

**DETERMINANTS OF INTEREST RATES IN MICRO FINANCE
INSTITUTIONS IN KENYA**

BY

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DECLARATION

This Research Project is my original work and I declare that it has not been presented elsewhere for a master degree in any other university.

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This Research Project has been submitted for the examination with my approval as university supervisor.

Sign _____ Date _____

Mirie Mwangi

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DEDICATION

This work is dedicated to my loving wife Nelly Njeri and my daughter Christine Wahu for being very supportive throughout my studies.

ABSTRACT

Microfinance institutions were established to assist the low income by providing credit. In their provision of credit to low earners they charge interest rate which over the years has been high. The purpose of the study was to establish the determinants of interest rates in the Microfinance Institutions in Kenya.

The study used both primary and secondary data. Primary data was collected using questionnaires from 104 credit and branch managers while secondary data was collected through the use of previous documents such as the financial statements. Data was analyzed using descriptive such as frequency, percentage, standard deviation and mean score.

The study established that according to respondents administrative cost, profitability, cost of funds and loan loss determined the interest rates charged by the microfinance institutions in Kenya. The study also established that there was a positive relationship between the variables. However, the analysis showed that the independent variables were not strong predictors of interest rates. This means that there are other factors which may also be determinants of interest rates.

The study recommends that the management of Microfinance Institutions should embrace technology in its operation in order to lower the operation expenses, the study further recommends that government should cheap in by providing funds in form of free interest loans to Microfinance Institutions to reduce the interest charged to low income earners and that there should be a proper regulatory body to oversees the running of Microfinance Institutions.

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ABBREVIATIONS

ADB -Africa Development Bank

AMIF -Association of Microfinance Institution

CBK -Central Bank of Kenya

CBS -Central Bureau of Statistics

CGAP -Consultative Group to Assist the Poor

DTMs -Deposit Taking Microfinance Institutions

KPOSB -Kenya post office savings bank

MFI -Microfinance Institutions

MIX -Microfinance Information Exchange

NGO -Non Governmental Organization

ROSCAS -Rotating Saving Societies

SIDA -Swedish International Development Agency

SMES -Small Medium Enterprises

USAID -United States Agency for International Development

WB -World Bank

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

One of the provocative questions in the microfinance sector is on its relatively high interest rates. Albeit microfinance commendation of mitigating wide interest rate variation of about 50 per cent between formal financial institutions and moneylenders, Armendariz and Morduch (2005) spatial differences within the sector have incited concerns. Rosenberg et al. (2009) estimate an average interest rate yield of 30 per cent and based on some benchmarking analysis conclude that Microfinance lending rates are not usurious. However, country-specific high interest rates of 80 per cent per annum evidenced in Mexico and South Africa engender concerns, mainly on the effect of lending rates on the economic activities of micro and small entrepreneurs and how they respond in such circumstances. The high interest rate that Microfinance Institutions (MFIs) charge is increasingly receiving criticism by policy makers in Africa, Asia and the Pacific (Fernando, 2006). Some policy makers have suggested that ceilings be introduced on microcredit interest rates to ensure that poor households have access to affordable credit. This is due to the fact that the main objective of MFIs is to provide affordable financial services to poor and low income households. In a related argument, Paranjape (2008) questions the interest rate rigidity of Microfinance Institutions in an era of low and changing lending rates.

Taking into account the potential benefits formal lending could provide, there is a growing interest among policymakers to formulate policies that may help increase the participation of the poor in formal credit markets. The high microloan interest rates have been of great concern since the beginning of the modern Microfinance movement in the late 1970s due to the impact it may have on the people (Fernando, 2006). But the criticism has intensified in the past few years, and legislated interest rate caps are being discussed in a growing number of countries including Kenya.

According to the Microfinance information Exchange (2010), the annual lending interest rate charged by microfinance institutions during the period 2000-2008 was on average 42% in Africa and in Latin America and 35% in Asia. Since annual inflation rates during those years in all three continents were around 7%, real interest rates paid by microfinance clients were high. Thus, it is not surprising that one of the most discussed issues in microfinance is the high interest rates these institutions charge.

Gonzalez (2010) asks, “are high micro credit interest rates not a sign that these institutions that proclaim development objectives are in fact gouging the poor?” This is due to the fact that Microfinance Institutions (MFIs) provide poor families with very small loans (so-called microcredits, typically in the range of a thousand to a few thousand Kenya shillings) to help them engage in productive activities or grow their small businesses. Over time, microfinance has come to include a broader range of services (credit, savings, insurance, etc.) as it became clear that the poor and the very poor who lack access to traditional financial institutions require a variety of financial services.

However, charging prices high enough to cover costs is an essential practice for any business enterprise that intends to continue its operations beyond the short-term. Interest rates therefore must cover operational and financial costs and growth, to achieve the objectives of a sustainable, healthy, growing microfinance industry reaching increased numbers of the poor, especially in rural areas. Interest charged on loans is justified by MFIs as it is the main source of income for these institutions. MFIs claim that they have to provide financial services to poor people and have to face administrative cost that’s why they charge such high rates (Fernando, 2006)

Copestake (2007) hypothesized that an effort to improve financial performance results in raising interest rates on loans but at the same time it inversely affects the social performance. However, empirical evidence about the role of efficiency in the determination of interest rate in microfinance is relatively scarce in the literature. Cull et al. (2007) using data on 124 institutions in 49 countries provided evidence that raising interest rates to very high levels does not ensure greater profitability and the benefits of

cost-cutting diminish when serving better-off customers. Microfinance interest rates cannot be expected to fall below the minimum costs necessary for MFIs to survive, so they will not be “affordable” for some purposes, for which alternative approaches are needed. Interest rates are “too high” if they result from inefficiencies. Increased competition and performance based capacity-building are appropriate strategies to improve efficiency for lower costs and interest rates.

Interest charged on loans is the main source of income for the MFI institutions and, because they incur huge costs, the rates are correspondingly high. Four key factors determine these rates: the cost of funds, the MFI’s operating expenses, loan losses, and profits needed to expand their capital base and fund expected future growth.

Many policy makers question why microfinance interest rates remain high even when MFIs receive concessional funds to finance lending. Although microlenders receive loan funds at concessional rates, they must cost these funds at market rates when they make decisions about interest rates to ensure the sustainability of the institution's operations. Donors provide concessional funds for a particular usage only for a limited period, as do some governments. However, concessional funds cannot be considered a permanent source of funds for MFIs, and provision must be made through interest rates to sustain the lenders' operations.

Inflation adds to the cost of microfinance funds by eroding microlenders' equity. Thus, higher inflation rates contribute to higher nominal microcredit interest rates through their effect on the real value of equity. Microlenders have two kinds of operating costs: personnel and administrative. Because microlending is still a labor-intensive operation, personnel costs are high. Administrative costs consist mainly of rent, utility charges, transport, office supplies, and depreciation of fixed assets. Making and recovering small loans is costly on a per unit basis. Often loan recovery is executed by staffs who visit clients, increasing costs in time taken and transportation used. Poor physical infrastructure, inadequate road networks, transportation, and telecommunication systems in many countries in which microlenders operate also increases administrative costs and

adds significantly to the cost of microfinance operations. This is particularly the case in Timor-Leste, Cambodia, Mongolia, India and in the sub-Saharan Africa. Inadequate law and order particularly in countries such as many countries in the sub-Saharan Africa, Nepal and Papua New Guinea also contribute to high administrative costs as microcredit operations often involve cash transactions and the physical movement of cash.

In many countries in the region, the majority of microcredit is provided by a few leading institutions, and competition among them is mostly on non-price terms. Large-scale commercial banks with access to low-cost funds, low operating costs, extensive branch networks, and vast human and other resources to provide financial services efficiently are presently not significantly involved in microcredit. The lack of participation of such conventional financial institutions in the microcredit market also limits potential competition. This study seeks to determine the determinants of interest rates charged by the MFIs in Kenya.

1.1.1 Determinants of Interest Rates

a) Cost of funds

One of the sources of Microfinance Institution fund is from commercial banks. Microfinance Institutions gets this fund so as they can also extend the financial service to their client. The cost of this fund is at the market interest rate. This financial expense combined with the fees paid on such loans and deposit taken from the public account for the 23% of the interest rate charged by profitable microfinance providers (Microfinance Information Exchange, 2010).

b) Operating expenses

Personnel and administrative expense form the largest component of interest rate 62% charged by sustainable microfinance providers. These high cost are associated with disseminating and recovering a large number of small sized loans often to clients in geographically dispersed areas with poor infrastructure and security conditions. Although these rates are a function of several factors, administrative costs are the single highest contributor to interest rates (Gonzalez et al, 2007).

c) Risk of default

Provision for bad debt is often a regulatory requirement for bank led Microfinance Institution but other types of Microfinance Institution realize the importance of creating an emergency fund to provide a cushion against the risk of loan defaults. As a result portfolio losses account for 6% of Interest rates charged by successful microfinance providers (Microfinance Information Exchange, 2007).

d) Profit

The profit motivation of micro finance providers is vital for many reasons. It's only logical that profits form part of interest rate charged on microloans. The tricky part is ensuring that the returns generated are reasonable and not indicative of greed as in case of commercial banks. A firestorm of controversy erupted in April 2007 when shareholders of Compartamos, a Mexican Microfinance Institutions with a banking license, sold a part of their shares in a public offering at an astonishingly high price, which made some of the individual sellers instant millionaires. One important reason for the high price was that Compartamos was charging its clients very high interest rates and making very high profits. The annualized interest rate on loans was above 85 percent (not including a 15 percent tax paid by clients), producing an annual return of 55 percent on shareholders' equity (Rosenberg et al, 2009).

1.1.2 Microfinance Institutions

The World Bank defines Microfinance Institution as an institution that engage in relatively small financial transactions using various methodologies to serve low income household, micro enterprises, small scale farmers and other who lack access to traditional banking services, They engage in micro credit or microfinance. Microfinance, is banking the unbankables, bringing credit, savings and other essential financial services within the reach of millions of people who are too poor to be served by regular banks, in most cases because they are unable to offer sufficient collateral. In general, banks are for people with money, not for people without (Maanen, 2004).

Microfinance is based on the premise that the poor have skills which remain unutilized or underutilized. It is definitely not the lack of skills which make poor people poor...charity is not the answer to poverty. It only helps poverty to continue. It creates dependency and takes away the individual's initiative to break through the wall of poverty. Unleashing of energy and creativity in each human being is the answer to poverty (Yunus, 2003). Microfinance is the supply of loans, savings, money transfer, insurance and other financial services to low income people. Microfinance Institution which encompasses a wide range of providers that vary in legal structure, mission and methodology offer these financial sources to clients who do not have access to mainstream banks or other formal financial services providers (lafourcade et al, 2005).

Microfinance institutions in Kenya are registered under different Acts of Parliament like: The Non Governmental Organizations Coordination Act; The Building Societies Act; The Trustee Act; The Societies Act; The Cooperative Societies Act; The Company Act; The Banking Act, The Kenya Post Office Saving Bank (KPOSB) Act and the Micro Finance Act (www.treasury.go.ke). The MFI operation, business, establishment, licensing and supervision are regulated by micro finance act 2006 which became operational in 2008 (www.centralbank.go.ke). According to the Microfinance Act (2006), the Microfinance Institution are classified and registered into three different tiers: deposit-taking institutions such as banks (Tier 1), credit only non deposit taking institutions (Tier 2), and informal organizations supervised by an external agency other than the government (Tier 3). The last category involves Rotating Savings Societies (Roscas), club pools and financial services associations (Fsas). These distinct classifications have led to some of the Microfinance Institution specializing in certain niche markets, which have contributed to their growth and sustainability in delivering microfinance.

The microfinance industry in Kenya is experiencing positive growth and change as it has evolved from charity based social and financial Empowerment programmes to fully operational financial institutions, which continue to contribute towards bridging the gap of financial inclusion. During the year 2010, CBK licensed four Deposit taking microfinance Institutions (DTMs). Out of the four; three institutions were licensed to

carry out nationwide deposit taking microfinance activities, while one institution was licensed as a community based deposit taking microfinance institution (Central Bank of Kenya Report 2011).

1.1.3 Concept of Interest Rate

Interest rate is the `rent` paid on borrowed money. Lenders receive interest as compensation for foregoing the use of their funds now. The original amount lent is called the principal and the percentage of principal which is paid payable over a period of time is the interest (Ivey 2002) and (Heaton, 2002). In money monetary using economies, money creates claims because it's an asset, a store of value, as well as a means of exchange. Therefore those who lend money expect to be compensated for handing over their claims for the period of the loan to those who borrow money. The compensation is the interest rate expressed as a rate percent per annum because it's a convenient way of calculating and comparing the cost of borrowing money. The commonly used definition of interest is that it's a price at which money is lent and borrowed. Therefore the interest rate can be defined as the price the lenders expect and borrowers pay for exchanging current claims for greater future claims to goods and services. Interest rate present cost of money (Kimutai, 2003). The interest rate for this study is the lending rate that Microfinance Institution charge for the loans they give to their clients.

1.2 Statement of the Problem

The high interest rate in MFIs which has faced a lot of criticism has been in existence for a long time. The interest rates range has remained high ranging between 30% to 70 despite the efforts to fix the interest rates through the famous Donda bill and Finance Bill 2011. Further, the high interest rates are against the regulation, the current Finance Bill which propose that interest rate should be pegged against Treasury bill/ Maximum interest rate that a bank or any financial institution may charge for a loan or monetary advance. The bill states that no interest rate should exceed four per cent of the base lending rate of the Central Bank (Finance Bill 2011). This however, cannot be applicable if institution is making losses. Since these rates can be justified by high transaction costs

and risks associated with micro lending, it is often difficult to differentiate between sustainability, profitability and greed (Fernando, 2006).

As these reforms of interest rates liberalization deepens, Microfinance Institutions are enjoying more and more independence in determining interest rates. At present, although the benchmark interest rates of commercial banks are determined by the central bank, Microfinance Institutions have relative large independence in setting lending rates. Microfinance Institutions can choose suitable interest rate based on its own property conditions as well as the customer credit status in order to increase profit (Nyanjwa, 2008)

While the necessity of charging interest on microcredit has been widely accepted, there seems to be plenty of disagreement over the level of interest rate charged by microfinance providers because the factors that go into these calculations are not well known (Fernando, 2006). We often hear about high transaction costs and cost of funds in microfinance as justifications of high interest rates, but there is more to it than that (Ramanaiah and Gowri 1999). One would expect the regulation that is conversant with the factors to address them so as Microfinance Institution to perform their role effectively. Studies available in regard to these factors in Kenya are scarce.

Studies by Randall (1998) and Ramanaiah and Gowri (1999) has shown mixed result regarding the extent of poverty alleviation, some in support while others accuse them of been greed and taking advantage of their nature operations and charging high interest rate. The study therefore seeks to answer the following question. What are the determinants of interest rate (lending rate) in Microfinance Institution in Kenya?

1.3 Objective of the Study

The objective of the study is to establish the determinants of interest rates in the Microfinance Institutions in Kenya.

1.4 Importance of the Study

The government will be interested in the study as it will help in its effort to formulate policies that will enable Microfinance Institution to charge favorable rates to the clients.

Microfinance Institution will find the study useful as it will be in a position to know the cause of high rate and put a control mechanism in.

The client or customers of Microfinance Institution will find the study being of value as it will make them understand the reason as to why their loans attract a high interest rate.

The study will be of great help to donor and agencies who are providers of fund to Microfinance Institution as they will be in a position to review their terms and conditions regarding their expectation on micro crediting in Microfinance Institution.

Academicians and scholars may find the study useful as it forms the basis upon which further studies on determinants of interest rates in financial institution could be conducted as well as adding to the body of knowledge in finance discipline.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter summarizes the information from other researchers who have carried out research in similar field of study. The specific areas covered are review of literature on theories that guide study, empirical studies that relate to factors determining the interest rate, summary and conclusions of the chapter.

2.2 Theoretical Framework

Traditional theories define interest rate as the price of savings determined by demand and supply of loanable funds. It is the rate at which savings are equal to investment assuming the existence of a capital market. The loanable fund theory argues that interest rate is determined by non-monetary factors. It assigns no role to quantity of money or level of income on savings, nor to institutional factors such as commercial banks and the government.

The liquidity theory, on the other hand, looks at the interest rate as the token paid for abstinence and inconveniences experienced for having to part with an asset whose liquidity is very high. It is a price that equilibrates the desire to hold wealth in the form of cash with the available quantity of cash, and not a reward of savings. Interest rate is a function of income. Its primary role is to help mobilize financial resources and ensure the efficient utilization of resources in the promotion of economic growth and development.

From the traditional theory, nominal interest rates adjust fully to the expected rate of inflation leaving real interest rates unchanged. In his works, Irving Fisher held the same sentiments and He believed that there is a positive relationship between expected future price increases and nominal interest rate. An increase in price increases the nominal value of trade, resulting in an increase in demand for money and leading to an increase in

nominal interest rate. Irving Fisher's theory is controversial, however, particularly when it is interpreted as suggesting a constant real interest rate.

Ngugi and Kabubo (1998) applying the traditional theory shows that positive real interest rate are achieved when inflation is moving down and when they move up the prospects of keeping them are narrow, their study further argues that the spread between lending and deposit rates widened with liberalization, while the short-term rates increases at a faster rate compared with longterm rates resulting in a negatively sloped yield curve. Frederick (1986) contends that high interest rate is an effective tool for stopping high inflation.

Fredric (1986) while noting that interest rate is the price lender charge on borrowed funds, he further contends that the forces of demand and supply in the market would attain the market equilibrium interest rate. This position is in conformity with the classical economic theory thus supply side of this money market represent the supply of loanable funds while the demand side will represent the demand for loanable funds, therefore the interest determination is at equilibrium at the point of intersection of the supply and demand curve. This study seeks to determine the factors that determine the interest rates of the MFIs. The MFIs give credit to the small entrepreneur and households how have high risk of defaulting with funds which are mainly borrowed from other financial institutions or donations from well wishers. Classical financial institutions typically require the existence of collateral as security before granting loans to a client. However, low income levels and the lack of assets would exclude most people in developing countries from obtaining credit from standard banks.

2.3 Interest Rates

The analysis of the McKinnon and Shaw hypothesis sets the tone for financial sector deregulation in most countries (McKinnon 1973; Shaw 1973). Since then, interest rate determination in formal financial institutions has experienced a transition from various forms of direct regulation to a system deregulation. The latter permits the market through the demand and supply of loans to determine rates. The principal justification for the turnaround is the plausibility of financial repression in a regulated regime. Brace et al,

(1997) posit that denying financial service providers the opportunity to charge interest rates at the market equilibrium leads to spiral shortages as potential lenders are sidelined due to government direct involvement in retail financing. Thus regulating interest rates through diverse means such as caps, high bank reserve, and liquidity ratio requirements discourage innovation and diversification of loan products.

Notwithstanding this viewpoint, although strongly upheld, Levine et al. (2000) identify broad financial functional roles of the state to mitigate some lapses that emerge as a result of market determination of interest rate. Permitting credit markets to determine interest rate through the economic forces of demand and supply of loans leads to rationing as a result of imperfect information (Stiglitz and Weiss 1981). Stiglitz and Weiss (1981) argue from the perspective of a pool of borrowers that react to interest rate and collateral set by banks. The riskiness of projects and attitudes of borrowers constrain banks to continuously increase interest rates and collateral requirements even in the case of an excess demand for loan. The obvious consequences of adverse selection and moral hazard stare in the face of banks. Over time banks have developed other mechanisms to mitigate these potential problems. For instance during all three principal phases of a loan life, non-asset based strategies are employed to minimize loan default, fungibility, and to stimulate and redirect investment to prioritized sectors of an economy.

With this backdrop of information on the state of play in the traditional banking system an open question about the applicability of this theory and practice to microfinance markets remains unanswered. The starting point for any discussion is to acknowledge that the market for microfinance is a residual of the traditional banking market. The philosophy underpinning the emergence of microfinance was to serve the neglected market niche of the traditional banking system. This market niche, though hard to define, in practice has been labeled with different names. This includes the 'unbankable', poor, brave poor, economically active poor, and so forth. A plausible reason for the different labeling overtime is the ongoing identification of a group of clients capable of responding favourably to banking needs and services. Operational strategies of making loans to the poor adds to the difficulty of finding an 'ideal' group of clients that hitherto had been

neglected by traditional banks but viewed as 'bankable' clients in microfinance. Practices, such as group lending, joint liability, receipt of subsidies, grants and government direct intervention, small and frequent loan repayments, forced savings, maintenance of a minimum balance of savings throughout the loan life and incorporating other non-financial services complicates the adaptation of banking theory to suit microfinance. These issues directly or indirectly affect the core factors of determining an interest rate that is loan loss, transaction cost, and mark-up. In addition to these factors, administrative cost efficiency and competition also affect interest rates. For the sake of brevity we discuss two issues (transaction cost and subsidies) that make interest rates setting a peculiar issue in the case of microfinance.

Defenders of commercial microcredit claim that access to credit is more important than the cost of credit, and that the mere fact of steady growth in the number of clients willing to pay the high interest rates is proof that microfinance provide is a valuable service. High repayment rates and repeat borrowing testify to the positive benefit that clients derive from microcredit. Further, high repayment indicates that the loans are affordable if not, their inability to repay would show up in default rate. (Helms and Reille, 2004)

Fernando (2006) argues that, much is to be gained through lower microcredit interest rates. The current high cost means that the microcredit efforts are not reaching as many people as they could be. He sees that Lower microcredit interest rates will help increase the depth and breadth of availability of affordable finance for poor households. Policymaker concern over high interest rates has led many to suggest capping interest rate by setting rate ceilings. Fernando warns that this is not an appropriate solution, arguing that Rate ceilings will retard the growth of the Microfinance Institution industry and result in reducing the supply of microcredit and other financial services, harming rather than helping poor and low income households. If rates are set to a level less than that required to cover costs, lenders will incur losses. Not only will this hurt Microfinance Institutions' ability to expand operations, but it will also reduce their creditworthiness and ability to borrow and also this would discourage potential investors from supporting the industry.

Critics of high microfinance interest rates argues that the modest rates of return achieved in most small-scale businesses in general and in agriculture in particular, are insufficient to cover debt service at such rates. Academic research on the matter has been inconclusive. Study by Karlan and Zinman, (2008) shows that there may be some interest inelasticity in microfinance consumer loans, contrary to conventional wisdom which assumes that low-income clients are willing to bear high interest rates if transaction costs are low and repayment schedule convenient. On the other hand, Suresh and Woodruff, (2007); McKenzie and Woodruff, (2007) finds that monthly rates of return on capital are very high in a wide range of nonfarm micro entrepreneurial activities, ranging from 4 to 7 percent per month, well above the typical interest rates charged by microfinance lenders of 2 to 3 percent per month. Another study Bidwell, (2009) finds that returns on agricultural investment are quite high in Ghana but that farmers seem to be risk constrained, fearing a loss of collateral because of the high variability in rainfall.

2.4 Determinants of Interest Rates

Interest rates are normally affected by factors; some are within the control of Microfinance Institution while others are beyond their control.

2.4.1 Profit

Kamau (2008) finds that interest rate was rated highest as the factor that determines the profitability of Microfinance Institution and the high rate was to achieve growth through profit. He concluded that recent development in microfinance industry in Kenya and elsewhere has involved the transformation of Microfinance Institution into bank or other form of regulated institutions. However for this transformation to occur the Microfinance Institution have to show that they have a potential to be profitable and capacity to compete with other established institution in the financial sector. To cater for possible growth profit must be maintained and the interest rate charged is high to address to achieve this growth in profit.

Fehmeen (2005) argues in favour of profitability factor of Microfinance Institutions in that, microfinance needs to work in the form of a business rather than charity and at the same time; Microfinance Institution need to incorporate a social dimension in their operations and this is often a difficult balancing act considering the lack of corporate governance and experience of certain institutions. While some of them completely lose touch with their social objective, others forget that the microfinance model needs to be financially sustainable at the end of the day.

Goonzela (2010) opposes the idea that profits are main drivers of interest, in his study Profits of sustainable Microfinance Institution, measured as a percentage of loan portfolio, were found to have dropped by about one-tenth (0.6 percentage points) per year. Profits are not a predominant driver of interest rates. His study shows that for the ordinary Microfinance Institution, the extreme and unrealistic scenario of complete elimination of all profit would cause its interest rate to drop by only about one-sixth. He argues that such an interest reduction would not be insignificant, but it would still leave microcredit rates at levels that might look abusive to politicians and the public. He concludes that interest rate is not the only source of income to Microfinance Institution thus they don't affect the interest rate.

Fernando (2006) argues that Interest charged on loans is the main source of income for Microfinance Institutions. Thus they must be high enough to cover operational costs. Since micro lending remains a high-cost operation, interest rates remain high. His study reports that Microfinance Institutions charges rates ranging from 30 to 70% a year. He caution that it's important to remember that comparisons with rates charged by commercial banks are inappropriate as larger loans mean lower transaction costs and result in lower interest rates.

2.4.2 Operational Cost

Operating costs always have been the main driver of Microfinance Institution' interest rates because microfinance is a labor intensive business. According to Rosenberg, Gonzalez, and Narain (2010), operating expenses make up close to 50 percent of nominal

interest yields in a worldwide comparison. Their study found that the countries with the lowest interest rates tend to have low operating costs. Such is the case in Ethiopia (where operating costs account for 9.4 percent of the gross loan portfolio) and Sri Lanka (7.7 percent). Nominal interest rates are lower than 20 percent in these countries. They study further argue that the size of loan affects the interest rate and small loans attracts high cost which leads to high rate.

Tiny loans require higher administrative expenses, which are not substantially offset by economies of scale. On the other hand, the learning curve of Microfinance Institution as they age produces substantial reductions. Rosenberg et al, (2009) study found that Administrative costs are the largest single contributor to interest rates, and have been declining by 1 percentage point per year. They observed that the decline appears to be a true improvement in the cost of serving each borrower, not just the result of expanding loan sizes. Their finding concurs that the level of these costs is strongly related to the age of the Microfinance Institution, and they conclude that there is inefficiency when most Microfinance Institution are relatively young, since most national microfinance markets are immature and noncompetitive. Further, while microfinance institutions have higher returns on assets than commercial banks, these same authors claim that the search for returns is not an important driver of interest rates.

In microfinance, sustainability could relate to organizational, managerial or financial Thapa, (2007). Of the three the one that has received the most attention is financial sustainability. According Nepal (1997), a microfinance institution attains sustainability when its operating income from loans is sufficient to cover all the operating costs. They argue that sustainability of microfinance institution includes both financial viability and institutional sustainability (self-sufficiency) of the lending institution. The microcredit summit campaign, on the other hand refers to a microfinance institution as institutional and financially Self-Sufficient if it is able to cover all actual operating expenses from income generated from its financial services operations, after adjustment for inflation and subsidies.

2.4.3 Transaction Costs

The pricing of microfinance services like any other good or service is a function of transaction cost. Transaction cost in the delivery of financial services, basically has three components: the costs of funds for on-lending, the costs of risk (loan loss), and administrative costs (processing loan applications, educating or training of clients and monitoring for loan repayment). The above makes it imperative to reach the conclusion that the absolute transaction cost per head of a poor person is more expensive than a client of a formal financial institution.

Campion et al, (2010) found that the advent of the global economic and financial crisis in the last quarter of 2008 had further constrained liquidity in the region. Microfinance Institution continues to grow, but at more modest rates, since their cost of funds has increased and many were experiencing difficulties in accessing capital at any price. At the same time, the number of nonperforming loans was rising, and remittances from expatriate workers had fallen. The latter is worrisome because some Microfinance Institution had been generating substantial fee income from handling these remittances, and the recipients had often used the money toward loan repayment. The study found that most Microfinance Institutions were coping with the crisis, focusing on improving their internal procedures and operational efficiency. Meanwhile, however, many governments in the region were found to have announced new or expanded subsidized credit programs targeting the low-income population. He concluded that many of the Microfinance Institution that participates in these programs has to adhere to fixed intermediation margins, which are sometimes insufficient to cover operating costs.

Received wisdom has long been that, lending to poor households is not worth it, due to too high costs, too great risks, too low saving propensities, and too few households capable of putting up collateral (Morduch 1999). The likely consequences of these adverse characteristics have been dealt with through alternative mechanisms such as group lending and joint liability, forced savings and small and regular loans and repayment. These mechanisms seem to prove that microfinance can be sustainable. In spite of the ingenuity of delegated screening, monitoring and enforcement, transaction

costs are up the roof and used as the main argument for high interest rates. Obvious reasons are the other strategies of microfinance operations including small amounts of loans and forced savings, remote settlements and provision of non-financial services. For instance, Rosenberg et al. (2009) assert that the effect of compulsory savings increases the effective cost of the loan to the borrower.

In microfinance, cost components of animating groups, purchase of forms, implications of 'forced savings' and frequent repayment rate constitutes the difference between real and effective interest rate. The precise magnitude of the difference is unknown but anecdotal evidence points to a more than 100 per cent gap. Less obvious, but added to this cost component, is time spent and opportunity cost in servicing the loan. In the case of poor clients this is high due to the inclusion of non-financial services as loan beneficiaries spend more time with bank staff. Finally, non-use of high technological devices such as computerized operations increases per unit cost.

Goonzale (2009) the relatively high price Microfinance Institution has to pay for money they borrow contributes substantially to the interest they charge borrowers. In general, it would seem unfair to criticize Microfinance Institution managers much on this score, because even though they can control their own operations, they usually have little control over their rate of borrowing/funding costs. Most of them get funding where they can find it and tend to be price takers rather than price makers when it comes to the interest rates they pay. Increasing reliance on deposit funding will lower costs over the longer term, as regulators authorize more Microfinance Institution to take savings. However, this option is unavailable to managers of Microfinance Institution if their country does not have the enabling regulation, or if their business is not yet solid enough to meet the hurdle for depository licensing.

2.4.4 Cost of Risk or Loan Losses

Risk of loan or defaulting late was found to affect the level of interest rate. The characteristic of individual's borrower's matter to almost all lending institutions thus they make a standard provision for loan losses at the time of disbursement. Study by Wright

and Alamgir (2004) found it to be 2% of disbursements which goes into the loan loss reserve and at regular intervals the actual loan losses, and whatever proportion of poor performing loans are judged to be irrecoverable, are written off against this reserve. He argues that a well managed institution which carefully selects and then closely monitors repayments by its customers will have to write off only a small proportion of its loans say 1-2%. One which is poorly managed and/or lending to customers who either do not have the resources to repay their loans, or who refuse to do so, possibly for political reasons, will suffer much higher loan losses, say 10-30% pa.

Loan losses due to borrower default have relatively little effect on Microfinance Institution interest rates, for the simple reason that such losses are quite low in most Microfinance Institutions. As a point of reference, the general rule of thumb in microcredit is that annual loan losses of more than about 5 percent tend to become unsustainable. Above that level, loan collection must be improved quickly and substantially or it will spin out of control. Microfinance Institutions usually have delinquency and default rates well below those of commercial banks in their countries. (Interestingly, emerging evidence also suggests that Microfinance Institutions are more stable than banks when it comes to the effect of general economic stress on their loan collection Gonzalez (2007) but there seems to be little room for an improvement big enough to have a substantial effect on the interest rates clients have to pay. The study argues that loan loss rates can go too low and an Microfinance Institution that has no loan losses at all is probably being too risk-averse in its selection of borrowers, which hurts not only the expansion of poor people's access to finance but also the Microfinance Institution's own profitability. If there is any widespread abuse in microcredit interest rates today, it certainly cannot be traced back to excessive loan loss expense. Microfinance Institution interest rates are not being inflated by unreasonable loan losses. In fact, default rates are very low.

Campion et al, (2010) classified drivers of microfinance interest rates into two. one within the control of microfinance providers like, whether they focus on women, rural clients, or the extreme poor, operational efficiency, portfolio quality, age, operational

self-sufficiency, profit margin, average loan size, the scale of the institution, and portfolio at risk. The second category is beyond control of Microfinance Institution like; inflation, the cost of funds, competition, and regulation and other forms of government intervention. Their study shows that many factors can have a direct or an indirect impact on Microfinance Institution interest rate. They concluded that improved operational efficiency is a key driver of lower rates which comes primarily from: competition, reinvestment of profits, learning by doing, pressure from donors and investors and the absence of interest rate caps. Their findings also indicated that Microfinance Institution that focus heavily on targeting women or the rural poor might have to charge slightly higher interest rates to cover their costs, cross-subsidize from higher-income market segments, or seek donor assistance to reach those markets.

Edwards and Khan (1985) developed an interest rate model for a semi-open economy where both domestic and foreign factors were considered to be vital in determining nominal interest rates. They argued that although the capital account of the balance of payments may not be completely open, if there is trade with the rest of the world, then the open economy factors are expected to indirectly influence domestic interest rates. For example, terms of trade shocks can produce changes in real income and prices that will affect domestic demand for credit and thus the equilibrium rate of interest. To Edwards and Khan, expected real interest rates deviate from the long-run equilibrium due to monetary disequilibrium where excess demand (supply) of real money balances yields a temporary higher (lower) real interest rate. As the money market goes back to equilibrium, the real rate of interest will equal the long-run rate so that conditions in the money market play no role in explaining the real rates of interest.

Ngugi and Kabubo (1998) study shows that positive real interest rates were not achieved until 1996 when inflation rate took a downward trend. But, prospects of keeping them positive are narrow with the upward trending inflation rate beginning in 1997. The spread between lending and deposit rates widened with liberalization, while the short-term rates increased at a faster rate compared with long term rates resulting in a negatively sloped yield curve. With a free market, the fundamentals are expected to contribute substantially

in explaining the variations in interest rates. However, the results indicate that the fundamentals played an insignificant role in explaining variations in interest rates. It is the monetary policy and fiscal policy activities that seem to have had significant impact on the levels of interest rates in the short run. However, in the long run the fundamentals play a major role as indicated by the significant error-correction term. Both internal and external factors interact together to determine interest rates. To conclude then, although lots of efforts have been put in the financial sector liberalization process, there are still some loose ends that need to be tightened if positive impacts are to be realized.

Angeloni and Prati (1993) expanded the domestic interest rate model to include the influence of foreign interest rates, expected rate of depreciation and the sterilization behaviour of the central bank. They examined the relationship between bank liquidity and money market interest rates for Italy using daily data from January 1991 to July 1992. Their results strongly supported the existence of liquidity effects on money market interest rates. Interest rates were found to be driven almost entirely by exchange factors either directly or through the liquidity effects of central bank intervention.

Tobin (1965) modified Fisher's conclusion by arguing that inflation reduces the demand for money balances, lowering the real rates of returns so that real interest rates are not a constant. To Fisher, the influence of change in the purchasing power of money on nominal interest rates depends on whether or not the change is foreseen. If it is not clearly foreseen, a change in purchasing power of money will at first affect the money interest rate. To the extent that changes in the purchasing power of money are foreseen, then theoretically it is possible to make allowance for the expected change in the unit value. To offset a foreseen appreciation, it is necessary that the rate of interest be correspondingly lower, while to offset unforeseen depreciation the rate of interest should be correspondingly higher. However, because of ignorance and indifference, depreciation and appreciation are never fully foreknown and therefore they are partially provided in interest rate. To Fisher, then, the change in value of money would not be fully reflected in nominal interest rate due to lack of foresight. From the Keynesian frame work, changes in monetary expansion induce changes in the nominal rate of interest through the portfolio

allocation behavior of asset holders. The analysis concludes an inverse relationship between money and nominal interest rates, so that monetary expansion leads to lower interest rates.

Porteous (2006) analyzed microcredit competition and its effects in Bolivia, Uganda, and Bangladesh. At the time of his study interest rates had not yet declined much in Uganda, but Porteous judged that the microcredit industry was still in a consolidation phase there and thus that classical competition theory would not yet predict price competition. Markets in Bolivia and Bangladesh were more highly saturated. Interest rates were found to have declined steeply in Bolivia, but considerably less in Bangladesh. Porteous reported that the rate reductions that had occurred there resulted more from political pressure than from competition.

Commercialization of microfinance have been sometimes taken it as an article of faith that markets will eventually approach saturation, at which point competition will put downward pressure on interest rates, forcing Microfinance Institution to lower their rates and become more efficient. But it is not guaranteed that such effects will always occur. Study by Bertrand et al. (2005) and Wright and Alamgir (2004) does not support this generally acceptance as they found that lenders might compete for customers by increasing their advertising, or enhancing service quality, instead of lowering their interest rates. In their study Rosenberg et al, (2009) found that Interest rates appear to have dropped in the markets where microcredit has already become competitive, except for Bangladesh. But it is still too early to make any robust prediction about how universal the lower-interest-rates through- competition scenario will be. They conclude that one cannot assume that competition will always lower interest rates.

When analyzing interest rates, the first aspect which comes to mind is whether they follow a behavioral pattern consistent with how much competition financial firms face. While the structure-conduct-performance theory suggests that greater competition among lending institutions should bring interest rates down, the informational problems that surround credit market transactions could weaken the former argument. In this regard, some authors predict the existence of a negative correlation between competition and

interest rates. Among them, Petersen and Rajan (1995) found that lending institutions who wield greater market power are those with enough resources to invest in relationship lending. Thus, as market power increases, the likelihood that small firms will be granted loans is greater and therefore interest rates should decline. With a different argument, Marquez (2002) and McIntosh and Wydick (2005) arrive to the same conclusion: as competition among financial institutions increase, default risks may follow a similar path and interest rates reduces.

Bolivia has historically had a reputation for sound microfinance regulation, but recently it passed a law allowing nonprofit Microfinance Institution to take intermediate deposits with extremely low capital reserve requirements. Such a policy risks the reputation of the country's entire microfinance industry should one of Microfinance Institution fail as a consequence (Campion et al, 2010). Anecdotes from microfinance managers in Ecuador suggest that the interest rate caps imposed by that country's government are keeping Microfinance Institution from serving the poor, contrary to its stated intentions. The larger average size of Microfinance Institution loans in Ecuador supports the managers' claim as the cost of administering them is too high.

Boot and Thakor (2000) claim that a relationship orientation helps to partially protect the financial institution from competition, Thereby, higher competition may induce financial firms to reallocate resources towards more relationship lending and therefore smaller firms may not face a reduction in the lending interest rates. Thus in the theoretical literature there are conflicting hypotheses regarding the effects that an increased competition on credit markets for small firms have on interest rates. Therefore, it is not clear-cut how is the interaction between entry, competition and interest rates on credit markets. Whether the correlation between market structure and interest rate is positive, negative or null, it is a question to be solved empirically.

2.5 Empirical Studies

A number of studies have looked at the factors that determine the interest rate in Microfinance Institution.

Campion et al, (2010) carried out a study to examine microfinance interest rates and their determinants in order to understand how these rates might be lowered. The study used financial data from 29 institutions in seven countries over a period of four years and explored patterns of cost and efficiency in Microfinance Institutions. The study found that improved operational efficiency comes with increased competition and institutional age, and also their regression analysis shows that there are Microfinance Institutions who charges low interest rate and still make profit. The study also found that interest rate caps reduce the outreach of the Microfinance Institutions to the low income earners. Pressure for social responsibility from donors and investors, including governments, can play a major role in shaping the microfinance industry. The study does not recommend the use of interest caps by authority as it will limit the availability of financial services to poor and hence calls for competition which will lead to lower rates.

Cotler, (2010) carried out a study to find what drives the lending interest rates in the Micro finance sector. using data of Microfinance Institution from Asia, Africa and America of 1299 institution for the period 2000 to 2008 and using set of regression equation, he found that the lending interest rate is negatively correlated with the productivity of financial institutions and with the number of years these Institutions have been operating and positively correlated with the funding costs. The productivity of the micro financial institutions could be increased by either use of technology or by lowering the cost of funding.

Rosenberg et al, (2006) using data from 555 sustainable Microfinance Institution for the year 2003-2006 carried out study to find out if the poor were being exploited by high microcredit interest rates. The study found that Microfinance Institution interest rates were declining by 2.3 % points a year, which was much faster than bank rates. The study also found that Microfinance Institution rates are lower than consumer and credit cards, and lower than that of informer lenders, interest rates were not been inflated by unreasonable loan losses as default rates were very low about 1.9% .

Lafourcade et al, (2005) using data from 300 Microfinance Institutions in sub Saharan Africa find out the performance of Microfinance Institutions in Africa found out that more than 70% of the Microfinance Institutions they offer saving as a core financial services for clients and use it as an important source of funds for lending. the study found that operating and financial expenses are high and on average revenue remain lower of 2.6 % measured by return on assets, despite this the Microfinance Institutions in Africa is expanding at a higher rate as institution has increased as indicated by number of borrowers and savers. The study further found that Africa Microfinance Institutions has the highest portfolio at risk over 30 days of only 4%. The study revealed that efficiency in terms of cost per borrower is lowest for African Microfinance Institutions. The study concludes that, it would be of value if technological innovations, product refinement and ongoing efforts to strengthen the capacity of African Microfinance Institutions are needed to reduce costs, increase outreach, and boost overall profitability.

2.6 Summary

A fair amount of research has sought to discover the extent of Microfinance institutions success in alleviating poverty and has ignored the determinants of interest rate. The research for determinants of interest rate is scarce and the available one shows mixed results regarding the effects on interest rate. What affects in one region may not affect in another region or may affect in the opposite. The mixed results are due to the area the study was carried out and the methodology used in carrying out research. No conclusive results that can be confirmed to be universal or applicable to all countries. Microfinance Institutions operate under different regulations and environment. What is important is for a particular region to know its determinants and address them.

The main aim of Microfinance Institution is an advantage by all means from its intended purpose, but the implementation may be questionable if not clearly understood by all players. The study therefore aims at seeking what are the factors that affect the interest rate, to what extent do they affect and what could be the remedy?

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter outlines the methodology that was used in gathering the data and reporting the results. It aims at explaining the methods and tools used in data collection and analysis. The data was tested for reliability and validity to the subject under.

3.2 Research Design

Research used a survey design. Mugenda and Mugenda (1999) stated that the descriptive survey is a method that will collect data from the population and help the research to get the process of collecting data in order to answer question regarding the current status of the subjects in the study. Descriptive research determines and reports the way things are in survey as an attempt to collect data from members of a population in order to determine the current status of that population with respect to one or more variables. Thus descriptive survey is an appropriate as it seeks to ascertain the state performance of Microfinance Institution and the suitability of the different measures as per the outcome of research.

3.3 Population and Sampling

The target population of the study comprised of all Microfinance Institution registered in Kenya and subscribe to Association of Microfinance Institutions of Kenya (AMFIK). As at December 2011 there were 52 Microfinance Institutions (see appendix ii). Due to the small size of the population, the researcher conducted a census study of all the elements of the population.

The period of study was between January 2000 and December 2010

3.4 Data Collection

The study used both qualitative and quantitative methods of data collection. Primary data was collected by way of self administered drop and pick questionnaires which were

distributed to credit managers and branch managers for response. The questionnaire had both open and close ended questions. The close ended questions provided most structured responses to facilitate tangible recommendations. The open ended questions provide additional information that may not have been captured in the close ended questions. (Appendix i) Secondary data sources was employed through the use of previous documents such as the Financial Statements, annual reports and information available in the Microfinance Information Exchange (Mix) to supplement the data received from questionnaires.

3.5 Data Analysis

Completed questionnaire was edited for completeness and consistency. The data was then coded and checked for any errors and omissions Kothari (1990) Descriptive statistics in particular means and standard deviation will be used to interpret responses to the questionnaire.

Qualitative data analysis was used to make general statements on how categories or themes are related. The qualitative analysis was done using content analysis which is a systematic qualitative description of the composition of the objects or materials of the study. It involves observation and detailed description of objects, items or things that comprise the sample.

Quantitative data will be analyzed using linear regression.

Descriptive statistics was also used to summarize data such as percentages, frequencies and tables to present the data collected for ease of understanding and analysis.

The data was analyzed using procedures within statistical package for social studies (SPSS).

The data collected was analyzed using multiple regression analysis. The Ordinary Least Square (OLS) method of regression was used in estimating the relationship between interest rate and the explanatory variables.

3.6 Data reliability and validity

Reliability refers to the consistency of measurement and is frequently assessed using test – retest reliability method. Reliability is increased using uniform testing procedures. Reliability of the research instrument was enhanced through a pilot study to be done on five employees of microfinance institution. The pilot study was not included in the actual study. The study allow for pre-testing of the research instrument, enabling familiarity with research and its administration and identifying items that require modification.

Validity is the degree to which the sample of the test items represents the content the test is designed to measure. Content validity which was employed in the study is a measure of degree to which data collected using a particular instrument represents a specific domain or content of a particular concept. The usual procedure in assessing the content validity of a measure is to use a professional or expert in a particular field. To establish the validity of the research instrument opinions were sought from the supervisor and other lecturers to facilitate the necessary revision and modification of the research instrument thereby enhancing validity.

3.7 Model Specification

The relationship between interest rate and its determinants as;

Rate Charged = f (Profit + Cost of fund+ Administration expense+ loan loss)

$$(Y_{it}) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + E$$

Where:

Y=Rate of interest rate charged to client by Microfinance institution(which is determined by X1,X2,X3,X4)

i=number of Microfinance institution

t= time period years

Profit (X1) = profit for the Microfinance institution for the years expressed as a percentage of loan issued.(a determinant of interest rate)

Cost of fund (X2) =interest paid to source the fund expressed against the amount sourced.

Expenses (X3) = the administration expense expressed against the loan issued.

Loan loss (X4) = the bad debts expressed against loan issued.

β_0 represent the constant, X represents the factors that determine the interest rates that Microfinance Institution charges and β represent the coefficients which is the strength of the effect each factor has on interest rate determination which is the basis of this study.

E= Error term that is assumed to have zero mean and constant variance

CHAPTER FOUR

DATA ANALYSIS RESULTS AND DISCUSSIONS

4.1 Introduction

In this chapter data pertaining to the determinants of interest rates in the Microfinance Institutions in Kenya is analyzed and presented then discussions from the findings made.

A total of credit managers from the 52 Microfinance Institutions were targeted. Every respondent was given a questionnaire out of which 68 respondents responded by completing and returning the questionnaire. This gave a response rate of 65%. The collected data were edited and coded. Data analysis of the responses was done using frequency, percentages, mean score and standard deviation. Inferential statistics such as regression analysis was used to test the relationship between the interest rate and the independent variables.

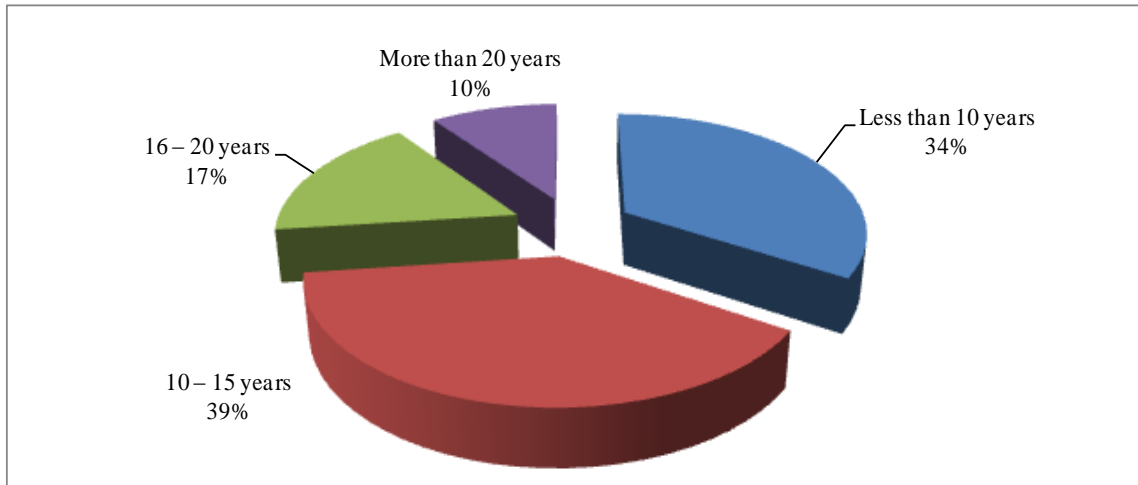
4.2 Respondents General Information

The study sought to determine the gender, age, years of working in the institution and how long the institution has been in operation. The results of the study are presented in the sections below:

4.2.1 Number of Years in Operations

Respondents were asked to indicate the number of years their institutions have been in operations. The results in Figure 4.4 show that most of the respondents (39%) indicated that their institutions have been in operation for between 10 and 15 years while 34% of the institutions have been in operations for less than 10 years. Only 10% have been in operations for more than 20 years.

Figure 4.1: Number of Years in Operations



Source: Research Data (2012)

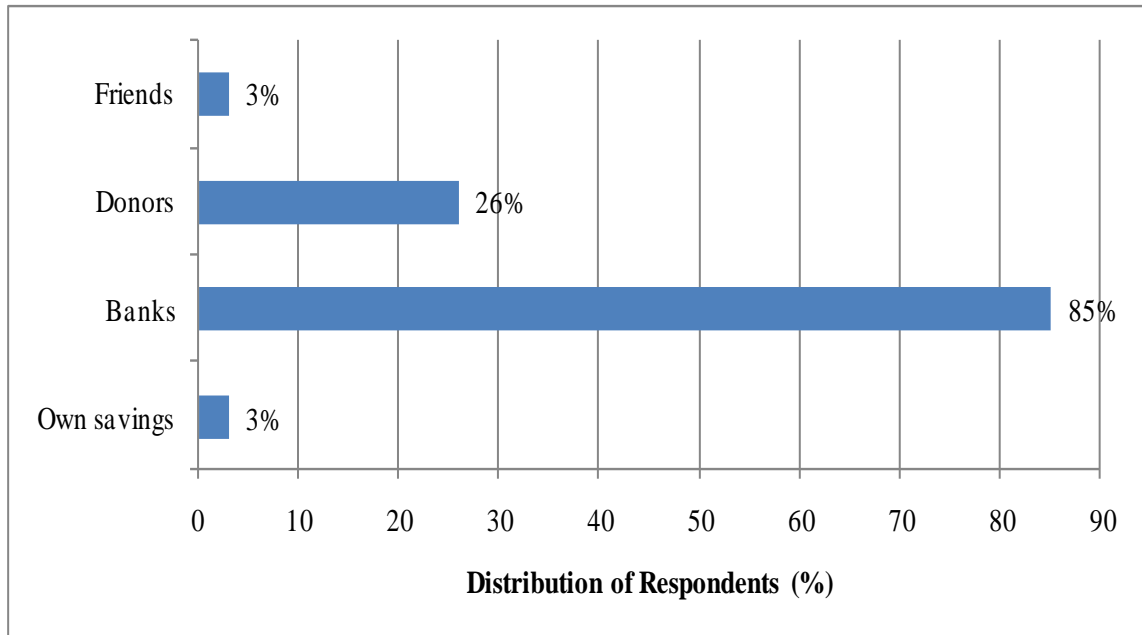
4.3 Determinants of Interest Rates

In this section the study sought to determine the determinants of interest rates charged by microfinance institutions in Kenya. The findings are presented in the subsequent sections.

4.3.1 Source of Capital

Respondents were asked to indicate their sources of capital. The findings of the study in Figure 4.5 show that majority of the respondents (85%) indicated that they borrowed money from the banks. The results show that 26% of the respondents indicated that they received funds from the donors.

Figure 4.2: Source of Capital

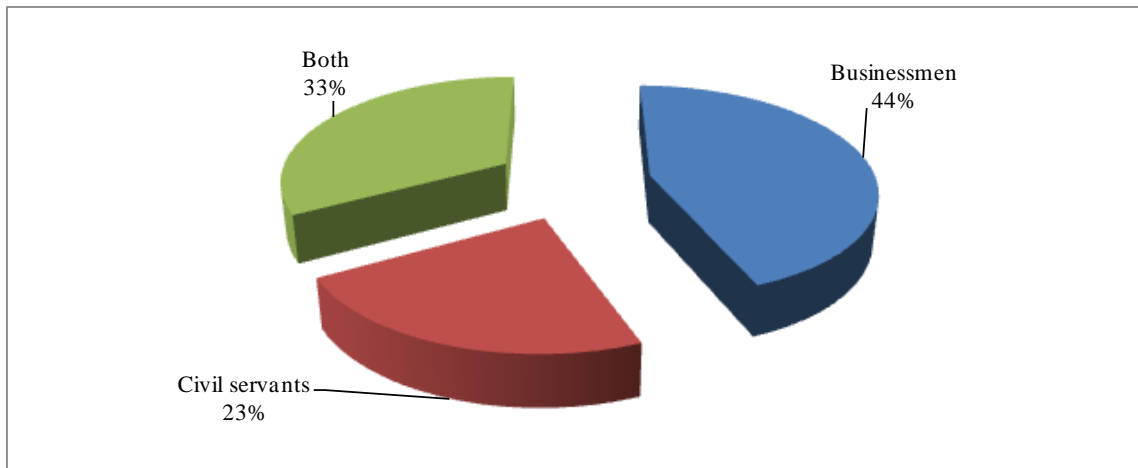


Source: Research Data (2012)

4.3.2 Clients

The respondents were asked to indicate their main clients. The findings of the study revealed that 44% of the respondents indicated that their main clients are businessmen while civil servants constituted 23%. The results show that 33% of the respondents indicated that their main clients were both businessmen and civil servants.

Figure 4.3: Mail Clients



Source: Research Data (2012)

4.3.3 Determinants of Interest Rates

Respondents were asked to indicate the extent to which the factors influenced the interest rates charged on the loans. The results of the study presented in Table 4.1 show that majority of the respondents (79%, mean score 3.94) indicated that the riskiness of the borrower determined the interest charged to a great extent. The results also show that 56% of the respondents (mean score 3.53) indicated that the type of security given by the borrower determined the interest rate charged to a great extent. The results of the study show that according to 82% of the respondents (mean score 4.00), the cost of the fund determined the interest rate charged on loan to a great extent. The results show that 76% of the respondents (mean score 3.88) indicated that the cost of operation greatly determined the interest charged. The results revealed that 65% of the respondents indicated that profit margins influenced the interest rate to a great extent. The cost of operations according to 56% of the respondents influenced to a great extent the interest rates charged on loans by the microfinance institutions. The study findings agree with Goonzale (2009) who noted that the MFIs have to pay money they borrowed which contributes substantially to the interest they charge borrowers. On the effect of operational cost on interest rate, the results agree with Rosenberg, Gonzalez, and Narain (2010) who found that operating expenses make up close to 50 percent of nominal interest yields. The findings also agree with Rosenberg et al (2009) study found that

Administrative costs are the largest single contributor to interest rates. Sharma and Nepal (1997) argued that MFIs attains sustainability when its operating income from loans is sufficient to cover all the operating costs. The study established that profits influenced the profitability which agree with Kamau (2008) who found that interest rate was rated highest as the factor that determines the profitability of Microfinance Institution.

4.4 Regression Analysis

A linear regression was done to determine the relationship between interest rate charged and all the independent variables i.e. cost of funds, cost of operations, profitability and loan loss.

4.4.1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.398(a)	.198	.057	2.316

a. Predictors: (Constant), Loan loss, Administrative expenses, Cost of fund, Profit

The R Squared show that the independence variables include loan loss, administrative expenses, cost of fund and profit explain approximately 19.8 percent of the variance in Interest rates. The results suggest that at least a few of the four variables in this model are significant predictors of the rate of interest charged by the MFIs (at the 95 percent confidence level).

Table 4.3: ANOVA

Model 1		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.388	4	.597	.345	.000(a)
	Residual	77.932	45	1.732		
	Total	80.320	49			

a Predictors: Predictors: (Constant), Loan loss, Administrative expenses, Cost of fund, Profit

b Dependent Variable: Interest rate

The regression results show that the significance value (*p-value*) of F statistics is less than 0.05. This implies that the test is statistically significant

Table 4.4: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	22.542	10.881		2.072	.031
Profit	.078	.098	.180	.802	.002
Cost of fund	.759	.526	.312	1.444	.014
Administrative expenses	.040	.113	.074	.351	.029
Loan loss	.378	.607	.137	.624	.040

a. Dependent Variable: Interest rate

Using the values of the coefficients (β) from the regression coefficient table 4.12, the established regression equation takes the form of:

$$\text{Interest rates} = 22.542 + 0.078X_1 + 0.759X_2 + 0.040X_3 + 0.378X_4$$

The study shows that all the independent variables have positive relationship with the dependent variable (interest rate). The results show that a unit increase in profits will result into a 0.078 change in interest rate. The findings further show that a unit increase in cost of funds will result into a 0.759 change in interest rate while a change in administrative expense will cause a change of 0.040 change in the interest rate. The result of the study show that unit change in loan loss will result into a 0.378 change in interest. The results show that all the variables are statistically significant as the p-values are less than 0.05 ($p < 0.05$).

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

From the primary data collected and analyzed, the following summary of findings, conclusions, recommendations were made based on the objectives of the study which was to establish the determinants of interest rates in the Microfinance Institutions in Kenya.

5.2 Summary of the Findings

The study established that majority of the institutions (85%) borrowed money from the banks. However, 26% got funding from donors funds from the donors. The study established that according to 44% of the respondents, the main clients are businessmen. Civil servants were also considered main clients by 23% of the respondents. The results show that 33% of the respondents indicated that their main clients were both businessmen and civil servants. The results of the study show that according to majority of the respondents (79%, mean score 3.94), the riskiness of the borrower determined the interest charged to a great extent. The results also show that 56% of the respondents (mean score 3.53) indicated that the type of security given by the borrower determined the interest rate charged to a great extent. The results of the study show that according to 82% of the respondents (mean score 4.00), the cost of the fund determined the interest rate charged on loan to a great extent. The results show that 76% of the respondents (mean score 3.88) indicated that the cost of operation greatly determined the interest charged. The results revealed that 65% of the respondents indicated that profit margins influenced the interest rate to a great extent. The cost of operations according to 56% of the respondents influenced to a great extent the interest rates charged on loans by the microfinance institutions. The study established that there existed a positive relationship between the dependent and independent variables as all the variables had positive better coefficient.

5.3 Conclusion

The study established that according to respondents administrative cost, profitability, cost of funds and loan loss determined the interest rates charged by the microfinance institutions in Kenya. The study also established that there was a positive relationship between the variables. However, the analysis showed that the independent variables were not strong predictors of interest rates. This means that there are other factors which may also be determinants of interest rates.

5.4 Recommendation

The study recommends that since administration cost is a key determinant of interest rate, the Microfinance Institutions should embrace use of technology in its operation which will reduce the expenses.

The study also recommends that, the Microfinance Institutions should be seeking funds from cheap sources like donors, members' savings as opposed to commercial loans.

The study further recommends that there is need for proper regulations to control the operation of microfinance institution so that they can operate well within a given framework.

The study recommends that government may cheapen by providing funds in form of free interest loan to Microfinance Institutions which will reduce the interest rates charged to low income earners.

5.5 Suggestions for Future Research

The study recommends that further research on the same be done on other financial institutions in Kenya. This is because different financial institutions have unique characteristics, are regulated by different Acts and have diverse contextual realities that might influence their responses and consequently the approach to different response strategies. This would bring out comprehensive empirical findings on the response of financial institutions to regulation and factors that influence it.

5.6 Limitations of the Study

The study used secondary data which was collected from the Microfinance Institutions financial reports and statements. The study was also limited to the degree of precision of the data obtained from the secondary source. While the data was verifiable since it came from Microfinance Information Exchange and others were audited by registered Auditing firms, it nonetheless could still be prone to these shortcomings.

Some of the microfinance institutions do not forward their statements to Microfinance Information Exchange and some are privately owned getting their financial statements was not easy as some were hard to convince it's for academic purposes.

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APPENDICES

Appendix i: Letter of Introduction

August, 2012

Dear Respondent,

REQUEST FOR RESEARCH DATA

I am a Master of Business Administration (MBA) student at University of Nairobi. I am required to submit as part of my course work assessment, a research project report on “establishment of the determinants of interest rates in the Microfinance Institutions in Kenya”. I am kindly requesting you to assist me in this study by filling the attached questionnaire to the best of your ability as it applies to your organization.

Please be assured that the information you provide will be used solely for academic purposes and all responses will remain confidential.

Thank you very much for your time.

Joseph Mucugu Waruiru,

Student Researcher.

Appendix ii: Questionnaire

SECTION 1: General Information

Name of respondent (optional)

Gender Male () Female ()

Age

<i>Age (Years)</i>	<i>Tick one</i>
25 and below	
26-35	
36-45	
46-55	
Over 55	

How long have you been working in the institution?

<i>Years</i>	<i>Tick one</i>
0-2	
3-5	
6-8	
More than 8	

How many years has the institution been in operation?

<i>Years</i>	<i>Tick one</i>
Less than 10 years	

10 – 15 years	
16 – 20 years	
More than 20 years	

SECTION B: DETERMINANTS OF INTEREST RATES

Where do you get your capital? Own savings [] Bank []
 Donors [] Friends []

Who are your main clients? Business men [] Civil servants []

Please state the extent, to which the following are determinants of interest rates you charge on the loans on a 5 point scale, where:

1 = Not at all

2 = little extent

3 = Moderate extent

4 = Great extent

5 = Very great extent

		1	2	3	4	5
1	The riskiness of the person borrowing					
2	The amount borrowed					
3	The duration before repayment					
4	The type of security given					
5	The cost of the fund					

6	The operational cost					
7	The profit margin					
8	Cost of operations					
9	The history of the borrower					

Appendix iii List of Mfis in Kenya

1. AAR Credit Service
2. Adok Timo
3. Adra Kenya
4. Agakhan First Microfinance Agency
5. Agakhan Foundation Micro Credit Program
6. Arep
7. Bimas
8. Blue Limited
9. Canyon Rural Credit Limited
10. Care International
11. Christian Health Association of Kenya
12. Cross bridge Credit
13. Daraja Trust
14. Ecumenical Church Loan Fund (Eclof)
15. Elite Micro Finance
16. Faulu Kenya
17. Fusion Capital Ltd
18. Gheto Child Micro Finance
19. Greenland Fedha Limited
20. Hope Africa
21. Indo Africa Finance

22. Jaru Micro Credit
23. Jitegemee Credit Scheme
24. Jitegemee Trust
25. Juhudi Kilimo Company Limited
26. Kadet
27. Kenya Entrepreneur Empowerment Foundation (KEEF)
28. Kenya Small Traders And Enterprise Society
29. Kenya Women Finance Trust
30. K-Rep Development Agency
31. Makao Mashinani
32. Meilenia Multipurpose Credit Society
33. Mic Microcredit Limited
34. Micro Kenya Limited
35. Modyn credit Limited
36. Oiko Credit
37. Opportunity Kenya
38. Pamoja Women Development Programme
39. Pride Africa
40. Remu Dtm
41. Rural Agency For Development (Rafode)
42. Sisdo

43. Small And Micro Enterprise Program (Smep)

44. Sunlik Microfinance Partners

45. Taifa Option Microfinance

46. U & I Microfinance Limited

47. Uwezo Dtm

48. Wedco

49. Weec

50. Window Development Fund

51. Yehu Enterprise Support Services

52. Youth Initiative Kenya(YIKE)

Appendix iii

The Mfis who responded

NO.	NAME OF MFI	YEAR 2010	
1	AAR Credit Service		
2	Adok Timo		
3	Agakhan First Microfinance Agency		
4	Bimas		
5	Canyon Rural Credit Limited		
6	Ecumenical Church Loan Fund (Eclof)		

7	Faulu Kenya		
8	Fusion Capital Ltd		
9	Greenland Fedha Limited		
10	Indo Africa Finance		
11	Jitegemee Credit Scheme		
12	Jitegemee Trust		
13	Juhudi Kilimo Company Limited		
14	Kadet		
15	Kenya Entrepreneur Empowerment Foundation (KEEF)		
16	Kenya Women Finance Trust		
17	K-Rep Development Agency		
18	Makao Mashinani		
19	Mic Microcredit Limited		
20	Molyn credit Limited		
21	Micro Kenya Limited		
22	Oiko Credit		
23	Opportunity Kenya		
24	Pamoja Women Development Programme		
25	Rural Agency For Development (Rafode)		
26	Sisdo		

27	Small and micro enterprise program (Smep)		
28	Sunlik Microfinance Partners		
29	Taifa Option Microfinance		
30	Remu Dtm		
31	U & I Microfinance Limited		
32	Uwezo Dtm		
33	Yehu Enterprise Support Services		
34	Youth Initiative Kenya(YIKE)		