Tsh. 360 per month how willing would you be to buy the product?	0 – it will not change my decision – GO TO 9.7 1 – maybe I will reconsider my decision – GO TO 9.8 2 – I would be willing to buy it - GO TO 9.8 *99 – hard to say*
ASK ONLY THOSE NOT WILLING TO BUY **9.7.** Is there any price at which you will change your decision and decide to buy?	0 – No, I am not interested at all Yes, the price is [_____] Tsh. per month
9.8. Would you recommend this product to your relatives and friends?	1 – definitely no 2 – rather no 3 – rather yes 4 – definitely yes *99 – hard to say*

Product concept II – property insurance

INT: I would like to talk to you about property insurance. Choosing to buy property insurance is a way to protect your family from financial shocks related to the loss (theft, fire, etc.) of your household or business assets. For all the assets you would like to insure you pay a fixed fee, being a proportion of their current market value, every month or once a year. In the event of asset loss, a claim is made and the family receives a cash benefit payment.

I will read you a concept of a new insurance product, and then I would like to ask for your opinion about it".

Coverage: This is the risk management product that covers a loss or damage (due to theft/fire) of a productive or household asset(s) of the value in between Tsh 300 and 10,000.

Benefit: 70% of current market value of insured asset(s).

Claim processing: within one month all the benefits are transferred in cash to the client

Provider: The service is provided by one of the biggest Tanzania private insurance companies.

Proximity: The service is available in the nearest town.

Price: 5.5% of the current value of the insured assets, i.e. if you insure an asset worth Tsh. 1000. You will have to pay Tsh.55 for the year (Tsh. 4.6 monthly); in case of a loss you will obtain 700 of the value.

Frequency of premium payment: payment can be done in regular monthly installments or up-front

9.1 What are up to 2 things you like the most about this product? MAX. 2 ANSWER POSSIBLE.	1. coverage 2. benefit (amount obtained) 3. claim processing 4. provider 5. proximity 6. price (premium) 7. frequency of premium payment OTHER: …….... *99 – hard to say*

9.2 What are up to 2 things you dislike the most about this product? MAX. 2 ANSWER POSSIBLE.	1. coverage 2. benefit (amount obtained) 3. benefit (not receiving anything if nothing happens) 4. claim processing 5. provider 6. proximity 7. price (premium) 8. frequency of premium payment OTHER: …….. *99 – hard to say*
9.3 How willing would you be to buy this product? (INT. READ POSSIBLE ANSWERS).	1 – definitely not willing – **GO TO 9.5** 2 – rather not wiling – **GO TO 9.5** 3 – rather willing - GO TO NEXT QUESTION 4 – definitely willing - GO TO NEXT QUESTION *99 – hard to say*
9.4. What is the value of the assets you would like to insure? WHEN DONE **GO TO 9.8**	[_____] Tsh. *99 – hard to say*
ONLY THOSE NOT WILLING TO BUY **9.5.** Why not? DONOT READ ANSWERS.	1. I do not need this insurance 2. I had bad experience with insurance 3. I do not trust insurers 4. coverage 5. benefit (amount) 6. benefit (losing money) 7. claim processing 8. provider 9. proximity 10. price (premium) 11. frequency of premium payment OTHER: …….. *99. hard to say*

ONLY THOSE NOT WILLING TO BUY **9.6.** And if the premium is lowered to 4% of covered amount per year how willing would you be to buy the product? (for the above example, it means that you will have to pay Tsh. 40 to insure an asset of 1000 for one year; paying Tsh. 3,3 per month).	0 – it will not change my decision – GO TO 9.7 1 – maybe I will reconsider my decision – GO TO 9.8 2 – I would be willing to buy it – GO TO 9.8 *99 – hard to say*
ASK ONLY THOSE NOT WILLING TO BUY **9.7.** Is there any price at which you will change your decision and decide to buy? (use the example above; monthly payment for an asset of Tsh. 1000 value)	0 – No, I am not interested at all Yes, the price is [_____] Tsh. per month
9.8. Would you recommend this product to your relatives and friends?	1 – definitely no 2 – rather no 3 – rather yes 4 – definitely yes *99 – hard to say*

Product concept III – life insurance

INT: I would like to talk to you about life insurance. Choosing to buy life insurance is a way to protect members of one's family from financial shocks related to the death of any of those covered family members. For each of the family members you would like to insure you pay a fixed fee every month or once a year. In the event of death befalling one of the family members, a claim is made and the family receives a cash benefit payment.

I will read you a concept of a new life insurance product, and then I would like to ask for your opinion about it.

Coverage: This is the risk-management product that covers death of the policyholder during the fixed term (1, 3 or 5 years).

Benefit: In case of death of the policyholder during the selected period his/her family receives a fixed benefit of Tsh.3000 If the policy holder does not die the family receives nothing.

Claim processing: within one month all the benefits are transferred in cash to the family.

Provider: The service is provided by one of the biggest Tanzania private insurance companies.

Proximity: The service is available in the nearest town.

Price: the premium payment would be Tsh. 3 per person per month.

Frequency of premium payment: monthly/Annually

E1. What are up to 2 things you like the most about this product? MAX. 2 ANSWER POSSIBLE.	1. coverage 2. benefit (the level of fixed amount) 3. benefit (not receiving anything if nothing happens) 4. claim processing 5. provider 6. proximity 7. price (premium) 8. frequency of premium payment OTHER: …….... *98 – none* *99 – hard to say*

E2. What are up to 2 things you dislike the most about this product? MAX. 2 ANSWER POSSIBLE.	1. coverage 2. benefit (the level of fixed amount) 3. claim processing 4. provider 5. proximity 6. price (premium) 7. frequency of premium payment OTHER: …….... *98 – none* *99 – hard to say*
E3. How willing would you be to buy this product?	1 – definitely not willing – **GO TO E5** 2 – rather not willing – **GO TO E5** 3 – rather willing - GO TO NEXT QUESTION 4 – definitely willing - GO TO NEXT QUESTION *99 – hard to say*
E4. How many people in your household would you like to insure? (including respondent) WHEN DONE **GO TO E8**	[_____] *99 – hard to say*
ONLY THOSE NOT WILLING TO BUY **E5.** Why not? NOT READ ANSWERS.	1. I do not need this insurance 2. I had bad experience with insurance 3. I do not trust insurers 4. coverage 5. benefit (the level of fixed amount) 6. benefit (loosing money) 7. claim processing 8. provider 9. proximity 10. price (premium) 11. frequency of premium payment OTHER: …….... *99. hard to say*

ONLY THOSE NOT WILLING TO BUY **E6.** And if the premium is lowered to Tsh.2 per month, how willing would you be to buy the product?	0 – it will not change my decision – GO TO E7 1 – maybe I will reconsider my decision – GO TO E8 2 – I would be willing to buy it - GO TO E8 *99 – hard to say*
ONLY THOSE NOT WILLING TO BUY **E7.** Is there any price at which you will change your decision and decide to buy?	0 – No, I am not interested at all Yes, the price is [_____] Tsh. per month
E8. Would you recommend this product to your relatives and friends?	1 – definitely no 2 – rather no 3 – rather yes 4 – definitely yes *99 – hard to say*

INT: The life insurance can be also linked to an investment plan. The policyholder saves regularly (with interest remuneration) for a fixed period of 10 (or 15) years. Savings has to be at least Tsh. 10 per month. Your savings safety is guaranteed by the government (as in banks).

Benefit: In case of death of the policyholder during the fixed term (10 or 15 years) his/her family receives the amount saved and a fixed benefit of Tsh. 3000. If the policyholder has not died he/she receives all his/her savings and interest earned on them (for 10 years + interest). In this case, the interest rate on savings is similar to those practiced by Tanzanian banks for 1 year term deposit.

Price: the premium payment would be the same as in the previous product presented = Tsh.3 per person per month and the savings would be a fixed monthly amount of at least Tsh.10. It gives a total payment of at least Tsh. 12 per person per month.

E9. How interested would you be in the saving (investment) plan function?	1 – definitely not interested 2 – rather not interested 3 – rather interested 4 – definitely interested *99 – hard to say*

THANK YOU FOR YOUR KIND COOPERATION