FACTORS INFLUENCING NON-PERFORMING LOANS OF MICROFINANCE INSTITUTIONS IN KENYA

BY

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DECLARATION

This project is my original work and has not been presented for an award in any other university.

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DEDICATION

This research work is dedicated to my entitre family, for their encouragement and support during this course;to my wife and kids who kept on inspiring me and giving me moral support;and my parents whose upringing and guidance made me whom I am today.

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ABSTRACT

The success of MFIs largely depend on the effectiveness of their credit management systems because these institutions generate most of their income from interest earned on loans extended to small and medium entrepreneurs. The Central Bank Annual Supervision Report, 2010 indicated high incidence of credit risk reflected in the rising levels of non- performing loans by the MFI's in the last 10 years, a situation that has adversely impacted on their profitability. This trend not only threatens the viability and sustainability of the MFI's but also hinders the achievement of the goals for which they were intended which are to provide credit to the rural unbanked population and bridge the financing gap in the mainstream financial sector. This study sought to find out the factors that influence non-performing loans of microfinance institutions in Kenya. This research study adopted a descriptive survey approach on the factors that determine non-performing loans of microfinance institutions in Kenya. This study targeted all the 52 MFI's in Kenya. This study used primary and secondary data. Primary data was collected by way of structured and semi structured questionnaires with both open and closed ended questions. This was done on the credit managers/officers. The data was analyzed by use of summary statistics, including percentages, means and standard deviation to measure interrelationships between the variables. Graphs were also used to display the information to improve presentation of the analyzed results for ease of interpretation. The SPSS version 17 and MS excel was also used to analyze the collected data. The study concluded that Institutional characteristics contribute most to the non-performing loans of microfinance institutions in Kenya followed by Macroeconomic variables and finally Customer characteristics. At 5% level of significance and 95% level of confidence, institutional characteristics (β=0.852, t=6.569, p=0.00), customer characteristics (β=0.578, t=4.117, p=0.00), and macroeconomic variables (β=0.654, t=3.968, p=0.00) were all found to be significant in influencing non-performing loans of microfinance institutions in Kenya. Microfinance Institutions in Kenya should put in place a vibrant credit process that would encompass issues of proper customer selection, robust credit analysis, authentic sanctioning process, proactive monitoring and follow up and clear recovery strategies for sick loans.

CHAPTER ONE

INTRODUCTION

1.1 Background

Extension of credit facilities is one of the major activities of all Microfinance institutions including Savings and Loans Companies, Rural banks, Financial Non Governmental Organization (FNGOs) and credit Unions. Loans are the dominant asset and represent 50-75 percent of the total amount at most Microfinance institutions, generate the largest share of operating income and represent the Microfinance institutions greater risk exposure (Mac Donald and Koch, 2006). Moreover, its contribution to the growth of any country is huge in that they are the main intermediaries between depositors and those in need of fund for their viable projects (creditors) thereby ensure that the money available in economy is always put to good use. Healthy loan portfolios are therefore vital for lending institutions in view of their impact on Liquidity, lending capacity, earnings and profitability of the MFIs.

A loan refers to money lent out at an interest. In other words, a loan refers to something lent for the borrowers temporary use on a condition that is equivalent to what is returned. Successful lending is about getting the balance right between financial return the lender expects and the risk that the borrower may not be repaid as anticipated. To some extent lending money is said to be a matter of common sense but in addition to succeed as a lending institution one needs to adopt a formalized approach to lending so that they don’t miss anything.

Every lending institution finds itself from time to time with loans in portfolio for which the risk of loss is greater than the anticipated when the loan was made or which the risk is greater than a lender would ordinarily or willingly assume. For instance according to the Central Bank of Kenya Supervision Report of 2002, a total of 1,098,437,000 were classified as losses in Stanbic and were attributed to the failure of the borrowers to pay back their loans advances (Islam, 2009). Because of this they were declared as non- performing loans. With such example one is propelled to make a careful study of the factors determining non- performing loans of microfinance institutions in Kenya.

1.1.1 Non-Performing Loans

According to the International Monetary Fund (IMF, 2009), a non- performing loan is any loan in which interest and principal payments are more than 90 days overdue; or more than 90 days worth of interest has been refinanced. On the other hand the Basel Committee (2001) puts non performing loans as loans left unpaid for a period of ninety days.

An efficient and well-functioning financial sector is essential for the development of any economy, and the achievement of high and sustainable growth. One of the indicators of financial sectors health is loan qualities. Most unsound financial sectors show high level of non-performing loans within a country. The causes for loan default vary in different countries and have a multidimensional aspect both, in developing and developed nations. Theoretically there are so many reasons as to why loans fail to perform. Some of these include depressed economic conditions, high real interest rate, inflation, lenient terms of credit, credit orientation, high credit growth and risk appetite, and poor monitoring among others. Bercoff et al. (2002) categorizes causes of nonperforming loans to institution specific and Macroeconomic conditions.

Lending is a risky enterprise because repayment of loans can seldom be fully guaranteed. According to Hoff and Stiglitz (1990), implicit contracts between lenders (financial institutions relationships) and borrowers, can motivate high effort and timely repayments. Besley and Coate (1995) also confirm that long-term relationships are a powerful disciplinary device. They posit that in credit markets dominated by short-term interactions, borrowers may only be motivated to repay if they know that, due to credit reporting, their current behaviour is observable by other lenders. The work of Fehr & Zehnder, (2005) indicates that the impact of credit reporting on repayment behaviour and credit market performance is highly dependent on the potential for relationship banking. Therefore, when bilateral relationships are not feasible, the credit market essentially collapses in the absence of acceptable borrower behaviour. As repayments are not third-party enforceable, many borrowers default and lenders cannot profitably offer credit contracts (Brown & Harvey, 2006). The availability of information on past repayment behaviour allows lenders to condition their offers on the borrowers' reputation. As borrowers with a good track record receive better credit offers, all borrowers have a strong incentive to sustain their reputation by repaying their debt (Orebiyi, 2002). Therefore, by repeatedly interacting with the same borrower, lenders establish long-term relationships that enable them to condition their credit terms on the past repayments of their borrower. As only a good reputation leads to attractive credit offers from the incumbent lender, borrowers have strong incentives to repay.

1.1.2 Factors accounting for Non-Performing Loans

Some research findings and publications indicate that non performing loans are caused by poor management Berger and De Young (1997) .They argue that managers in most banks or MFIs with the problem of nonperforming loans do not practice adequate loan underwriting, monitoring and control.

Credit culture is another factor which has been identified by some research findings (e how) as a cause of NPLs. Sometimes borrowers decide to apply for loan without thinking enough about the future and what else they need to buy with their income. When this occurs, a credit culture can develop where borrowers take out large loans not because it is financially wise to do so but because they see others do it. This can result in defaulted loans.

A World Bank policy research working paper on NPLs in Sub-Saharan Africa revealed that NPLs are caused by adverse economic shocks coupled with high cost of capital and low interest margins (Fofack, 2005). Goldstein and Turner (1996) stated " the accumulation of NPLs is generally attributable to a number of factors, including economic downturn, macroeconomic volatility, terms of trade deterioration, high interest rate, excessive reliance on overly high-priced inter-bank borrowings, insider borrowing and moral hazard.

Another literature (e how) identified sudden market changes as yet another factor which account for NPLs. Any sudden market change can change the loan market by affecting how much money people can take as loans and make payments. If the market suddenly changes and prices of items increase due to shortage or increased demand, borrowers will have less money to pay off their loans which can lead to loan default.

Rouse (1989) indicated in his work that problem loan can emanate from overdrawn account where there is no overdraft limit or overdraft taken on account which has not been actively operated for some time and overdraft taken in excess of the reasonable operational limit. He also identified lack of good skills and judgment on the part of lenders as a possible cause of NPLs.

Bloem and Gorter (2001) asserted that NPLs may be caused by less predictable incidents such as the cost of petroleum products, prices of key exports, foreign exchange rates, or interest rate change abruptly. They also indicated that poor management, poor supervision, overoptimistic assessments of creditworthiness during economic booms and moral hazards resulting from generous government guarantees could also lead to loan default.

1.1.3 Loan Processing in MFIs

There is an element of risk in any loan granted because the expected repayment may not occur. Lending involves a lender providing a loan in return for a promise of interest and principal repayment in future (Kay Associate Ltd), 2005). Because of this risk of default in loan repayment, lenders needs to project into the future and make sound judgment that will ensure that repayment is effected at the agreed date. Available literature places so much importance on the lender’s role in ensuring good decisions relating to the granting of loans in order to minimize credit risk. The lender must always aim at assessing the extent of the risk associated with the lending and try to reduce factors that can undermine repayment.

The lender should therefore assemble all the relevant information that will assist him/her in arriving at a sound credit decision. In view of the possibility of nonpayment which leads to NPLs, MFIs have adopted a standard loan request procedures and requirements usually contained in credit policy manual to guide loan officers and customers. Some of the factors that the MFIs consider before granting loans include the following which are often referred to as the canons of good lending: The character of the prospective borrower; Amount being requested by the customer; Margin(Interest margin, commissions and relevant fees.); The purpose of the loan; Ability of the borrower to manage business successfully; Repayment(source of repayment must be credible); Insurance(security provided by the customer) and Technical and financial viability of the business.

1.1.4 Micro-Finance Institutions in Kenya

A micro finance is an emerging market particularly amongst the urban and peri-urban populations in Kenya. The growth of the sector is supported mainly by private micro finance institutions and government of Kenya initiatives as motivated by economic pillar enablers of the Kenya Vision 2030. Technically, micro finance is a business in which the person conducting the business holds himself out as accepting deposits on a day to day basis and any other activity of the business which is financed, wholly or to a material extent, by lending or extending credit for the account and at the risk of the person accepting the deposit, including the provision of short term loans to small or micro enterprises or low income households and characterized by the use of collateral substitutes (GoK, 2006).

According to Waithera (2008), Micro Finance is way of supplying loans and small credits to finance small projects to help the poor have an income through forming their own small scale business to earn their daily bread and better their living. Micro finance is the provision of credit to the poor and low-income earners to enable engage them in productive activities. Kiiru (2006) asserts that the Kenyan micro-finance industry is relatively a new phenomenon having begun with a few agencies about 20 years ago. Since then there has been a gradual shift in interest and resources allocation towards assisting the informal sector in a variety of ways. In the 1970's the main organization providing credit to the informal sector were church based organizations. The programs point to innovations like group lending contracts as the keys to their success. Group lending effectively make a borrowers neighbors co-signers to loans mitigating problems created by information asymmetries between borrower and lender. Neighbours will then have incentives to monitor each other and to exclude risky borrowers from participation prompting repayments even in the absence of collateral requirements (Modurch, 1999). Group lending mechanism allows a group of individuals often called solidarity to provide collateral or loan guarantee through a group repayment pledge. The repayments are made daily, weekly, monthly, or after four weeks.

Repayments for some loan products are made by one installment. A delayed installment is said to be delinquent and a repayment that has not been made is said to be in default. If one group member defaults the other group members makes up for the re-payment amount. Although there are good reasons to be excited about the micro finance promise of poverty alleviation, there are also good reasons for caution too. Poverty alleviation through provision of subsidized credit was embraced by many countries in the 1950's through the 1980's, but these experiences were nearly all disasters. Loan repayment rates often dropped well below 50 percent. The rapid proliferation of MFIs has drawn some criticism. Some observers fear that it has outpaced the capacity of developing world governments to implement sensible regulatory measures (Howard et al, 2006).

While this has contributed to the industry's flexibility and propelled its fast growth, it has also created a wild environment in which borrowers with limited financial experience may be exploited by incompetent or unscrupulous lenders (Howard et al, 2006). In 2005, for example, government regulators in Kenya closed Akiba micro finance on grounds that it had unlawfully taken customers deposits and reneged on payments (Mullei, 1999). In 2006, the Indian governments cracked down on two large MFIs following suicides of at least sixty of their customers who were under pressure to repay loans at prohibitively high interest rates (Fernado et al, 2006). Poverty alleviation through provision of subsidized credit was embraced by many countries in the 1950's through the 1980's, but these experiences were nearly all disasters. Loan repayment rates often dropped well below 50 percent (Morduch, 1999). Kenya rural enterprise programme suffered default in two of its schemes while Benin, Ghana, guinea and Tanzania have also suffered a bad portfolio due to non repayment of loan issued out.

There have been attempts in the past to study Micro financing and Micro lending but much focus has been on the impact of MFIs in poverty alleviation, especially in Kenya. Not much has been done to find out causes of loan default in MFIs institutions in Kenya, therefore this research addresses that gap.

1.2 Research Problem

The success of MFIs largely depend on the effectiveness of their credit management systems because these institutions generate most of their income from interest earned on loans extended to small and medium entrepreneurs. The Central Bank Annual Supervision Report, 2010 indicated high incidence of credit risk reflected in the rising levels of non- performing loans by the MFI's in the last 10 years, a situation that has adversely impacted on their profitability. This trend not only threatens the viability and sustainability of the MFI’s but also hinders the achievement of the goals for which they were intended which are to provide credit to the rural unbanked population and bridge the financing gap in the mainstream financial sector. Extension of credit facilities is one of the major activities of all Microfinance institutions including Savings and Loans Companies, Rural banks, Financial Non Governmental Organization (FNGOs) and credit Unions. This is usually evidenced by the large proportion that loans constitute in the overall operating assets of these lending institutions.

Most studies undertaken in the past few years have focused mainly on credit models used by MFI’s and their impact on profitability (Migiri, 2002). There is abundant evidence that the financial/banking crises in East Asia and Sub-Saharan African countries were preceded by high non-performing loans. For instance, in Indonesia where over 60 financial institutions collapsed during the financial crisis, nonperforming loans represented about 75% of total loan portfolios (Caprio and Klingebiel, 2002). The banking crisis which affected a large number of Sub-Saharan African countries in the 1990s was also accompanied by a rapid accumulation of nonperforming loans (Caprio and Klingebiel, 2002). Daumont, Gall and Leroux (2004) found the accumulation of nonperforming loans to be attributable to economic downturns and macroeconomic volatility, terms of trade deterioration, high interest rates, excessive reliance on overly high-priced interfinancial institutions borrowings, insider lending and moral hazard.

Locally, Kibera (2012) carried out a study on factors that influence loan default rate; a case of the micro finance firms in Nairobi, Kenya. Simba (2013) did a study on whether there exists a relationship between borrowing interest rates and the level of nonperforming loans in the Deposit Taking Microfinance Institutions in Kenya, the results showed that there was no significant relationship between borrowing interest rates and nonperforming loans in the Deposit Taking Microfinance Institutions Kenya. Absence of empirical studies on the relationship between borrowing and the level of non-performing loans and recognition of the critical role that MFI’s play in the economy are the principal motivation behind this study which sought to find out the factors that influence non-performing loans of microfinance institutions in Kenya. The study will therefore address the following research question; what is the effect of institutional characteristics on non-performing loans of microfinance institutions in Kenya? what is the effect of customer characteristics on non-performing loans of microfinance institutions in Kenya? what is the effect of macroeconomic variables on non-performing loans of microfinance institutions in Kenya?

1.3 Objective(s) of the Study

i. To assess the effect of institutional characteristics on non-performing loans of microfinance institutions in Kenya.
ii. To assess the effect of customer characteristics on non-performing loans of microfinance institutions in Kenya.
iii. To assess the effect of macroeconomic variables on non-performing loans of microfinance institutions in Kenya.

1.4 Value of the Study

On the side of MFIs in Kenya, the information generated shall be useful in as far as providing insights on how to improve on its lending methodologies as well as implementing workable strategies to control the problem of a growing non-performing loan portfolio in the institutions and thereby improve its financial performance and profitability.

Secondly, the research study would be of benefit to the Kenyan banking and non-banking financial sectors as a whole since the financial (Lending institutions) in the country operate within the same environment and deal with customers of similar characteristics.

The Public in general and MDI in particular shall find the results of the study valuable as means of adopting the best practices as pertains to the lending methodologies and thereby improve on their non-performance loans.

The study findings provide baseline information to policy makers and the Central Bank when making economic policy decisions such that they can come up with applicable prudential regulations.

Finally the research findings could serve as a source of reference for other related research works in the future.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Literature review covers relevant literature with the aim of gaining insight into non-performing loans within micro finance institutions. It covers: theoretical framework, conceptual frame work, and empirical studies which shed light on causes of loan default within micro finance institutions.

2.2 Theoretical review

2.2.1 Financial Intermediation Theory

Financial intermediation is a process which involves surplus units depositing funds with financial institutions who then lend to deficit units. Matthews and Thompson (2008) identify that financial intermediaries can be distinguished by four criteria: first their main categories of liabilities (deposits) are specified for a fixed sum which is not related to the performance of a portfolio.

Second the deposits are typically short-term and of a much shorter term than their assets. Third a high proportion of their liabilities are chequeable (can be withdrawn on demand).And fourth their liabilities and assets are largely not transferable. The most important contribution of intermediaries is a steady flow of funds from surplus to deficit units.

2.2.2 Information Asymmetry Theory

This strand of theory is based on the notion that the borrower is likely to have more information than the lender about the risks of the project for which they receive funds. This leads to the problems of moral hazard and adverse selection (Matthews and Thompson, 2008). These problems reduce the efficiency of the transfer of funds from surplus to deficit units. The banks overcome these problems in three respects: First by providing commitment to long-term relationships with customers, Secondly through information sharing and thirdly through delegated monitoring of borrowers. Under direct financing, it is necessary for a lender to collect information to try to redress the information asymmetry.

2.2.3 The Theory of Delegated Monitoring of Borrowers

This is one of the most influential in the literature on the existence of banks. Defined broadly, 'monitoring' of a borrower by a bank refers to information collection before and after a loan is granted, including screening of loan applications, examining the borrower's ongoing creditworthiness and ensuring that the borrower adheres to the terms of the contract. A bank often has privileged information in this process if it operates the client's current account and can observe the flows of income and expenditure. This is most relevant in the case of small and medium enterprises and is linked to banks' role in the payments system (Matthews and Thompson, 2008).

2.3 Factors Influencing Non-Performing Loans Of Microfinance Institutions

2.3.1 Knowledge of Borrowers

Knowledge on record keeping and business may help borrowers to manage their cash flows and make better business decisions, especially for borrowers who a restarting new businesses. Training and education level (Bhatt, 2002) are believed to be affecting the business performing ability of borrowers. However, Bhatt also points out that training for borrowers could prove to be costly for borrowers who need the loans quickly to capture the opportunities.

2.3.2 The Types of Loans

Different kinds of investment give different returns. Some farm produce may give better returns than other produce. Concentration of types of loan may affect the performance of MFIs. Investment in low earning or high-risk farm products and businesses may result in a lower repayment rate. Specifying the kind of investment for borrowers may be limiting the opportunity and result in higher risks. MFIs should be encouraged to lend to non-farm enterprises and non-farm households (Sacay and Randhawa 1995).

2.3.3 Policy and Objectives

Clear policy has to be communicated well among the staff and clients with proper signals. Without clear policy, communicated objectives may not be set clearly or not taken seriously. Unclear objectives on loan collection, for example, may result in low quality of loan portfolios. Without clear objectives of outreach, loan officers may not concentrate on serving the target group (Holt and Ribe, 1991).

2.3.4 Loan Staff

Loan officers in MFIs have to take care of many small loans and with more borrowers to handle, the monitoring and advisory functions of the staff may be affected and may result in higher loan defaults.

2.3.5 The Schedule and the Amount of Loan Installments

Small and frequent payments may make it easier for small borrowers to manage the cash. Many successful MFIs require small regular repayment from borrowers, recognizing that farm households have many and varied sources of income and types of expenditure (Wright, 2000). Terms of loan payment should reflect the borrowers' needs. According to Wright, institutions with short-term loan products and technologies may be more competitive to informal lenders. Branches with a higher ratio of short-term loans may be doing better financially.

2.3.6 Staff Training

Training of MFIs' staff is considered to affect the performance. Loan collection may be affected by the quality of loan officers. Poor screening and insufficient monitoring of loans affect the quality of loans (Yaron, et.al, 1997).

2.3.7 Management Information Systems

Management information systems are essential for accurate data and monitoring of customers' progress (Sacay and Randhawa, 1995). There should be effective management information systems in tracking payments, due loans, and overdue loans in order to systematically monitor loan performance (Yaron, et.al., 1997).

2.3.8 Incentives for Borrowers

Incentives provided for the borrowers to pay back may be a determinant of repayment rate. More access to credit after full repayments may be a major incentive for borrowers. Continuing access to repeat loans have been identified as a critical factor in keeping a low default rate (Wright, 2000). Inadequate incentive for clients to pay back is a factor that affects the quality of loans (Yaron, et.al., 1997). Borrowers need to have a clear signal from the MFIs that loan repayment is serious. Late payment of loans often occurs because borrowers often test the MFIs, knowing that MFIs are non-profit organizations and the staff is not responsible for making profits (Norell, 2002).

2.3.9 Incentives for Staff

A staff incentives system affects the performance of micro-finance institutions. Rewards, including monetary incentives and promotion contribute to the efficiency of successful rural financial institutions (Yaron, et al., 1998).

2.3.10 Loan Amount

Larger loans have greater risk exposure, so the variable costs per-dollar is higher (Schreiner, 2001). If lenders don’t take extra care, there could be more loan defaults. Greater loan size means less depth of outreach for the borrower, but usually means more profitability for the lender (Schreiner, 2002). According to Schreiner (2002), average balance, a proxy for depth of outreach, is directly proportional to revenue and default risk. Average loan size to GNP, as a proxy of depth of outreach, was found to have a statistically significant inverse relationship with financial self-sufficiency (Woller, 2002). The amount of loans could be a factor causing NPLs, as it directly relates to risk.

Many MFIs have had problems with the repayments of clients whose loans issued exceed their capacity to repay (Wright, 2000). Higher loan size on the average may imply the overestimation of borrowers’ repayment capacity. On the other hand, higher loan size could mean that the borrowers have higher capacity to earn and to repay the loans. Loans too large for business needs may result in the use of loans for personal needs and results in the inability to pay from income (Norell, 2002).

Friends of credit officers or privileged figures are usually the ones who receive large size loans based on favoritism, overlooking the capacity to pay back. Khandker (1998) claims that loan recovery rate for larger loans may be lower than small loans. One of the reasons of the possible relationship between high repayment rate and the small loans could be higher risk distribution. With a given amount of funds available, smaller loans enable the MFIs to serve more customers.

2.3.11 Location

Locations of lending institutions affect the transaction costs of the borrowers and lenders (Bhatt, 20022). It is easier for lenders to acquire information and provide assistance to the borrowers and easier for the borrowers to travel to the lenders with shorter or more convenient routes of transportation. In Sharma and Zeller's study (1999), trying to achieve "marginal impact of credit services" may be the cause of concentration of branches of credit organizations in the area with better access to transport and communication infrastructure where clients' income covariance seem to be lower. Branches with poor locations may cause inconvenience in communication resulting in inefficiency in consultant services and services related to loan collection.

2.3.12 Women's Participation

Women in many developing countries don't have as many opportunities as men do in finding jobs and credit. Some argue that women's participation has led to economic empowerment of women and thus higher loan repayment rates on women borrowers (Bhatt, 2002).

2.3.13 Flexibility for Borrowers to Use the Borrowed Money

This may be an important factor that helps borrowers to take the opportunities of earning better income rather than having to go through the loan application process again. Often loans are diverted because there are better opportunities or emergencies. Wright (2000) points out that successful MFIs do not tie their loans to specific types of projects and where there is a strict policy on providing loans for productive uses there would be a mechanism to provide facilities to meet other needs.

2.3.14 Savings

Egiatsu (1992) claims that the traditional "credit first theory" had serious defects of poor loan recovery. According to Egiatsu, the new view, "the deposit first theory" argued that if the loans are externally funded, borrowers know that there is no "real root in their own economic life". Some financial organizations consider outside money to be "cold money" and fear that the discipline may be reduced among the members (Wright, 2000). In the case of MFIs, self-financing reduces dependence on external resources and improves financial discipline (Khandker, 1998)

The client's established relationship with the bank may contribute to the necessary data bank used in considering loans and may contribute to better credit assessment and loan collection. Clients and the bank can have some knowledge of each other and feel at ease since more is known before the first loans or larger loans are granted. Clients' savings habit is useful information in credit evaluation (Ravicz, 1998: Matin, Hulme and Rutherford, 2002). More savings could imply that the branches have a good relationship with the clients and have more access to clients' information.

2.3.15 Income of Households

Household income may represent the capacity to pay back the loan. Incomes from other jobs or from other family members may be used for loan repayments and increase the capacity of loan payment (Bhatt, 2002). Since a goal of MFIs is usually to help the poor discriminating those with lower household income by using income as a criterion for credit may seem unsuitable. In trying to cut down some bad loans, the credit officers may be more inclined to consider income of the households as a major criterion for loan approval. Income of the borrowers may be a major factor affecting the ability to repay the loans but may not necessarily affect the willingness to pay. Income fluctuation from ill-health, theft, job loss and fluctuation in demand may have caused dropouts from credit programs (Copestake, Bhalotra and Johnson, 2001).

2.3.16 Group Pressure

Peer pressure may be an important factor that encourages loan repayment (Khandker, 1998). Dealing with credit groups may reduce transaction costs (Bhatt, 2002) and risks of lending. Borrowers tend to be more willing to pay back if pressured by their peers. Ratio of group lending to total lending volume may be related to loan repayment because the groups help take care of the screening and follow up. Rahman (1999), in his study on Grameen Bank, found that 98 percent of the repayment rate of a local bank was achieved with the help of peer pressure along with institutional and moral coercion. However, many borrowers became "vulnerable and trapped by the system" with increases in debt liability and recycling of loans (Rahman, 1999).

2.3.17 Government policy

Macroeconomic variables such as national income, inflation and interest rates affect the performance of MFIs directly. The uncertainty in the domestic economy may lead to capital flight, liquidity crises, and increases in the cost of funds for financial institutions.

Interventions may be based on political motives. Unprofitable special programs are often imposed on MFIs owned by the government. Interest payments are often remitted or loans are written off for political reasons and may create a culture of default (Khandker, 1998). Direct interventions should be implemented either to address specific market failures or to reduce poverty; furthermore, the effectiveness of the intervention should always be measured against the objective (Yaron, et al., 1997).

MFIs under government control may be under government pressure to expand their network in the rural area and expand credit to priority sectors without paying sufficient attention to loan recovery (Khandker, 1998). Government interventions could reduce the autonomy of micro-finance institutions since they have to comply with the government's policy (Sacay and Randhawa, 1995).

2.3.18 Interest Rates

Interest ceilings and interest rates fixing has been very damaging because interest rates are critical in the mobilization, and allocation of resources (Yaron, et al., 1997). According to Yaron, et al., government's restrictions on interest rates restrict the levels and types of participation by financial intermediaries in rural financial markets because interest rates on directed agricultural credit are usually fixed below market rates. Restricting interest rates discourages savings and may discourage lending to small borrowers. The demand for loans may not be significantly affected by the level of interest rates (Rhyne, 1998), but interest rate setting is related to client selection (Meyer, 2000). More promising projects might be selected at reasonable market rate. Loan collection performance might be better if poor projects are not selected.

Subsidized rates lead to rationing, which tends to favor the wealthy and politically connected and borrowers might not take the loans seriously enough (Muraki, et al., 1997). Borrowers may take loans less seriously since the rate is lower than the market rate and money may not be used for the best investment available in the market. However, lower interest rates may be helpful for small borrowers who may not know many high return investment opportunities.

2.4 Empirical Review

Analyzing the potential positive effects associated with group dynamics, some studies examine the impact of different levels of peer selection, peer monitoring and peer pressure. Wenner (1995) presents a methodology to test whether the selection mechanism has an impact on the repayment performance of 25 Costa Rican credit groups and whether group members use local information for the screening of their peers. His study shows that lending groups use private information to select their peers and that this selection mechanism increases the group repayment performance. On the same issue, the above-mentioned study of Zeller (2008) confirms the positive role of peer selection (internal rules of conducts) on repayment performance. Wydick (2009) uses data from 137 Guatemalan credit groups to show how social cohesion affects group performance in terms of repayment rates, group insurance and moral hazard. He found that peer monitoring in urban groups and peer pressure in rural ones significantly affects group performance.

Vigano (2003), employing a credit scoring model for development banks based on 118 sample borrowers, taking the case of Development Bank of Burkina Faso, found out that customer's characteristics, enterprise characteristics and customer's activity, profitability and revenue stability, asset value and composition, financial situation, loan use, bank-customer relationship, contractual conditions and credit risk control, quality of information and the customer's banking behavior are identified to influence the bank's credit risk. The study revealed that being women, married, aged, proximity to the bank, use of better technology and being flexible to adjust to market changes, proper use of the loan, project diversification, frequency of loan maturity, collateral, personal guarantee and being a pre-existing depositor are negatively related to loan default risk. Loans in kind, long weighting period from application to disbursement and being younger firm, past default, existence of other loan are those positively related to loan default rate.

An empirical study made by Ajayi (2002) on factors which influence default in mortgage finance institution with particular reference to the Federal Mortgage Bank of Nigeria using correlation and multiple regression analysis based on 128 samples (62.7% of the population) showed that default has largely been positively influenced by cost of construction, monthly repayment, loan to value ratio, market value of property, age of borrower and the annual income of borrower. The expected rental income from property, however, had a negative influence on default.

Hunt (2006) examined the credit rationing technology of lenders and the repayment behavior of borrowers at a rural financial institution based on 504 sample observations. Loan rationing equation and loan repayment equations estimated employing Tobit model using survey data at Guyana Cooperative Agricultural and Industrial Development Bank revealed that only 33% of the criteria utilized identified credit worthy borrowers implying that the screening technology was not efficient and needed to be repaired. The results also indicated that tightening the loan contract terms by reducing the grace period on loans and rejecting applications which had long processing times enhanced the pool of credit worthy borrowers. Female borrowers were also not rationed differently than male borrowers, nor were they worse repayers than male borrowers (i.e. the variable sex was insignificant in both equations), but wealthy borrowers were bad credit risks as their repayment performance is poor. In general, the study showed that only four out of twelve explanatory variables (fishing, males in food crops and livestock, credit experience and sugar cane) enhance creditworthiness, while other variables especially grace period, delays, and joint borrowers contribute significantly to the default problem.

Chirwa (1997) estimated the probability of agricultural credit repayment utilizing data from five Agricultural Development Divisions in Malawi using a probit analysis. The result based on 1237 sample farmer club members showed that the availability of resources from crop sales and income transfers, the size of the club, the degree of diversification and the quality of information determined the probability of repayment. In contrast, other factors such as amount of loan, sex of household's head, size of household and club experience was not statistically significant. Crop sales, income transfers, degree of diversification and quality of information are positively while size of club is negatively related with the probability of repayment.

In an attempt to empirically analyze the loan repayment determinants in credit group of microenterprises in Madagascar, Zeller (2008) employed a Tobit model using information obtained at the household, group and community level. The result based on 146 sample groups showed that groups with higher levels of social cohesion have a better repayment rate. The result also lead to the conclusion that it is not the level of physical and human assets of the group members but the degree of variance of risky assets among members that contributes to better loan repayment. The result therefore indicated that heterogeneity in asset holdings among members and related intra group diversification in on and off farm enterprises, enables members to pool risks so as to better secure repayment of the loan. Furthermore, gains in the repayment rate due to risk pooling diminish at the margin because of increased costs of coordination, monitoring, and moral hazard that come with greater heterogeneity in groups.

Padmanabhan (1981) mentioned some of the specific reasons for default in rural credit projects which a development banker can possibly guard against at the time of project preparation or appraisal based on Indian experience. These factors include: under financing, over investment, imperfect analysis, incidence of loan cases per field staff, unscientific banking plan allocation, feeble technical advice (inadequate technical support), improper planning of infrastructural support, ineffective tie-up arrangements, inadequate communication between branch office and head office, unrealistic repayment schedule, cursory assessment of response from the farmers, reduction in the unit value of projects and high propensity to consume.

2.5 Summary of literature review

The roles MFIs play in an economy along with MFI lending based on the above review are enormous. The above literature has covered the processes MFIs pursue in their credit methodology from customer selection to loan sanctioning and follow-up. The various risks the banking sector face with special emphasis on credit risk was also discussed. In addition, findings by the different authors about lending methodologies and the causes of loan default in microfinance deposit-taking institutions were discussed in detail. For instance, Wenner (1995) presents a methodology to test whether the selection mechanism has an impact on the repayment performance of 25 Costa Rican credit groups and whether group members use local information for the screening of their peers. Wydick (2009) uses data from 137 Guatemalan credit groups to show how social cohesion affects group performance in terms of repayment rates, group insurance and moral hazard. Ajayi (2002) did a study on factors which influence default in mortgage finance institution with particular reference to the Federal Mortgage Bank of Nigeria. Hunt (2006) examined the credit rationing technology of lenders and the repayment behavior of borrowers at a rural financial institution based on 504 sample observations.

Because different studies tend to ask and answer different questions, it is not surprising that they also reach different and potentially opposed conclusions. Therefore there is a research gap in trying to understand the factors that influence non-performing loans of microfinance institutions in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This study sought to analyze the factors that determine non-performing loans of microfinance institutions in Kenya. This chapter involves a blueprint for the collection, measurement and analysis of data. Therefore, in this section the researcher identifies the procedures and techniques that were used in the collection, processing and analysis of data.

3.2 Research design

This research study adopted a descriptive survey approach on the factors that determine non-performing loans of microfinance institutions in Kenya. The descriptive design was deemed appropriate because the main interest was to establish the relationship and analyze how the factors supported matters under analysis in one organization. According to Donald and Pamela (1998), a descriptive study is concerned with finding out the what, where and how of a phenomenon. Descriptive research design was chosen because it enables the researcher to generalise the findings to a larger population. According to Mugenda and Mugenda (1999), it is important and appropriate to use data where subjects are observed in either natural set-up without manipulating the environment.

3.3 Population

Study population is a well defined or specified set of people, group of things, households, firms, services, elements or events which are being investigated. Thus, the population should fit a certain specification, and the population should be homogenous (Ngechu 2004). This study targeted all the MFI’s in Kenya. There are 52 MFI as per the list of MFIs by the Association of Micro Finance Institutions of Kenya (AMFI) 2013 provided in appendix ii. This population provided a significant representation of the whole country, Kenya.

3.4 Data Collection Methods and Instruments

According to Ngechu (2004), there are many methods of data collection. The choice of a tool and instrument depends mainly on the attributes of the subjects, research topic, problem question, objectives, design, expected data and results. This is because each tool and instrument collects specific data.

This study used primary and secondary data. Primary data was collected by way of structured and semi structured questionnaires with both open and closed ended questions, see (Appendix I). This was done on the credit managers/officers. The questionnaires were administered by multiple approaches that include drop and pick later method and use of email to contact the respondents. To increase the response rate, a follow up was done by use of telephone calls.

Secondary data was obtained from the published annual reports and financial statements of the institutions. The information covered a period of five years from years 2008 to 2012. This category of data was mainly found in the print and electronic media meant for public consumption. The use of this type of information was beneficial in several ways to the study and some of the benefits include:

Firstly, this it is less expensive to collect, in terms of time and money. It afforded the researcher the opportunity to collect high quality data which would not have been of the same quality if the researcher were to collect it in its primary form. Saunders et al (2007) quote Stewart and Kamins (1993) as stating that secondary data are likely to be of higher-quality than could be obtained by collecting empirical data. The data to be collected had in it very useful information needed to answer the research questions like loan portfolio of the institution, provision and charge for credit loss (i.e. provision for bad and doubtful debt) and profitability during the five-year period.

3.5 Data Analysis and Presentation

The data was analyzed by use of summary statistics, including percentages, means and standard deviation to measure interrelationships between the variables. Graphs were also used to display the information to improve presentation of the analyzed results for ease of interpretation. Data from the completed questionnaires was coded to facilitate statistical analysis. Both descriptive and inferential statistics was used to analyze the data, including mean deviation and frequency distribution. The SPSS version 17 and MS excel was also used to analyze the collected data. To establish the link between institutional characteristics, customer characteristics, macroeconomic variables and non-performing loans, the study used the regression model below:

$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \varepsilon$

Where:

Y is the dependent variable (Non-performing Loans)

β_0 is the regression constant

$\beta 1$, $\beta 2$, $\beta 3$, $\beta 4$, and $\beta 5$ are the coefficients of independent variables,

X1 is institutional characteristics

X2 is customer characteristics

X3 is macroeconomic variables

ε is the Error Term.

The study also checked the model significances (f and t-significances) for statistical reporting.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 Introduction

This chapter presents data analysis and interpretation. The objective of the study was to find out the factors that influence non-performing loans of microfinance institutions in Kenya. The research was conducted on sample size of 52 respondents from all the MFI's in Kenya out of which 35 respondents completed and returned the questionnaires duly filled in making a response rate of 69%. Mugenda and Mugenda (1999) stated that a response rate of 50% and above is a good for statistical reporting. The study made use of frequencies (absolute and relative) on single response questions. On multiple response questions, the study used Likert scale in collecting and analyzing the data whereby a scale of 5 points were used in computing the means and standard deviations. These were then presented in tables, graphs and charts as appropriate with explanations being given in prose.

4.2 General Information

The study initially sought to inquire information on various aspects of respondents' background that is; gender, marital status, age and level of education. This information aimed at testing the appropriateness of the respondent in answering the questions regarding factors that influence non-performing loans of microfinance institutions in Kenya.

4.2.1 Respondents Gender

The respondents were requested to indicate their gender. The findings are as presented below.

Table 4.1: Respondents Gender

	Frequency	**Percentage (%)**
Male	20	58
Female	15	42
Total	**35**	**100**

As per the findings in table 4.1, majority (58%) of the respondents was male and the remaining 42% were female. This implies that both genders were included in the study even though most of the responses emanated from male respondents.

4.2.2. Respondents Marital Status

The study requested the respondents to indicate their marital status. The findings are tabulated below.

Table 4.2: Respondents Marital Status

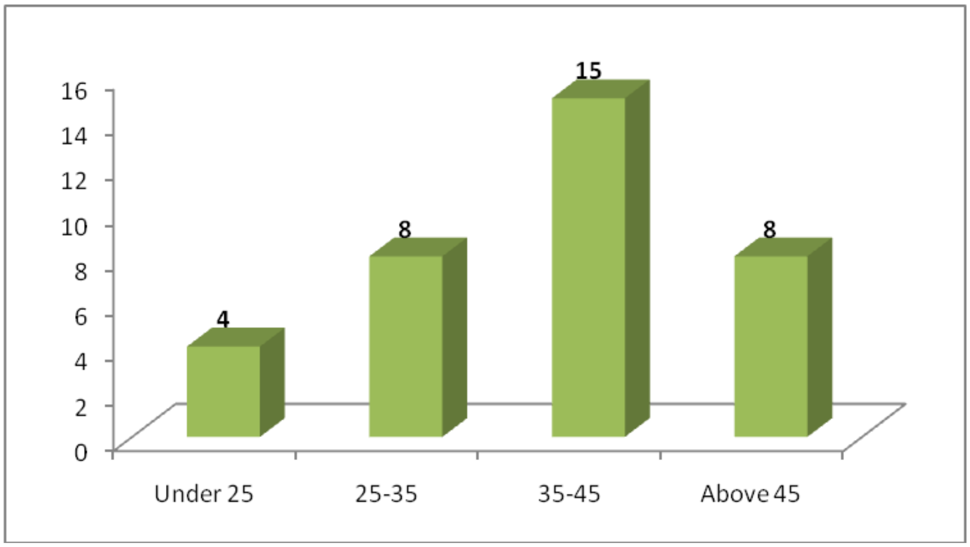
	Frequency	**Percentage (%)**
Married	22	62
Single	9	26
Widow	3	8
Divorced	1	4
Total	**35**	**100**

The findings in table 4.2 above indicate that majority (22) of the respondents are married, 9 respondents are single, 3 respondents are widowed and 1 respondents are divorced. This implies that most of the respondents are married.

4.2.3 Respondents Age Bracket

The study also requested the respondents to state their age brackets and the findings are as illustrated below.

Figure 4.1: Respondents Age Bracket



As per the findings, majority (15) of the respondents are 35-45 years old, 8 respondents are 25-35 and above 45 years old each, the remaining 4 respondents are under 25 years old.

4.2.4 Respondents Education Level

The study requested the respondents to indicate their level of education. The findings are tabulated below.

Table 4.3: Respondents Education Level

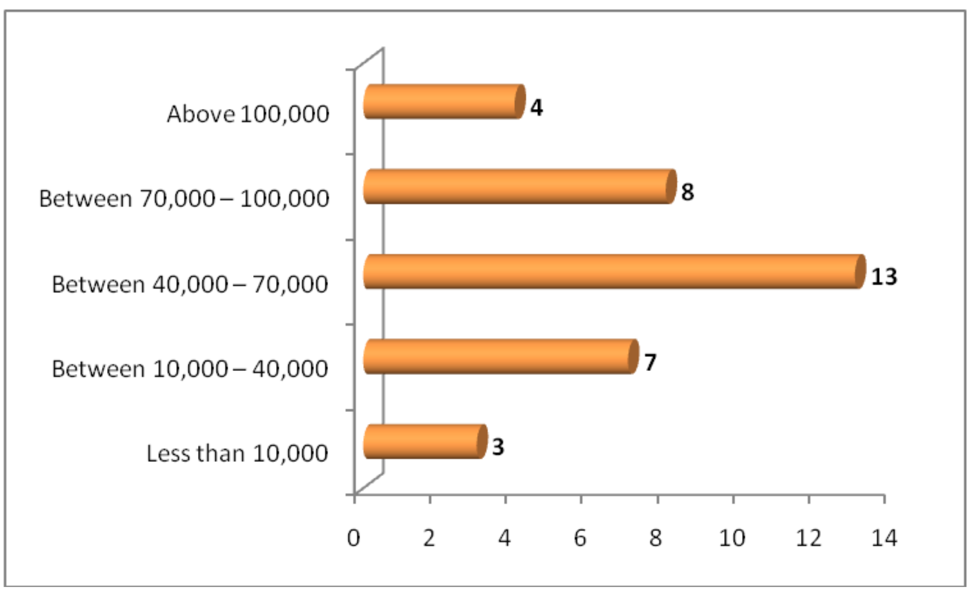
	Frequency	Percentage (%)
Diploma	10	28
Bachelor's Degree	18	50
Masters	5	16
Doctorate	2	6
Total	**35**	**100**

The findings in table 4.3 show that majority (50%) of the respondents have a bachelor's degree, 28% of the respondents have a diploma, 16% of the respondents have a masters and 6% of the respondents have a doctorate. This information shows that the respondents were knowledgeable enough and could give valid and reliable information based on their high level of understanding of various issues.

4.2.5 Loan Amount asked for by Clients

The respondents were requested to state the loan amount asked for by clients. The findings are presented below.

Figure 4.2: Loan Amount asked for by Clients



As illustrated in figure 4.2 above, most (13) of the respondents revealed that the loan amount asked for by clients is between 40,000-70,000; 8 respondents said that the loan amount asked for by clients is between 70,000-100,000; 7 respondents were of the opinion that the loan amount asked for by clients is between 10,000-40,000; while 4 respondents indicated that the loan amount asked for by clients is above 100,000 and finally, 3 respondents stated that the loan amount asked for by clients is less than 10,000. This depicts that most of the loan amount asked for by clients were above Kshs.10, 000.

4.3 The Impact of Institutional Characteristics on Non-Performing Loans of Microfinance Institutions in Kenya

4.3.1 Respondents Opinion on the Interest Rate Charged by MFI

The respondents were asked to describe the interest rate charged by MFI. Accordingly, the findings are as tabulated below.

Table 4.4: Respondents opinion on the interest rate charged by MFI

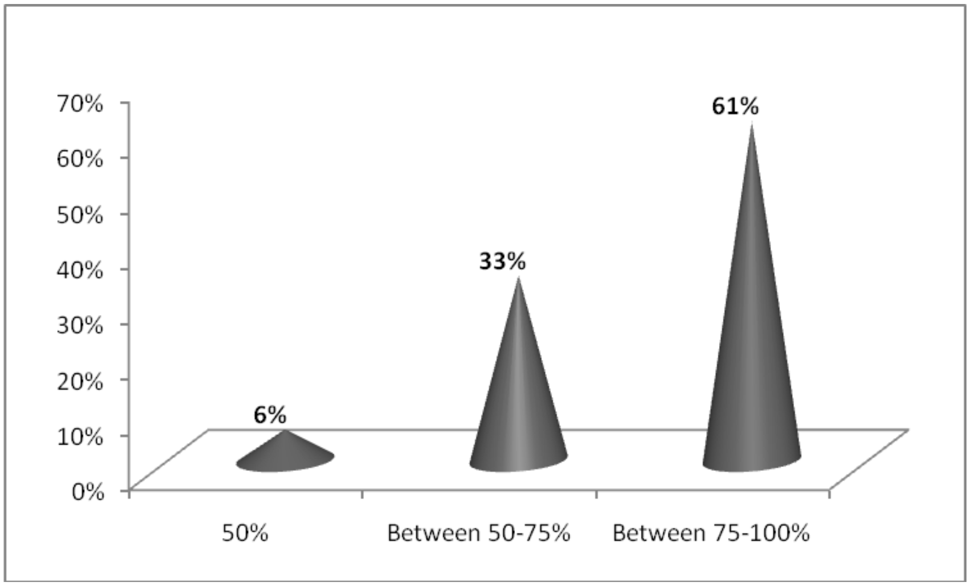
	Frequency	**Percentage (%)**
High	4	11
Fair	27	78
Low	4	11
	35	**100**

From the findings, majority (27) of the respondents were of the opinion that the interest rate charged by MFI was fair, others (4 each) were of the opinion that the interest rate charged by MFI was high and low. This depicts that the interest rate charged by MFI is fair.

4.3.2 Repayment of Loans by Customers

The respondents were further asked to indicate the level of the loans disbursed to customers that are paid back. The findings are illustrated below.

Figure 4.3: Repayment of Loans by Customers



According to the findings in figure 4.3 above, majority (61%) of the respondents revealed that the level of the loans disbursed to customers that are paid back are 50-75%, this was followed by 75-100% level (33%) of respondents who agreed and 6% of the respondents stated that the level of the loans disbursed to customers that are paid back are 50%. These findings depict that in most cases the loans disbursed to customers are not fully paid back.

4.3.3 How Respondents Organizations Deal with Loan Default Problems

The study requested the respondents to explain how they deal with loan default problems. Below is a summary of the findings.

Table 4.5: How Respondents Organizations Deal with Loan Default Problems

	Frequency
Write off	17
Outsourcing (External solicitor/ Debt collectors)	21
Legal Action	28
Accurately assessing the credit capacity of clients through identifying which clients have stronger or weaker capacity to repay, categorize them accurately, then provide them with loan products that balance their varying credit limits with a need to enforce group liability.	35

The findings in table illustrate that the most common way the respondents organizations deal with loan default problems was by accurately assessing the credit capacity of clients through identifying which clients have stronger or weaker capacity to repay, categorize them accurately, then provide them with loan products that balance their varying credit limits, with a frequency level of 35, this was followed by taking legal action with a frequency level of 28, Outsourcing (External solicitor/ Debt collectors) with a frequency level of 21 and writing off with a frequency level of 17. This depicts that preventive measures such as accurately assessing the credit capacity of clients through identifying which clients have stronger or weaker capacity to repay, categorize them accurately, then provide them with loan products that balance their varying credit limits is the most common method used in dealing with loan default problems.

4.3.4 Respondents opinion on the extent to which Institutional Characteristics influence Non-Performing Loans of Microfinance Institutions

The respondents were asked to indicate the extent to which they agreed with statements concerning the extent to which Institutional Characteristics influence Non-Performing Loans of Microfinance Institutions. The responses were placed on a five Likert scale where 1 =very small extent, 2=small extent 3= moderate 4=great extent and 5=very great extent. A mean of above 3 is regarded to measure satisfaction on the test variables. Standard deviation was used to indicate the variation or "dispersion" from the "average" (mean). A low standard deviation indicates that the data points tend to be very close to the mean, whereas high standard deviation indicates that the data is spread out over a large range of values. The results are as in the table 4.6 below

Table 4.6: Respondents opinion on the extent to which Institutional Characteristics influence Non-Performing Loans of Microfinance Institutions

Institutional Characteristics	Mean	Std Dev
The organization requires clients to make weekly deposit in order to avoid default	2.02	0.213
Payment of loan in time in the organization is determined by the reminders to customers.	3.39	0.011
To qualify to credit, prevailing economic conditions are considered	3.42	0.411
Recovery of loans is influenced by interest rates charged on clients.	3.61	0.349
Customers are comfortable with the loan period that the organization extends to them	3.78	0.148
The organization considers client‘s characters before extending a loan.	3.86	0.116
The loan period given to customers affect loan recovery in the organization	3.91	0.412
The organization considers customer‘s collateral before extending the loan to them.	3.97	0.342
To access capital the organization considers the customer‘s financial status in order to loan to them.	3.99	0.521
The organization considers the trustworthiness of customers before extending a loan to them.	4.00	0.176
The organization assesses customer‘s capacity to pay back in order to qualify for the loan.	4.02	0.336
The loan amount extended to customers affects the loan recovery in the organization.	4.03	0.114
Customers face penalties if they don‘t pay the loan in time	4.08	0.114
The loan size that the organization extends to clients is good	4.11	0.332
Effective management information systems in the organization enhances tracking payments, due loans, and overdue loans in order to systematically	4.16	0.132
Loan officers in the organization are trained to recover loans from clients.	4.24	0.159
There is a direct relationship between credit policy and loan recovery.	4.36	0.148

The findings in table 4.6 above portray that, the respondents strongly agreed that; There is a direct relationship between credit policy and loan recovery (mean=4.36), Loan officers in the organization are trained to recover loans from clients (mean=4.24), Effective management information systems in the organization enhances tracking payments, due loans, and overdue loans in order to systematically monitor loan performance (mean=4.16), The loan size that the organization extends to clients is good (mean=4.11), Customers face penalties if they don‘t pay the loan in time (mean=4.08), The loan amount extended to customers affects the loan recovery in the organization (mean=4.03), The organization assesses customer‘s capacity to pay back in order to qualify for the loan (mean=4.02) and The organization considers the trustworthiness of customers before extending a loan to them (mean=4.00). They also agreed that To access capital the organization considers the customer‘s financial status in order to loan to them (mean=3.99), The organization considers customer‘s collateral before extending the loan to them (mean=3.97), The loan period given to customers affect loan recovery in the organization (mean=3.91), The organization considers client‘s characters before extending a loan (mean=3.86), Customers are comfortable with the loan period that the organization extends to them (mean=3.78), Recovery of loans is influenced by interest rates charged on clients (mean=3.61), To qualify to credit, prevailing economic conditions are considered (mean=3.42), Payment of loan in time in the organization is determined by the reminders to customers (mean=3.39). On the other hand they disagreed that The organization requires clients to make weekly deposit in order to avoid default (mean=2.02).

This depicts that the direct relationship between credit policy and loan recovery is the most influential Institutional Characteristics on Non-Performing Loans of Microfinance Institutions.

4.4 The Impact of Macroeconomic Variables on Non-Performing Loans of Microfinance Institutions in Kenya

4.4.1 Pricing of Loans/Credit Facility by Respondents Organization

The respondents were requested to indicate how their organizations price their loans/credit facility. The findings are tabulated below.

Table 4.7: Pricing of loans/credit facility by respondents organization

	Frequency
Treasury Bill + risk premium	22
Base rate + premium	26
Policy rate + risk premium	30
Average of the market	33
Total	**204**

From the findings in table 4.7 above, Average of the market is the most common method used by the respondents organizations to price their loans/credit facility with a frequency level of 33, this was followed by policy rate + risk premium with a frequency level of 30, Base rate + premium with a frequency level of 26 and finally Treasury Bill + risk premium with a frequency level of 22. This implies that Average of the market is the most common method used by the respondents organizations to price their loans/credit facility.

4.4.2 Respondents opinion on the extent to which Macroeconomic variables influence Non-Performing Loans of Microfinance Institutions

The respondents were asked to indicate the extent to which they agreed with statements concerning the extent to which Macroeconomic variables influence Non-Performing Loans of Microfinance Institutions. The responses were placed on a five Likert scale where 1 =very small extent, 2=small extent 3= moderate 4=great extent and 5=very great extent. A mean of above 3 is regarded to measure satisfaction on the test variables. Standard deviation was used to indicate the variation or "dispersion" from the "average" (mean). A low standard deviation indicates that the data points tend to be very close to the mean, whereas high standard deviation indicates that the data is spread out over a large range of values. The results are as in the table 4.8 below

Table 4.8: Respondents opinion on the extent to which Macroeconomic variables influence Non-Performing Loans of Microfinance Institutions

Macroeconomic variables	Mean	Std Dev
Interest payments are often remitted or loans are written off for political reasons and may create a culture of default in the organization	2.96	0.029
Uncertainty in the domestic economy discourages lending to small borrowers	3.41	0.208
MFIs under government control may be under government pressure to expand their network in the rural area and expand credit to priority sectors without paying sufficient attention to loan recovery	3.72	0.252
Unprofitable special programs are often imposed on MFIs owned by the government	3.87	0.111
Restricting interest rates discourages savings and lending to small borrowers	3.96	0.367
Government interventions could reduce the autonomy of micro-finance institutions since they have to comply with the government's policy	3.99	0.036
Prevailing inflation rates discourages lending to small borrowers	4.03	0.196
Government's restrictions on interest rates restrict the levels and types of participation by the organization in financial markets	4.10	0.241

As per the findings in table 4.8 above, the respondents strongly agreed that; Government's restrictions on interest rates restrict the levels and types of participation by the organization in financial markets (mean=4.10) and Prevailing inflation rates discourages lending to small borrowers (mean=4.03). They also agreed that Government interventions could reduce the autonomy of micro-finance institutions since they have to comply with the government's policy (mean=3.99), Restricting interest rates discourages savings and lending to small borrowers (mean=3.96), Unprofitable special programs are often imposed on MFIs owned by the government (mean=3.87), MFIs under government control may be under government pressure to expand their network in the rural area and expand credit to priority sectors without paying sufficient attention to loan recovery (mean=3.72) and that uncertainty in the domestic economy discourages lending to small borrowers (mean=3.41). However they disagreed that interest payments are often remitted or loans are written off for political reasons and may create a culture of default in the organization (mean=2.96). This implies that Government's restrictions on interest rates restrict the levels and types of participation by the organization in financial markets.

4.5 The Impact of Customer Characteristics on Non-Performing Loans of Microfinance Institutions in Kenya

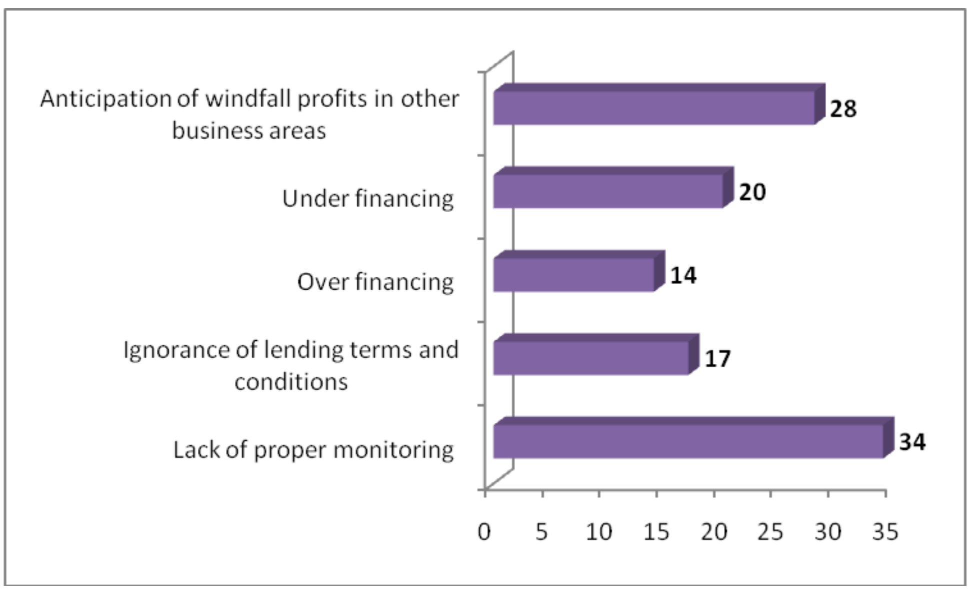
4.5.1 Type of Security/Collateral Often Offered by Borrowers to Secure Loans or Overdraft

The respondents were asked to state the type of security/collateral often offered by borrowers to secure loans or overdraft. Accordingly the respondents revealed that the type of security/collateral often offered by borrowers to secure loans or overdraft include; Landed property, Cash (Fixed Deposit, S/A), Guarantee, vehicles, inventory, stocks and bonds, and equipment, machinery and equipment, fixtures, investment funding, chattel paper, and payment rights.

4.5.2 Factors Accounting for Diversion of Funds by Borrowers

The respondents were requested to state which factors account for diversion of funds by borrowers. The findings are presented below.

Figure 4.4: Factors Accounting for Diversion of Funds by Borrowers



According to the findings in figure 4.4 above, the most common factor accounting for diversion of funds by borrowers was Lack of proper monitoring with a frequency level of 34, this was followed by Anticipation of windfall profits in other business areas with a frequency level of 28, under financing with a frequency level of 20, Ignorance of lending terms and conditions with a frequency level of 17 and finally over financing with a frequency level of 14.

4.5.3 The Status of the Current Customers Loans

The respondents were asked what the status of the current customers' loans was. A summary of the findings is tabulated below.

Table 4.9: The Status of the Current Customers Loans

	Frequency
Fully repaid	8
Repayment on schedule	22
Repayments in arrears	5
Total	**35**

From the findings in table 4.9 above, majority (22) of the respondents stated that the status of the current customers' loans was repayment on schedule, 8 of the respondents stated that the status of the current customers' loans was Fully repaid while 5 respondents indicated that the status of the current customers' loans was Repayments in arrears. This depicts that as much as loans were being paid, default by customers was still happening.

4.5.4 Respondents Opinion on the Extent to Which Customer Characteristics Influence Non-Performing Loans of Microfinance Institutions

The respondents were asked to indicate the extent to which they agreed with statements concerning the extent to which Customer Characteristics influence Non-Performing Loans of Microfinance Institutions. The responses were placed on a five Likert scale where 1 =very small extent, 2=small extent 3= moderate 4=great extent and 5=very great extent. A mean of above 3 is regarded to measure satisfaction on the test variables. Standard deviation was used to indicate the variation or "dispersion" from the "average" (mean). A low standard deviation indicates that the data points tend to be very close to the mean, whereas high standard deviation indicates that the data is spread out over a large range of values. The results are as in the table 4.10 below

Table 4.10: Respondents Opinion on the Extent to Which Customer Characteristics Influence Non-Performing Loans of Microfinance Institutions

Customer characteristics	**Mean**	**Std Dev**
Delayed approval	3.49	0.361
Wrong timing of credit delivery	3.55	1.131
Inadequate marketing avenues	3.56	0.913
Willful default	3.64	0.948
Number of employees	3.65	0.746
Business manager	3.69	0.971
Flexibility for Borrowers to Use the Borrowed Money	3.71	0.308
Business location	3.74	0.808
Gender	3.78	1.133
Type of business	3.96	0.834
Borrowers sold on credit and were not able to make repayments on time	3.99	0.649
Lost their assets	3.99	0.731
Age of the business	4.02	0.721
Diversion of funds	4.05	0.102
Profits	4.06	0.310
Business was not profitable	4.08	0.156
The Schedule and the Amount of Loan Installments	4.09	0.322
Non-compliance with credit policy account for NPLs	4.11	0.285
Savings	4.12	0.310
Business Failure	4.15	0.156
Used the loan for household expenses hence unable to repay the loan on schedule	4.22	0.322
High interest rate	4.23	0.275
Poor credit appraisal	4.29	0.245
Inadequate monitoring	4.31	0.102
Income of households	4.45	0.125

The findings in table 4.10 above shows that, the respondents strongly agreed that that the most influential Customer Characteristics on Non-Performing Loans of Microfinance Institutions; Income of households (mean=4.45), Inadequate monitoring (mean=4.31), Poor credit appraisal (mean=4.29), High interest rate (mean=4.23), Used the loan for household expenses hence unable to repay the loan on schedule (mean=4.22), Business Failure (mean=4.15), Savings (mean=4.12) Non-compliance with credit policy account for NPLs (mean=4.11), The Schedule and the Amount of Loan Installments (mean=4.09), Business was not profitable (mean=4.08), Profits (mean=4.06), Diversion of funds (mean=4.05) and Age of the business (mean=4.02). They also agreed that Lost their assets as well as Borrowers sold on credit and were not able to make repayments on time (mean=3.99 each), Type of business (mean=3.96), Gender (mean=3.78), Business location (mean=3.74), Flexibility for Borrowers to Use the Borrowed Money (mean=3.71), Business manager (mean=3.69), Number of employees (mean=3.65), Willful default (mean=3.64), Inadequate marketing avenues (mean=3.56), Wrong timing of credit delivery (mean=3.55) and Delayed approval (mean=3.49).

This depicts that Income of households strongly influences Non-Performing Loans of Microfinance Institutions.

4.5.5 Aspects that Force Borrowers to Repay Loan in Time

The respondents were asked to state which aspects force borrowers to repay loan in time. The findings are as illustrated below.

Table 4.11: Aspects that Force Borrowers to Repay Loan in Time

	Frequency
Peer pressure	20
Social sanctions especially fear of loss of status	24
Fear of losing future loan from the MFIs	28
Supervision, advisory visits & training regarding loan utilization & repayment	31
Claim staked against their personal wealth	33
Claim staked against guarantors	34

As per the findings, the most common aspect that forces borrowers to repay loan in time according to the respondents was Claim staked against guarantors with a frequency level of 34, this was followed by Claim staked against their personal wealth with a frequency level of 33, Supervision, advisory visits & training regarding loan utilization & repayment with a frequency level of 31, Fear of losing future loan from the MFIs with a frequency level of 28, Social sanctions especially fear of loss of status with a frequency level of 24 and Peer pressure with a frequency level of 20. This implies that Claim staked against guarantors force borrowers to repay loan in time.

4.6 Inferential Statistics

The study further applied general Linear Model to determine the predictive power of the factors that influence non-performing loans of microfinance institutions in Kenya. This included regression analysis.

4.6.1 Regression Analysis

In addition, the researcher conducted a multiple regression analysis so as to test relationship among variables (independent) on the non-performing loans of microfinance institutions in

Kenya. The researcher applied the statistical package for social sciences (SPSS V 17.0) to code, enter and compute the measurements of the multiple regressions for the study.

Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (Non-performing Loans) that is explained by all the three independent variables (institutional characteristics, customer characteristics and macroeconomic variables).

4.6.2 Model Summary

Table 4.12: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.822	0.675	0.601	0.716

The three independent variables that were studied, explain only 67.5% of the non-performing loans of microfinance institutions in Kenya as represented by the R^2. Therefore, further research should be conducted to investigate the other factors (32.5%) that affect non-performing loans of microfinance institutions in Kenya.

4.7.3 ANOVA Results

Table 4.13 ANOVA of the Regression

Model		**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
1	Regression	2.534	15	1.267	8.635	.000[a]
	Residual	9.307	20	2.327		
	Total	**11.841**	**35**			

The significance value is 0.000 which is less than 0.05 thus the model is statistically significant in predicting how institutional characteristics, customer characteristics and macroeconomic variables affect Non-performing Loans. The F critical at 5% level of significance was 2.25. Since F calculated is greater than the F critical (value = 8.635), this shows that the overall model was significant.

4.7.4 Coefficient of determination

Table 4.14 Coefficient of determination

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	**Std. Error**	**Beta**		
1	(Constant)	1.103	0.2235		5.132	0.000
	Institutional characteristics	0.852	0.1032	0.1032	6.569	.000
	Customer characteristics	0.578	0.3425	0.1425	4.117	.000
	Macroeconomic variables	0.654	0.2178	0.1178	3.968	.000

Multiple regression analysis was conducted as to determine the relationship between the non-performing loans of microfinance institutions in Kenya and the three variables. As per the SPSS generated table below, regression equation

($\mathbf{Y} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$) becomes:

($Y = 1.103 + 0.852X_1 + 0.578X_2 + 0.654X_3$)

According to the regression equation established, taking all factors into account (institutional characteristics, customer characteristics and macroeconomic variables) constant at zero, non-performing loans of microfinance institutions in Kenya will be 1.103. The data findings analyzed also shows that taking all other independent variables at zero, a unit increase in Institutional characteristics will lead to a 0.852 increase in non-performing loans of microfinance institutions in Kenya; a unit increase in Customer characteristics will lead to a 0.578 increase in non-performing loans of microfinance institutions in Kenya, a unit increase in health Macroeconomic variables will lead to a 0.654 increase in non-performing loans of microfinance institutions in Kenya.

This infers that Institutional characteristics contribute most to the non-performing loans of microfinance institutions in Kenya followed by Macroeconomic variables and finally Customer characteristics. At 5% level of significance and 95% level of confidence, institutional characteristics, customer characteristics and macroeconomic variables were all significant in influencing non-performing loans of microfinance institutions in Kenya.

4.7 Summary and Interpretation of Findings

The study found out that most of the loan amount asked for by clients was above Kshs.10, 000.

4.7.1 The Impact of Institutional Characteristics on Non-Performing Loans

The study found out that the interest rate charged by MFI is fair. Additionally the study established that in most cases the loans disbursed to customers are not fully paid back. The most common way the respondents organizations deal with loan default problems was found to be by accurately assessing the credit capacity of clients through identifying which clients have stronger or weaker capacity to repay, categorize them accurately, then provide them with loan products that balance their varying credit limits, others were; by taking legal action with a, Outsourcing (External solicitor/ Debt collectors) and writing off. This implies that the strategies put in place to counter default problems were not sufficient.

The study also established that; There is a direct relationship between credit policy and loan recovery, Loan officers in the organization are trained to recover loans from clients, Effective management information systems in the organization enhances tracking payments, due loans, and overdue loans in order to systematically monitor loan performance, The loan size that the organization extends to clients is good, Customers face penalties if they don‘t pay the loan in time, The loan amount extended to customers affects the loan recovery in the organization, The organization assesses customer‘s capacity to pay back in order to qualify for the loan, The organization considers the trustworthiness of customers before extending a loan to them, To access capital the organization considers the customer‘s financial status in order to loan to them, The organization considers customer‘s collateral before extending the loan to them, The loan period given to customers affect loan recovery in the organization, The organization considers client‘s characters before extending a loan, Customers are comfortable with the loan period that the organization extends to them, Recovery of loans is influenced by interest rates charged on clients, To qualify to credit, prevailing economic conditions are considered and Payment of loan in time in the organization is determined by the reminders to customers. On the other hand the study established that the organization doesn't require clients to make weekly deposit in order to avoid default. This depicts that the most influential Institutional Characteristics on Non-Performing Loans is the credit policy.

4.7.2 The Impact of Macroeconomic variables on Non-Performing Loans

The study revealed that, Average of the market is the most common method used by the respondents' organizations to price their loans/credit facility; this was followed by policy rate + risk premium, Base rate + premium and finally Treasury bill + risk premium.

The study further established that Government's restrictions on interest rates restrict the levels and types of participation by the organization in financial markets and prevailing inflation rates discourages lending to small borrowers. Moreover the study also found out that Government interventions could reduce the autonomy of micro-finance institutions since they have to comply with the government's policy, restricting interest rates discourages savings and lending to small borrowers, unprofitable special programs are often imposed on MFIs owned by the government, MFIs under government control may be under government pressure to expand their network in the rural area and expand credit to priority sectors without paying sufficient attention to loan recovery and that uncertainty in the domestic economy discourages lending to small borrowers. However interest payments were found to not often be remitted or loans are written off for political reasons and may create a culture of default in the organization. Therefore the most influential Macroeconomic variables on Non-Performing Loans was prevailing inflation rates.

4.7.3 The Impact of Customer characteristics on Non-Performing Loans

The study further revealed that the type of security/collateral often offered by borrowers to secure loans or overdraft include; Landed property, Cash (Fixed Deposit, S/A), Guarantee, vehicles, inventory, stocks and bonds, and equipment, machinery and equipment, fixtures, investment funding, chattel paper, and payment rights.

The study found out that the most common factor accounting for diversion of funds by borrowers was Lack of proper monitoring; this was followed by Anticipation of windfall profits in other business areas, under financing, Ignorance of lending terms and conditions and finally over financing. Furthermore the study revealed that as much as loans were being paid, default by customers was still happening.

The study found out that that the most influential Customer Characteristics on Non-Performing Loans of Microfinance Institutions were; Income of households, Inadequate monitoring, Poor credit appraisal, High interest rate, Used the loan for household expenses hence unable to repay the loan on schedule, Business Failure, Savings Non-compliance with credit policy account for NPLs, The Schedule and the Amount of Loan Installments, Business was not profitable, Profits, Diversion of funds, Age of the business, Lost their assets, Borrowers sold on credit and were not able to make repayments on time, Type of business, Gender, Business location, Flexibility for Borrowers to Use the Borrowed Money, Business manager, Number of employees, Willful default, Inadequate marketing avenues, Wrong timing of credit delivery and Delayed approval respectively.

The study determined that the most common aspect that forces borrowers to repay loan in time according to the respondents was Claim staked against guarantors, this was followed by Claim staked against their personal wealth, Supervision, advisory visits & training regarding loan utilization & repayment, Fear of losing future loan from the MFIs, Social sanctions especially fear of loss of status and Peer pressure.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of findings, conclusion and recommendations. Section 5.2 provides the summary of the study, section 5.3, the conclusion, and section 5.4, recommendations of the study while section 5.5 presents recommendations for further research.

5.2 Summary of Findings and Discussions

The study found out that most of the loan amount asked for by clients was above Kshs.10, 000. Khandker (1998) claims that loan recovery rate for larger loans may be lower than small loans. One of the reasons of the possible relationship between high repayment rate and the small loans could be higher risk distribution. With a given amount of funds available, smaller loans enable the MFIs to serve more customers. Smaller loans may be necessary for new customers since they don't have a credit history.

5.2.1 Institutional Characteristics

The study found out that the interest rate charged by MFI is fair. Additionally the study established that in most cases the loans disbursed to customers are not fully paid back. The most common way the respondents organizations deal with loan default problems was found to be by accurately assessing the credit capacity of clients through identifying which clients have stronger or weaker capacity to repay, categorize them accurately, then provide them with loan products that balance their varying credit limits, other were; by taking legal action with a, Outsourcing (External solicitor/ Debt collectors) and writing off. Nicholas (1989) indicated in his work that problem loan can emanate from overdrawn account where there is no overdraft limit or overdraft taken on account which has not been actively operated for some time and overdraft taken in excess of the reasonable operational limit. He also identified lack of good skills and judgement on the part of lenders as a possible cause of NPLs. Bloem and Gorter(2001) asserted that NPLs may be caused by less predictable incidents such as the cost of petroleum products, prices of key exports, foreign exchange rates, or interest rate change abruptly. They also indicated that poor management, poor supervision, overoptimistic assessments of creditworthiness during economic booms and moral hazards resulting from generous government guarantees could also lead to loan default.

The study also established that; There is a direct relationship between credit policy and loan recovery, Loan officers in the organization are trained to recover loans from clients, Effective management information systems in the organization enhances tracking payments, due loans, and overdue loans in order to systematically monitor loan performance, The loan size that the organization extends to clients is good, Customers face penalties if they don‘t pay the loan in time, The loan amount extended to customers affects the loan recovery in the organization, The organization assesses customer‘s capacity to pay back in order to qualify for the loan, The organization considers the trustworthiness of customers before extending a loan to them, To access capital the organization considers the customer‘s financial status in order to loan to them, The organization considers customer‘s collateral before extending the loan to them, The loan period given to customers affect loan recovery in the organization, The organization considers client‘s characters before extending a loan, Customers are comfortable with the loan period that the organization extends to them, Recovery of loans is influenced by interest rates charged on clients, To qualify to credit, prevailing economic conditions are considered and Payment of loan in time in the organization is determined by the reminders to customers. On the other hand the study established that the organization doesn’t require clients to make weekly deposit in order to avoid default.

This concurs with Kay Associates Ltd (2005) & Golden and Walker (1993) who contend that because of this risk of default in loan repayment, lenders needs to project into the future and make sound judgment that will ensure that repayment is effected at the agreed date. Available literature places so much importance on the lender’s role in ensuring good decisions relating to the granting of loans in order to minimize credit risk. The lender must always aim at assessing the extent of the risk associated with the lending and try to reduce factors that can undermine repayment. The lender should therefore assemble all the relevant information that will assist him/her in arriving at a sound credit decision.

5.2.2 Macroeconomic variables

The study revealed that, Average of the market is the most common method used by the respondents organizations to price their loans/credit facility, this was followed by policy rate + risk premium, Base rate + premium and finally Treasury Bill + risk premium. Weinberg (1995) also suggests that bank managers adjust lending standards as market conditions change, seeking to smooth overall lending risk.

The study further established that Government's restrictions on interest rates restrict the levels and types of participation by the organization in financial markets and prevailing inflation rates discourages lending to small borrowers. Moreover the study also found out that Government interventions could reduce the autonomy of micro-finance institutions since they have to comply with the government's policy, Restricting interest rates discourages savings and lending to small borrowers, Unprofitable special programs are often imposed on MFIs owned by the government, MFIs under government control may be under government pressure to expand their network in the rural area and expand credit to priority sectors without paying sufficient attention to loan recovery and that uncertainty in the domestic economy discourages lending to small borrowers. However interest payments were found to not often be remitted or loans are written off for political reasons and may create a culture of default in the organization. Studies conducted by Keeton and Morris (1987) on a sample of nearly 2,500 US commercial banks using simple linear regressions indicate that large portion of loan losses recorded by the banks ascribe to adverse local economic conditions along with the poor performance of certain sectors. Similar study by Sinkey and Greenwalt (1991) on large commercial banks in the United States from 1984 to 1987 by employing simple log-linear regression model and data also indicates that depressed regional economic conditions explain the loss-rate of the commercial banks. Other authors who looked at asset-price evidence also found a linkage between credit risk increases and adverse macroeconomic conditions (Mueller, 2000; Anderson and Sundaresan, 2000; Collin-Dufresne and Goldstein, 2001).

5.2.3 The Impact of Customer characteristics on Non-Performing Loans of Microfinance Institutions in Kenya

The study further revealed that the type of security/collateral often offered by borrowers to secure loans or overdraft include; Landed property, Cash (Fixed Deposit, S/A), Guarantee, vehicles, inventory, stocks and bonds, and equipment, machinery and equipment, fixtures, investment funding, chattel paper, and payment rights. Supporting of the aforementioned, Rose and Hudgins (2005) define secured lending in banks as the business where the secured loans have a pledge of some of the borrower's property (such as home or vehicles) behind them as collateral that may have to be sold if the borrower defaults and has no other way to repay the lender.

The study found out that the most common factor accounting for diversion of funds by borrowers was Lack of proper monitoring; this was followed by Anticipation of windfall profits in other business areas, under financing, Ignorance of lending terms and conditions and finally over financing. Furthermore the study revealed that as much as loans were being paid, default by customers was still happening.

The study found out that that the most influential Customer Characteristics on Non-Performing Loans of Microfinance Institutions were; Income of households, Inadequate monitoring, Poor credit appraisal, High interest rate, Used the loan for household expenses hence unable to repay the loan on schedule, Business Failure, Savings Non-compliance with credit policy account for NPLs, The Schedule and the Amount of Loan Installments, Business was not profitable, Profits, Diversion of funds, Age of the business, Lost their assets, Borrowers sold on credit and were not able to make repayments on time, Type of business, Gender, Business location, Flexibility for Borrowers to Use the Borrowed Money, Business manager, Number of employees, Willful default, Inadequate marketing avenues, Wrong timing of credit delivery and Delayed approval respectively. Microfinance Institutions rarely lose money solely because the initial decision to lend was wrong. Even where there are greater risks that the banks recognize, they only cause a loss after giving a warning sign (Machiraju). More banks lose money because they do not monitor their borrower's property, and fail to recognize warning signs early enough. When banks fail to give due attention to the borrowers and what they are doing with the money, then they will fail to see the risk of loss. The objective of supervising a loan is to verify whether the basis on which the lending decision was taken continues to hold good and to ascertain the loan funds are being properly utilized for the purpose they were granted.

The study determined that the most common aspect that forces borrowers to repay loan in time according to the respondents was Claim staked against guarantors, this was followed by Claim staked against their personal wealth, Supervision, advisory visits & training regarding loan utilization & repayment, Fear of losing future loan from the MFIs, Social sanctions especially fear of loss of status and Peer pressure. Goldstein and Turner (1996) stated " the accumulation of NPLs is generally attributable to a number of factors, including economic downturn, macroeconomic volatility, terms of trade deterioration, high interest rate, excessive reliance on overly high-priced inter-bank borrowings, insider borrowing and moral hazard.

5.3 Conclusions

The purpose of this study was to find out the factors that influence non-performing loans of microfinance institutions in Kenya. The study therefore addressed the following research question; what is the effect of institutional characteristics on non-performing loans of microfinance institutions in Kenya? what is the effect of customer characteristics on non-performing loans of microfinance institutions in Kenya? what is the effect of macroeconomic variables on non-performing loans of microfinance institutions in Kenya?. Accordingly, the study came to the following conclusions;

Institutional characteristics contribute most to the non-performing loans of microfinance institutions in Kenya followed by Macroeconomic variables and finally Customer characteristics. At 5% level of significance and 95% level of confidence, institutional characteristics, customer characteristics and macroeconomic variables were all found to be significant in influencing non-performing loans of microfinance institutions in Kenya.

The direct relationship between credit policy and loan recovery is the most influential Institutional Characteristics on Non-Performing Loans of Microfinance Institutions. The Average of the market is the most common method used by the respondents' organizations to price their loans/credit facility. Government's restrictions on interest rates restrict the levels and types of participation by the organization in financial markets. The study also concluded that Income of households is the most influential Customer Characteristics on Non-Performing Loans of Microfinance Institutions.

The study also concluded that preventive measures such as accurately assessing the credit capacity of clients through identifying which clients have stronger or weaker capacity to repay, categorize them accurately, then provide them with loan products that balance their varying credit limits is the most common method used in dealing with loan default problems. Morevoer, Claim staked against guarantors also forces borrowers to repay loan in time.

5.4 Limitations of the Study

As it has always been with most academic activities this research is not without limitations. Some of the limitations encountered during the entire research period are outlined below.

The study area was limited to the 52 MFI in Nairobi only and this could affect the generalizations of the findings.

The research constitutes a crosssectional snapshot based on 52 MFIs. We can neither trace the progress of the companies in our study nor estimate the potential lags between factors that influence non-performing loans of microfinance institutions in Kenya and the outcomes achieved by the firms. A longitudinal study would be necessary to overcome such limitations.

The sample size is far below the number of cases reported in other research, which has led in this case to a more complex data analysis. It would be advisable to replicate the study in broader contexts to confirm the underlying factors identified in this case.

Finally, the study also suffers from a common limitation in quantitative research: the use of subjective measures for the variables considered. However, it is widely reported in the literature that this procedure increases the response rate as well as that there is a high correlation between subjective and objective data on performance (Venkatraman and Ramanujan, 1986). The use of self-reported data may induce social desirability bias, although the assurance of anonymity can reduce such bias when responses concern sensitive topics (Hair et al., 1999).

5.5 Recommendations

5.5.1 Policy Recommendations

After close examination and analysis of the research findings, the following recommendations are suggested:

Microfinance Institutions in Kenya should put in place a vibrant credit process that would encompass issues of proper customer selection, robust credit analysis, authentic sanctioning process, proactive monitoring and follow up and clear recovery strategies for sick loans.

Microfinance Institutions in Kenya should put in place a clear policy framework that addresses issues of conflict of interest, ethical standards, check and balance in decision making process for all those involved in the credit process ensure its implementation thereof.

Microfinance Institutions in Kenya should pursue a balanced approach of profit maximization and risk management lest they engage in aggressive lending and unhealthy competition that would lead to selecting borrowers that would default.

Microfinance Institutions in Kenya should give due emphasis it takes to developing the competency of credit operators, information system management pertaining to credit and efficiency of the credit process. As loans would contribute to the development of an economy and its default leads to episode of huge loss on Microfinance Institutions in Kenya and a country; deliberate effort should be exerted in developing culture of the public towards credit and its management by individual Microfinance Institutions in Kenya, Kenya Public Financial Institutions Agency, CBK and others.

Prudence of policies that govern Microfinance Institutions in Kenya loans should continuously be ensured in light of international best practices, macroeconomic situations, level of development of Microfinance Institutions and the economy in general by CBK.

5.5.2 Recommendations for further studies

The focus of this study was on combined factors that influence non-performing loans of microfinance institutions in Kenya, it is, therefore, recommended that a similar study be conducted on these three factors independently i.e. institutional characteristics, customer characteristics and macroeconomic variables.

In addition, assessing the statistical relationship between all microfinance institutions specific factors and nonperforming loans in Kenya could be a future research agenda.

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APPENDIX I: LETTER OF INTRODUCTION

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
MBA PROGRAMME

Telephone: 020-2059162
Telegrams: "Varsity", Nairobi
Telex: 22095 Varsity

P.O. Box 30197
Nairobi, Kenya

DATE 31/7/2014

TO WHOM IT MAY CONCERN

The bearer of this letter JOSEPH KARIUKI NDUNGU

Registration No. D61/76118/2012

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
31 JUL 2014
P.O. Box 30197 – 00100, NAIROBI

PATRICK NYABUTO
MBA ADMINISTRATOR
SCHOOL OF BUSINESS

APPENDIX II: QUESTIONNARE

Section A: Demographic Data

(Tick where appropriate)

1. Gender

   Female [ ]

   Male [ ]

2. Marital Status

   Married [ ]

   Single [ ]

   Widow [ ]

   Divorced [ ]

3. Age

   Under 25 [ ]

   25-35 [ ]

   35-45 [ ]

   Above 45 [ ]

4. Level of Education

   Primary [ ]

   Diploma [ ]

   Bachelor’s Degree [ ]

Masters [ ]

Doctorate [ ]

Other (specify)……………………………..

5. What loan amount do clients ask for?

Less than 10,000 [ ]

Between 10,000 – 40,000 [ ]

Between 40,000 – 70,000 [ ]

Between 70,000 – 100,000 [ ]

Above 100,000 [ ]

Section B: The Impact of Institutional Characteristics on Non-Performing Loans of Microfinance Institutions in Kenya

6. How do you describe the interest rate charged by MFI?

Very high [ ]
High [ ]
Fair [ ]
Low [ ]
Very low [ ]

7. Of the loans disbursed to customers, they pay back

Less than 50% [ ]

50% [ ]

Between 50-75% [ ]

Between 75-100% [ ]

8. How do you deal with loan default problems?

Legal Action [ ]

Outsourcing (External solicitor/ Debt collectors) [ ]

Write off [ ]

Others (please specify)……………………………………………………………………….

9. Please indicate your level of agreement with the following statement concerning the extent to which Institutional Characteristics influence Non-Performing Loans of Microfinance Institutions. Where 1=strongly disagree, 2= disagree, 3= Neutral, 4= agree, and 5= strongly agree.

Institutional Characteristics	**1**	**2**	**3**	**4**	**5**
The organization considers client‘s characters before extending a loan.					
The organization considers customer‘s collateral before extending the loan to them.					
To qualify to credit, prevailing economic conditions are considered					
To access capital the organization considers the customer‘s financial status in order to loan to them.					
The organization assesses customer‘s capacity to pay back in order to qualify for the loan.					
The organization considers the trustworthiness of customers before extending a loan to them.					
The organization requires clients to make weekly deposit in order to avoid default					
Customers face penalties if they don‘t pay the loan in time					
Customers are comfortable with the loan period that the organization extends to them					
The loan size that the organization extends to clients is good					
Payment of loan in time in the organization is determined by the reminders to customers.					
Recovery of loans is influenced by interest rates charged on clients.					

The loan period given to customers affect loan recovery in the organization					
The loan amount extended to customers affects the loan recovery in the organization.					
Loan officers in the organization are trained to recover loans from clients.					
There is a direct relationship between credit policy and loan recovery.					
Effective management information systems in the organization enhances tracking payments, due loans, and overdue loans in order to systematically monitor loan performance.					

Section C: The Impact of Macroeconomic variables on Non-Performing Loans of Microfinance Institutions in Kenya

10. How do you price your loans/credit facility?

Treasury Bill + risk premium [ ]

Policy rate + risk premium [ ]

Base rate + premium [ ]

Average of the market [ ]

Other …………………………………………………………..

11. Please indicate your level of agreement with the following statement concerning the extent to which Macroeconomic variables influence Non-Performing Loans of Microfinance Institutions. Where 1=strongly disagree, 2= disagree, 3= Neutral, 4= agree, and 5= strongly agree.

Macroeconomic variables	**1**	**2**	**3**	**4**	**5**
Government's restrictions on interest rates restrict the levels and types of participation by the organization in financial markets					
Restricting interest rates discourages savings and lending to small borrowers					

Prevailing inflation rates discourages lending to small borrowers					
Uncertainty in the domestic economy discourages lending to small borrowers					
Unprofitable special programs are often imposed on MFIs owned by the government					
Interest payments are often remitted or loans are written off for political reasons and may create a culture of default in the organization					
MFIs under government control may be under government pressure to expand their network in the rural area and expand credit to priority sectors without paying sufficient attention to loan recovery					
Government interventions could reduce the autonomy of micro-finance institutions since they have to comply with the government's policy					

Section D: The Impact of Customer characteristics on Non-Performing Loans of Microfinance Institutions in Kenya

12. What type of security/collateral is often offered by borrowers to secure loans or overdraft?

Landed property [ ]

Cash (Fixed Deposit, S/A) [ ]

Guarantee [ ]

Other please, specify …………………………………….

13. Which of the following factors account for diversion of funds by borrowers?

Lack of proper monitoring [ ]

Ignorance of lending terms and conditions [ ]

Over financing [ ]

Under financing [ ]

Anticipation of windfall profits in other business areas [ ]

14. What is the Status of the current customers loans?

Fully repaid [ ]

Repayment on schedule [ ]

Repayments in arrears [ ]

Other……………………………………………………………………

15. Please indicate your level of agreement with the following statement concerning the extent to which Customer characteristics influence Non-Performing Loans of Microfinance Institutions. Where 1=strongly disagree, 2= disagree, 3= Neutral, 4= agree, and 5= strongly agree.

Customer characteristics	**1**	**2**	**3**	**4**	**5**
Type of business					
Age of the business					
Number of employees					
Business location					
Business manager					
Gender					
Profits					
Savings					
Income of households					
The Schedule and the Amount of Loan Installments					
Flexibility for Borrowers to Use the Borrowed Money					
Business Failure					
Poor credit appraisal					
Inadequate monitoring					
High interest rate					
Inadequate marketing avenues					
Willful default					
Diversion of funds					
Wrong timing of credit delivery					
Non-compliance with credit policy account for NPLs					
Delayed approval					
Business was not profitable					
Used the loan for household expenses hence unable to repay the loan on schedule					
Borrowers sold on credit and were not able to make repayments on time					
Lost their assets					

16. Which of the following aspects force borrowers to repay loan in time?

Claim staked against their personal wealth [ ]

Claim staked against guarantors [ ]

Social sanctions especially fear of loss of status [ ]

Fear of losing future loan from the MFIs [ ]

Supervision, advisory visits & training regarding loan utilization & repayment [ ]

Peer pressure

Others ………………………………………………………………………………….

THANKYOU FOR YOUR COOPERATION!!

APPENDIX III: MICROFINANCE INSTITUTIONS IN KENYA

1	AAR Credit Services	27	Kenya Women Finance Trust
2	ADOK TIMO	28	Kenya Women Holding
3	Agakhan First Microfinance Agency	29	Kilimo Faida
4	Barclays Bank of Kenya Ltd	30	Mega Microfinance Limited
5	Biashara Factors Limited	31	MESPT
6	BIMAS	32	Micro Africa Limited
7	Blue Limited	33	Microensure Advisory Services
8	Canyon Rural Credit Limited	34	Molyn Credit Limited
9	Chartis Insurance	35	Muramati SACCO Society Ltd
10	CIC Insurance	36	Oikocredit
11	Co-operative Bank	37	One Africa Capital Limited
12	ECLOF Kenya	38	Opportunity International
13	Elite Microfinance	39	Programme (PAWDEP)
14	Equity Bank	40	Rafiki Deposit Taking Microfinance Ltd
15	Faulu Kenya DTM Limited	41	Remu DTM Limited
16	Fusion Capital Ltd	42	Assistance
17	Greenland Fedha Limited	43	Rupia Limited
18	Jamii Bora Bank	44	Select Management Services Limited
19	Jitegemea Credit Scheme	45	SISDO
20	Jitegemee Trust Limited	46	SMEP DTM Limited
21	Juhudi Kilimo Company Limited	47	Swiss Contact
22	K-Rep Bank Ltd	48	Taifa Option Microfinance
23	K-Rep Development Agency	49	U & I Microfinance Limited
24	KADET	50	Uwezo DTM Limited
25	Kenya Entrepreneur Empowerment Foundation	51	Yehu Microfinance Trust
26	Kenya Post Office Savings Bank	52	Youth Initiatives - Kenya (YIK)

Source: Association of Microfinance Institutions of Kenya-2013

APPENDIX IV: DATA ON INSTITUTIONAL CHARACTERISTICS

Institutional Characteristics	**Mean**	**Std Dev**
The organization requires clients to make weekly deposit in order to avoid default	2.02	0.213
Payment of loan in time in the organization is determined by the reminders to customers.	3.39	0.011
To qualify to credit, prevailing economic conditions are considered	3.42	0.411
Recovery of loans is influenced by interest rates charged on clients.	3.61	0.349
Customers are comfortable with the loan period that the organization extends to them	3.78	0.148
The organization considers client‘s characters before extending a loan.	3.86	0.116
The loan period given to customers affect loan recovery in the organization	3.91	0.412
The organization considers customer‘s collateral before extending the loan to them.	3.97	0.342
To access capital the organization considers the customer‘s financial status in order to loan to them.	3.99	0.521
The organization considers the trustworthiness of customers before extending a loan to them.	4.00	0.176
The organization assesses customer‘s capacity to pay back in order to qualify for the loan.	4.02	0.336
The loan amount extended to customers affects the loan recovery in the organization.	4.03	0.114
Customers face penalties if they don‘t pay the loan in time	4.08	0.114
The loan size that the organization extends to clients is good	4.11	0.332
Effective management information systems in the organization enhances tracking payments, due loans, and overdue loans in order to systematically	4.16	0.132
Loan officers in the organization are trained to recover loans from clients.	4.24	0.159
There is a direct relationship between credit policy and loan recovery.	4.36	0.148

APPENDIX V: DATA ON MACROECONOMIC VARIABLES

Macroeconomic variables	Mean	Std Dev
Interest payments are often remitted or loans are written off for political reasons and may create a culture of default in the organization	2.96	0.029
Uncertainty in the domestic economy discourages lending to small borrowers	3.41	0.208
MFIs under government control may be under government pressure to expand their network in the rural area and expand credit to priority sectors without paying sufficient attention to loan recovery	3.72	0.252
Unprofitable special programs are often imposed on MFIs owned by the government	3.87	0.111
Restricting interest rates discourages savings and lending to small borrowers	3.96	0.367
Government interventions could reduce the autonomy of micro-finance institutions since they have to comply with the government's policy	3.99	0.036
Prevailing inflation rates discourages lending to small borrowers	4.03	0.196
Government's restrictions on interest rates restrict the levels and types of participation by the organization in financial markets	4.10	0.241

APPENDIX VI: DATA ON CUSTOMER CHARACTERISTICS

Customer characteristics	**Mean**	**Std Dev**
Delayed approval	3.49	0.361
Wrong timing of credit delivery	3.55	1.131
Inadequate marketing avenues	3.56	0.913
Willful default	3.64	0.948
Number of employees	3.65	0.746
Business manager	3.69	0.971
Flexibility for Borrowers to Use the Borrowed Money	3.71	0.308
Business location	3.74	0.808
Gender	3.78	1.133
Type of business	3.96	0.834
Borrowers sold on credit and were not able to make repayments on time	3.99	0.649
Lost their assets	3.99	0.731
Age of the business	4.02	0.721
Diversion of funds	4.05	0.102
Profits	4.06	0.310
Business was not profitable	4.08	0.156
The Schedule and the Amount of Loan Installments	4.09	0.322
Non-compliance with credit policy account for NPLs	4.11	0.285
Savings	4.12	0.310
Business Failure	4.15	0.156
Used the loan for household expenses hence unable to repay the loan on schedule	4.22	0.322
High interest rate	4.23	0.275
Poor credit appraisal	4.29	0.245
Inadequate monitoring	4.31	0.102
Income of households	4.45	0.125