



**INFLUENCE OF CREDIT MANAGEMENT ON THE LOAN PERFORMANCE AMONG
MICROFINANCE INSTITUTIONS IN KENYA**

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ABSTRACT

Effective management of credit is essential to the long term success of any microfinance institution, since they generate most of their income from interest earned on loans extended to small and medium entrepreneurs. This study sought to establish the influence of credit management on the loan performance of deposit taking microfinance institutions in Kenya. The objectives of the study were to: establish the influence of risk management and the effect of interest rates, on loan performance of microfinance institutions. The study adopted descriptive survey research design .The target population of this study was taken from 6 selected MFIs located in Nairobi. The study sampled the credit officers of these institutions using stratified random sampling technique .The data was collected by use of structured questionnaires. A pilot survey was conducted with a sample size of 10 credit officers from these 6 MFIs. Data was analysed through descriptive statistics and regression analysis. Presentation of findings was done using tables. The research revealed that risk management and the interest rate, affect the loan performance. The study recommended that MFIs recognize the need for proper risk management strategies. It also recommended that the MFIs review the interest charged and make them favorable among the customers. This will increase the competitive advantage among the competitors and thus increase the clientele. The findings also recommend that the MFIs review their operational costs and minimize them since they make up the single largest component of the expenses. The research further recommended that MFIs should develop credit terms that are customer friendly and customer centered. This will enable more customers take up loans and also improve the repayment rate of the loans. It also recommended that the MFIs develop collateral demands that the clients can meet.

Key Words: *Credit Management, Loan Performance, Microfinance*

INTRODUCTION

According to Asiedu-Mante (2011) credit management involves establishing formal legitimate policies and procedures that will ensure that proper authorities grant credit, the credit goes to the right people, the credit is granted for the productive activities or for businesses which are economically and technically viable, the appropriate size of credit is granted, the credit is recoverable and there is adequate flow of management information within the organization to monitor the credit activity. Credit management is the process for controlling and collection of payments from customers. This is the function within financial services to control credit policies that will improve revenues and reduce financial risks (Pandey, 2008).

Schreiner & Colombet (2001) define microfinance as the attempt to improve access to small deposits and small loans for poor households neglected by banks. Microfinance involves the provision of financial services such as savings, loans and insurance to poor people living in both urban and rural settings who are unable to obtain such services from the formal Banks (Besley, 2002). The World Bank defines microfinance as “ Small-scale financial services, primarily credit and savings provided to people who farm or fish and who operate small enterprises or microenterprises where goods are produced, recycled, repaired, or sold; who provide services; who work for wages or commissions; who gain income from renting out small amounts of land, vehicles, draft animals, or machinery and tools; and to other individuals and groups at the local levels of developing countries, both rural and urban” (Robinson, 2001).

The Kenyan Microfinance Industry (MFI) is one of the oldest and well established in Africa (Association of Microfinance Institution, AMFI

2010). Two of the current six to ten big players in the MFI market in Kenya started operating as early as the 1980s: the Kenyan Rural Enterprise Program (K-Rep) and Kenya Women’s Finance Trust (KWFT). K-Rep initially focused on lending funds provided by USAID and other donors to smaller organisations such as the National Council of Churches in Kenya (NCCCK), KWFT, among others. Some of these organisations have evolved over time to become commercialized, self –sustaining and hugely profitable institutions. Microfinance Institutions (MFIs) offer loans, insurance, money transfer services, take savings and offer technical assistance to low income earners, business development to low income community in developing countries like Kenya (AMFI, 2010).

Microfinance is an effective tool to fight poverty by providing financial services to those who do not have access to or are neglected by the commercial banks and other financial institutions. The poor, having no or very little income, cannot offer any collateral which banks require, have no credit history, banks are too far away to verify and observe their behaviour (there is little information) and the loans are generally far too small compared to transaction costs (Dokulilova et al, 2009).The potential of using institutional credit and other financial services for poverty alleviation in Kenya is quite significant.

Statement of the Problem

Microfinance Institutions and other finance institutions must develop a credit policy to govern their credit management operations (Pandey, 2008) and since microfinance institutions generate their revenue from credit extended to low income individuals in the form of interest charged on the funds granted (Central Bank Annual Report, 2010) the loan repayments may be uncertain. The prudent

management of credit can minimize operational risk while securing reasonable returns (NBE, 2010). The Central Bank of Kenya Annual Supervision Report, 2010 indicated high incidences of credit risk reflected in the rising levels of non-performing loans by the MFIs in the last 10 years, a situation that has adversely impacted on their profitability for example in 2007 loan default was at its highest at Kshs 1,195,279,678. This trend not only threatens the viability and sustainability of the MFIs but also hinders the achievement of the goals for which they were formed namely to provide credit to the rural unbanked population and bridge the financing gap in the mainstream financial sector.

According to the AMFI supervision report for 2011, loans disbursed to members accounted to three quarters of the total assets. The quality of loans has therefore been a challenge as the average gross non-performing loans (NPL) stood at 9.6% for the licensed MFIs contrary to the AMFI prudential guidelines which provide that the level of non-performing debts should not be more than five percent. This level of NPL is very high and underlines the need for the MFIs subsector to enforce credit policies to minimize credit risk.

Mwangi (2010) did a study on the factors affecting microfinance credit risk management practices in Kenya and Nyakeri (2012) did a study on the effect of credit management practices on the financial performance in SACCO. However there is no record available to the study of influence of credit management on the loan performance of MFIs.

The Objectives of the Study

The main purpose of the study was to establish the influences of credit management on the loan performance among Microfinance Institutions in Kenya. This was supported by the objectives that; To establish the effect of

risk management and interest rates on the loan performance in the microfinance institutions.

Research Questions

- i. What are the risk management and how it affects the loan performance of the microfinance institution?
- ii. How credit interest rates of microfinance institution cater for the risk and how it affects the loan performance?

Scope of the Study

The research was limited to Nairobi Central Business District which was selected for the purpose of this study. The study covered the influence of credit management on the loan performance of Microfinance Institutions.

LITERATURE REVIEW

Theoretical Framework

a) Adverse Selection Theory of Credit Markets

In the study this theory explains the effect of the financial risk, and the interest on the credit. The adverse selection theory of credit markets originates with the paper by Stiglitz and Weiss (1981). The theory rests on two main assumptions: that lenders cannot distinguish between borrowers of different degrees of risk, and that loan contracts are subject to limited liability (that is, if the project returns are less than debt obligations, the borrower bears no responsibility to pay out of pocket).

The analysis is restricted to involuntary default, that is, it assumes that borrowers repay loans when they have the means to do so. In a world with simple debt contracts between risk-neutral borrowers and lenders, the presence of limited liability of borrowers

imparts a preference for risk among borrowers, and a corresponding aversion to risk among lenders. This is because limited liability on the part of borrowers implies that lenders bear all the downside risk. On the other hand, all returns above the loan repayment obligation accrue to borrowers.

Raising interest rates then affects the profitability of low risk borrowers disproportionately, causing them to drop out of the applicant pool. This leads to an adverse compositional effect higher interest rates increase the average riskiness of the applicant pool. At very high interest rates, the only applicants are borrowers who could potentially generate very high returns (but presumably with small probability). Since lenders' preferences over project risk run counter to those of borrowers, they may hold interest rates at levels below market-clearing and ration borrowers in order to achieve a better composition and lower risk in their portfolio. Excess demand in the credit market may persist even in the face of competition and flexible interest rates.

b) Credit Default Theory

Credit default theory is mainly intended for use to estimate expected losses through an understanding of the causes of credit default. In practice a loss from a given default often involves lengthy delays (of months or even years) either in a sale of the collateralised asset or in a sale of that asset to a debt collector for loan value recovery or in making a claim from an insurer. The practical definition of a default as a delinquency with a time lag is therefore merely to provide an early recognition of potential loss and the time lag may vary from country to country due to cultural and legal differences. There is no compelling research to suggest a particular delinquency period: 30-days, 90-days or 180-days which will optimise

the trade-off between timeliness in the warning of a loss and the likelihood of an actual loss from default. Therefore there is a need to make a distinction between the current practical definitions of default and a theoretical definition, which is necessary to create a credit default theory. A successful credit default theory should be able to estimate the optimal delinquency time lag which is likely to indicate significant expected loss in any given jurisdiction. For an unsecured loan such as a credit card loan, for such loans have very low payment obligations so that delinquency rates and therefore default rates are substantially less than what one would expect. Indeed lenders of unsecured loans seek to obtain substantial gains from charging high interest rates on outstanding balances after the minimum payment obligations have been made. The loss given default when the borrower is unable to even make the minimum payment obligation will depend on the debt collection process and other cultural and legal factors. In this study this theory explains the effect of credit terms on the performance of microfinance.

Empirical Literature

The microfinance institutions participation in several developing economies is escalating from time to time. Various studies on different countries on the performance of the MFIs confirm this (Robert, 2007). For example, in Bangladesh a microfinance institution called Grameen Bank at the end of 2000 reported 2.4 million members, where 95 percent of them are women, with \$225 million outstanding loan. In addition, Thailand also has reported impressive outreach through agricultural lending by the Bank for Agriculture and Agricultural Cooperative (Meyer 2002). In general, a lot number of microfinance institutions have registered impressive outreach in several developing economies

including India, Cambodia, Kenya and others (Meyer 2002). Similarly, Aklilu (2002) reviews the importance of micro finance institutions in developing economies based on countries' experiences. In the review she suggested for promotion of the existing well developed institution to facilitate growth of formal MFIs.

In Kenya, Mwangi (2010) conducted a study on factors affecting microfinance institution credit risk management practices in Kenya. The specific objectives of the study were the effects of market concentration, portfolio quality and market infrastructure on microfinance credit risk. The study established that the market concentration, portfolio quality and market quality affect the microfinance credit risk. Nyakeri (2012) conducted a study on the effect of credit management practices of financial performance in saving credit cooperatives in Nairobi. The specific objectives for the study were credit scoring, loan portfolio, credit risk analysis and credit approval process. The study established that credit risk analysis improves the loan portfolio, profitability and returns of the microfinance institution.

Conceptual Framework

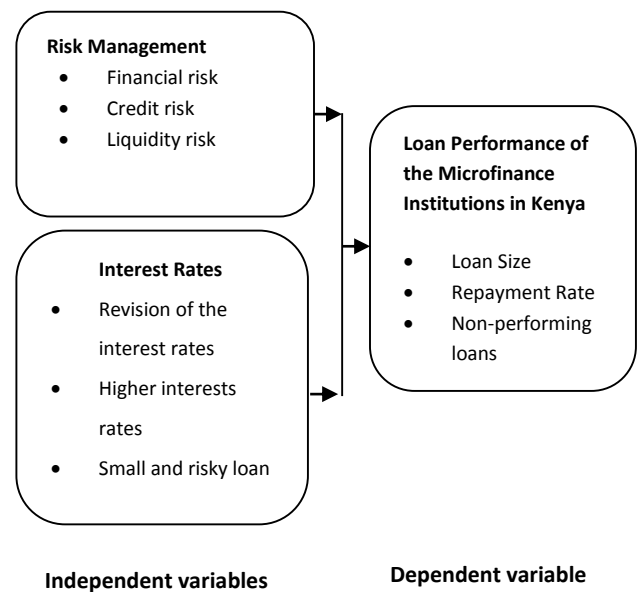


Figure 2.1: Conceptual Framework

a) Risk management

Majority of financial institutions in Kenya have recognized the importance of proper risk management by setting up independent and well funded risk management functions, a new survey indicates (CBK 2010). The Risk Management Survey, 2010 launched by Central Bank of Kenya indicated that there is enhanced risk awareness and risk management at 95 percent of the institutions hence improved efficiency and effectiveness of risk management. Risk management has helped to enhance the overall decision making processes and in reducing financial losses in 90 percent of the institutions.

Financial Risks

Financial risks begin with the possibility that a borrower may not pay the loan on time with interest (credit risk) and because an MFI's loan portfolio is its most valuable asset, the financial risks which include credit, market, and liquidity risks are of greatest concern (Greung & Bratanovic, 2000). The business of a

financial institution is to manage financial risks, which include credit risks, liquidity risks, interest rate risks, foreign exchange risks and investment portfolio risks (Steinwand, 2000). Most microfinance institutions have put most of their resources into developing a methodology that reduces individual credit risks and maintaining quality portfolios. Microfinance institutions that use savings deposits as a source of loan funds must have sufficient cash to fund loans and withdrawals from savings. Those MFIs that rely on depositors and other borrowed sources of funds are also vulnerable to changes in interest rates. Janney & Lynn, 2000 noted that, financial risk management requires a sophisticated treasury function, usually centralized at the head office, which manages liquidity risk, interest rate risk, and investment portfolio risk. As MFIs face more choices in funding sources and more product differentiation among loan assets, it becomes increasingly important to manage these risks well (Greung & Bratanovic, 2000).

Credit risk

Credit risk is defined as the change in the value of the asset portfolio of a bank, due to the failure of an obligor to meet his payment commitments (CBK, 2005). The risk attributable to loan default leads to high effective borrowing rates, through a risk premium that varies with the exposure to default. This is because a microfinance institution has to undergo costs to carefully evaluate and closely monitor the risk, especially in an environment where probability of default is high (Parlour & Winton, 2008).

In Kenya, credit risk is a real threat to the microfinance industry due to the fact that loan portfolios form the largest part of the balance sheet items (CBK, 2005). Credit risk encompasses both the loss of income resulting

from the MFI's inability to collect anticipated interest earnings as well as the loss of principle resulting from loan defaults (Steinwand, 2000). Janney & Lynn, (2000) said that, Management must continuously review the entire portfolio to assess the nature of the portfolio's delinquency, looking for geographic trends and concentrations by sector, product and branch.

Omino (2005) puts emphasis on sound development of microfinance institutions as vital ingredients for investments, employment and to spur the economic growth. As a result of their flexibility and the way they operate, they are exposed to various risks which include financial risks, operational risks and strategic risks. And as competition increases and the sector mature, MFIs are faced with numerous risks as highlighted above and the sector must mitigate the risks in order to sustain the business and remain relevant in the long run (Omino, 2005).

Given the ever dynamic and challenging business environment, a Micro Finance Institution (MFI) is bound to be exposed to various risks. The problem is that Micro Finance Institutions that don't adapt and/or institutionalize financial risk management strategies are likely to witness poor growth patterns compared with those that adapt financial risk management strategies.

The threat that MFIs may experience stunted growth or collapse as a result of poor financial risk management is not without any basis. The threat is so real such that some well-known MFIs have collapsed in the past. In 2005, for example, government regulators in Kenya closed Akiba Micro Finance on the grounds that it had unlawfully taken customers' deposits and reneged on the repayments (Ellis, 2007). The report by the Task force on Pyramid Schemes (2008) was formed to investigate the collapse of pyramid schemes in

Kenya (pyramids are a form of microfinance). The taskforce found that Kenyans lost more than Sh34 billion to schemes such as Developing Enterprise Community Initiative (DECI).

Liquidity risk

Liquidity risk is the possibility of negative effects on the interests of owners, customers and other stakeholders of the financial institution resulting from the inability to meet current cash obligations in a timely and cost-efficient manner. Liquidity risk usually arises from management's inability to adequately anticipate and plan for changes in funding sources and cash needs. Jain, (1997) emphasizes that, efficient liquidity management requires maintaining sufficient cash reserves on hand (to meet client withdrawals, disburse loans and fund unexpected cash shortages) while also investing as many funds as possible to maximize earnings (putting cash to work in loans or market investments).

Susan ,(1996) states that ,a lender must be able to honor all cash payment commitments as they fall due and meet customer requests for new loans and savings withdrawals. These commitments can be met by drawing on cash holdings, by using current cash flows, by borrowing cash, or by converting liquid assets into cash. Jain, (1997) emphasizes that, liquidity management is not a one-time activity in which the MFI determines the optimal level of cash it should hold. Liquidity management is an ongoing effort to strike a balance between having too much cash and too little cash.

If the MFI holds too much cash, it may not be able to make sufficient returns to cover the costs of its operations, resulting in the need to increase interest rates above competitive levels. If the MFI holds too little cash, it could face a crisis of confidence and lose clients who

no longer trust the institution to have funds available when needed. Joakim, (2000), states that, effective liquidity management protects the MFI from cash shortages while also ensuring a sufficient return on investments. Effective liquidity risk management requires a good understanding of the impact of changing market conditions and the ability to quickly liquidate assets to meet increased demand for loans or withdrawals from savings.

b) Interest Rate

Interest rate charged on the credit is the cost of funds plus margin that is costs include operating costs, the cost of funds, and expected loan losses. Operating costs include office space and supplies, employee remuneration and training, transportation and communications, and equipment and building depreciation, among others. Operational costs often make up the single largest component of the rates MFIs charge borrowers. In a 2002 study, operating (also called administrative) costs were between 10 and 25 percent of the average loan portfolio. In a 2007 study, average operating expenses for 894 MFIs in 94 countries were around 19.2 percent of a loan portfolio (MIX 2007; Rosenberg 2002).

Lowering the Interest Rate at the Microfinance Institution

Many MFIs can achieve substantially lower rates. Operating costs are both the largest and the most manageable component of interest rates, and efficiency gains at the institutional level could significantly lower rates for the industry as a whole. MFIs can use a number of technological innovations and tactics, better manage risk, and reduce administrative costs, (Mike & Erick 2010). Operational risks generally pose the greatest potential threat of loss to an MFI. They include credit risk, and the risk of fraud and theft. MFIs can often greatly reduce the likelihood of losses and contain the scale of their damages by identifying

vulnerabilities, designing and implementing controls, and monitoring their effectiveness (CGAP, 2008).

One particularly important way an MFI can reduce the risk of loan losses and generate higher productivity per officer is to create appropriate incentives for loan officers to maintain large and healthy loan portfolios. There are many ways to design an incentive program. For example, the MFI can offer a bonus for each successful loan repayment, or it can target specific productivity measures, like number of clients visited per day. CGAP, (2009) noted that in, the MFI's management information system is its system of collecting, archiving, retrieving, and using information. The system tracks the loan officers' productivity and clients' repayment schedules and balances, among other things. A good information system is vital for making timely assessments of the quality of the loan portfolio and other variables that most affect cost and risk.

Lowering the Interest through Government Policy

Governments can enable significant efficiency gains in microfinance markets by promoting the sharing of credit information, increasing institutional access to the electronic payments systems, and enabling innovations in payments technologies. As important, governments should enforce laws that protect against money laundering and other financial crimes (Christen, Lyman, & Rosenberg, 2003). Finally, governments can create an enabling environment for a sustainable and competitive microfinance sector by ensuring a stable macroeconomic environment and allowing the entrance of foreign competitors into the financial markets (World Bank, 2008).

Critique of the Existing Literature

Scholarly interest in microfinance has lagged behind industry development, but it too is now

growing rapidly. Before 1997, academic journals published only an occasional article on microfinance, but since that time, academic journals have published hundreds of peer-reviewed articles on the topic. Nonetheless, microfinance has yet to break into finance journals. This despite the term finance in microfinance and the fact that the basic products offered by microfinance institutions (MFIs)—namely investing (savings), lending (credit services), and insurance (risk management)—are all well-established topics of mainstream finance research (Brau & Woller 2004)

An important area of financial research that has yet to be rigorously explored but which has significant potential is the feasibility of introducing microfinance into the world capital markets. With the high repayment rates of many MFIs, there exists the potential to tap MFIs into world capital markets through instruments such as commercial banks loans, commercial paper, bond financing, equity financing, or through the bundling and securitization of MFI loans. Determining avenues to permit investment in MFIs via capital markets is an area of research that seems tailored to the tools and theory of finance academics.

Research Gap

Globally, Goldberg and Palladini (2010) Managing Risks and Creating Value with Microfinance (2009) did a study on microfinance meets the market; Walsh (2010) conducted a study on Assessments on the credit management process of credit union. In Kenya, Mwangi (2010) did a study on the factors affecting microfinance credit risk management practices in Kenya and Nyakeri (2012) did a study on the effect of credit management practices on the financial performance in SACCO. However, none of

these studies focused on influences of credit management on the loan performance of deposit taking microfinance institutions in Kenya. In addition, none of these studies focused on risk management and interest rates, which were the variables in this study.

RESEARCH METHODOLOGY

Research Design

The study adopted a descriptive survey method because it is efficient in collecting large amounts of information within a short time. In addition, the study incorporated both qualitative and quantitative research.

Population

The population that was used in this study were the credit staff working in the headquarters of the 6 licensed deposit taking microfinance institutions in Nairobi Region. According to CBK (2012) licensed deposit taking MFIs include UWEZO Deposit Taking Microfinance Limited SMEP Deposit Taking Microfinance Limited, Remu DTM Limited, Rafiki Deposit Taking Microfinance, Kenya Women Finance Trust DTM Limited and Faulu Kenya DTM Limited.

Table 1: Target Population

	Target Population
Credit Managers	6
Senior Credit Officers	18
Credit Officers	62
Total	86

Sample and Sampling Technique

Stratified random sampling was used to select the target population; the study selected a sample of respondents from the total population by use of sampling formula derived by Krejcie (1970) , which gave a sample of 46 respondents.

Table 2: Sample Population

	Target Population	Sample Size	Percentage
Credit Managers	6	4	9
Senior Credit Officers	18	10	21
Credit Officers	62	32	70
	86	46	100

3.5 Instrument for Data Collection

The main data collection instrument which was employed in this study was the use of questionnaires. The design included multiple-choice questions; fill in questions and questions that required ranking of answers. The questions were clearly simplified and structured in a manner void of any ambiguity and technical details.

Data Analysis and Presentation

The data collected from the respondents was verified and checked for reliability, then analyzed using SPSS (Software Package for Social Sciences) version 20. Multiple linear regression method was applied. The goal of the multiple linear regressions was to point out the relationship between a dependent variable and the independent variable. With the help of the multiple linear regressions it was possible to determine to what extent a part of the total variation of the dependent variable was influenced by the variation of the independent variable.

Finally, regression assumptions was tested and controlled. Inference about the test would be based on a significant level which was obtained from the test. Thus, whenever the amount of the significant level is less than 5 percent, it won't be accepted.

Linear Regression Model

The study will adopt the following linear regression model

$$Y_g = B_0 + B_1X_1 + B_2X_2$$

Y_g = Loan Performance

$B_0, B_1, \text{ and } B_2$, = Coefficients

X_1 , = Risk Management

X_2 , = Interest Rate

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

Response rate

The study had a sample of the 46 credit officers working in MFIs. Out of the 46, responses were obtained from 34 of them. This translated to a response rate of 74%. According to Mugenda and Mugenda (2008) the statistically significant response rate for statistical analysis should be at least 50%.

Gender of the Respondent

The respondents were asked to indicate their gender. The responses obtained showed that

Out of the respondents that responded 53% were male while 47% were female.

Level of Education

The respondents were asked to state their highest level of education. The findings showed that the respondents that had college diplomas as their highest level of education were 12%, 26% had university degrees, 38% had masters' degree as their highest level of education while 9% had PhDs. Those who had other qualifications were 15%. Among the listed qualifications were all certified in professional courses such as CPA, ACCA and CISA.

Years Worked For Organization

The findings showed that the respondents that had worked for their respective organizations

had worked for less than 5 years, 26% had worked for 5-10 years, 32% had worked for 11-15 years while 24% had worked for above 15 years. This shows that the respondents were all qualified to answer the questions as they were familiar with the company operations.

Years worked in the Credit department

The respondents were asked how long they had worked in the credit department, the findings showed that the respondents that had worked in the credit department for less than 5 years were 26%, 18% had worked for 5-10 years, 35% had worked for 11-15 years and 21% had worked for above 15 years. These findings indicate that all the respondents have worked in the credit department and thus would be familiar with the study objectives and the purpose of the study.

Study Variables

a) Risk Management

Risk Management Strategies

The study sought to establish whether the organizations have any risk management strategies in place. All the respondents said that their organization had risk management strategies.

Influence of Risk management

The respondents were asked to rate the extent to which they agree on the statement below on the influence of risk management. The responses are shown in table 3.

Table 3: Influence of Risk Management

	Mean	Std.Dev
The institution has set up well funded risk management functions	1.822	0.241
There is enhanced risk awareness among lenders	1.254	0.443

Risk strategies are followed in disbursement of credit	1.441	0.145
The institution conducts thorough risk assessment on the potentials clients	1.882	0.311
The institution has set up fund to cater for the risks that the institution may incur in its transactions	1.356	0.142

Source: Research data

On whether the organization has set up well funded risk management functions the respondents agreed with a mean of 1.822 and a deviation of 0.241. Asked whether there is enhanced risk awareness among lenders the respondents strongly agreed with a mean of 1.254 and a deviation of 0.443. On whether the institution has mitigation strategies, the respondents strongly agreed with a mean of 1.441 and a deviation of 0.145. On whether the risk strategies are followed in disbursement of credit, the respondents agreed with a mean of 1.882 and a deviation of 0.311. On whether the institution conducts through risk assessment on the potentials clients the respondents agreed with a mean of 1.882 and a deviation of 0.311. On whether the institution has set up fund to cater for the risks that the institution may incur in its transactions the respondents agreed with a mean of 1.356 and a deviation of 0.142. Credit risk is defined as the change in the value of the asset portfolio of a bank, due to the failure of an obligor to meet his payment commitments (CBK, 2005). The risk attributable to loan default leads to high effective borrowing rates, through a risk premium that varies with the exposure to default.

The respondents rated the effects of the risks. The responses are in table 4.

Table 4: Effect of risks

	Mean	Std. Dev
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Financial Risk	1.024	0.114
Credit Risk	1.221	0.008
Operational Risks	1.531	0.102
Strategic Risks.	1.228	0.362
Liquidity Risk	1.382	0.145
Interest Rate Risk	1.421	0.144
Investment Portfolio Risk	1.338	0.324

Source: Research data

The respondents said that Financial Risk affects with a mean of 1.024 and a deviation of 0.114. Credit Risk affects to a great extent with a mean of 1.221 and a deviation of 0.008. Financial risks begin with the possibility that a borrower may not pay the loan on time with interest (credit risk) and because an MFI's loan portfolio is its most valuable asset, the financial risks which include credit, market, and liquidity risks are of greatest concern (Greung & Bratanovic, 2000). The respondents said that operational risks affect to a great extent with a mean of 1.531 and deviation of 0.102. Strategic Risks affect to a great extent with a mean of 1.228 and a deviation of 0.362. On liquidity Risk the respondents said it affected to a great extent with a mean of 1.382 and a deviation of 0.145. Liquidity risk is the possibility of negative effects on the interests of owners, customers and other stakeholders of the financial institution resulting from the inability to meet current cash obligations in a timely and cost-efficient manner. The Interest Rate Risk affects to a very great extent with a mean of 1.421 and a deviation of 0.144. Investment Portfolio Risk affects to a great extent with a mean of 1.338 and a deviation of 0.324.

b) Interest Rates

The respondents were asked whether in their own opinion there is interest rate charged on a loan. All the respondents said yes. The study sought to determine the extent to which the respondents agreed with the statements

below on the interest rates. The findings are shown in table 5.

Table 5: Interest Rate

	Mean	Std.Dev
In my institution the interest rate charged on the credit is the cost of funds plus margin	1.226	0.001
In my institution the operational costs often make up the single largest component of the rates MFIs charge borrowers	1.025	0.142
The institutions has a flexible interest rate policy that caters to different loan amounts	1.254	0.113

Source: Research data

On whether in their institution the interest rate charged on the credit is the cost of funds plus margin that is costs include operating costs, the cost of funds, and expected loan losses, the respondents said to a very great extent with a mean of 1.226 and a deviation of 0.001. Asked whether in their institution the operational costs often make up the single largest component of the rates MFIs charge borrowers, the respondents strongly agreed with a mean of 1.025 and a deviation of 0.142. On whether the institutions has a flexible interest rate policy that caters to different loan amounts, the respondents said to a very great extent with a mean of 1.254 and a deviation of 0.113.

c) Loan Performance

The respondents were asked what the institutions loan size for the last three years has been. The findings are shown in the table 6.

Table 6: Loan Size

Years	Loan size '000:	Loan size '000:	Loan size '000:	Loan size '000:	Loan size '000:	Loan size '000:
2014	15,345.	12,285.	9,238.2	12,224.	6,832.	19,625.
2013	13,245.	11,148.	10,128.	9,254.3	5,296.	15,274.
2012	9,382.1	11,296.	8,325.6	7,214.3	4,829.	10,263.
2011	66	32	88	8	11	33
2010	1	44	6	3	65	18

Source: Research data

From the responses all the institutions had an increase in the loan size across the three years. In the year 2012, the highest loan portfolio by an institution was 11,296,440 while the lowest was 4,829,650. In 2013, the institution with the highest loan portfolio had a loan size of 15,274,330 while the one with the least had a loan size of 5,296,110. In the years 2014, the least loan size was 9,238,220 while the highest loan size was 19,625.44

The respondents were asked what the rate of repayment of loans by customers in their institution is. The findings are shown in table 7.

Table 7: Repayment Rate

	Frequency	Percentage
0-25	6	18%
26-50	9	26%
51-75	11	32%
76-100	8	24%
Total	34	100%

Source: Research data

The respondents that said the repayment rate was between 0-25% were at 18%. Those that said it was between 26-50% were 26%, 32% said it was between 51-75% while 24% said it was between 76-100%.

The respondents were asked what the rate of nonperforming loans was in their institutions. The findings are shown in table 8.

Table 8: Non Performing Loans

	Frequency	Percentage
0-25	24	71%
26-50	8	24%
51-75	2	6%
76-100	0	0%
Total	34	100%

Source: Research data

The respondents that said their rate of nonperforming loans was between 0-25% were 71%, 24% said it was between 26-50%,

6% said it was between 51-75% while there were no respondents that said it was between 76-100%.

Regression Analysis

The study conducted a regression analysis to test the influence among predictor variables. The research used statistical package for social sciences (SPSS V 20.0) to code, enter and compute the measurements of the linear regressions

Table 9: Results of linear regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.808	0.6528	0.648	0.249

The coefficient of determination which is R square is used to determine the model fit. It is the percentage of the variance in the dependent explained uniquely or jointly by the independent variables. From the findings R square is 0.6528. This means that 65.8% of the performance is explained by the factor variables (Risk Management, Interest Rate,). A study should therefore be conducted to determine what influences the other 34.72% of the performance.

Table 10: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	11.266	2	2.8165	28.667	0.004
1 Residual	6.519	31	0.2247		
Total	17.785	33			

The probability value of 0.004 indicates that the regression relationship was highly significant in predicting how Risk

Management, Interest Rate, influence performance among MFIs. The F critical at 5% level of significance was 2.5252 since F calculated is greater than the F critical (value = 28.667), this shows that the overall model was significant.

Table 11: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.664	0.289		5.757	0.004
	Risk Management	0.964	0.127	0.221	4.361	0.000
	Interest Rate	0.611	0.163	0.182	3.748	0.001

a. Dependent Variable: Performance of MFIs

The equation derived from the above regression results will therefore take the form of: $Y = 1.664 + 0.964X_1 + 0.611X_2$

The regression equation above has established that taking all factors into account risk management, interest rate) constant at zero performance of MFIs will be 1.664. The findings presented also show that taking all other independent variables at zero, a unit increase in risk management would lead to a 0.964 increase in the performance of MFIs. Further, the findings shows that a unit increases in interest rate would lead to 0.611 increases in the performance of MFIs. This notwithstanding, all the variables were significant as the P-values were less than 0.05 thus an indication that they were significant.

SUMMARY OF FINDINGS

Majority of the respondents agreed that most institutions has set up well funded risk

management functions this is in agreement with the report by CBK (2010), which indicated that many financial institutions in Kenya have also recognized the importance of proper risk management by setting up independent and well funded risk management functions. The study revealed that there is enhanced risk awareness among lenders. Also in agreement with the report by CBK (2010) that there is enhanced risk awareness and risk management among MFIs in the country. It is also evident from the findings that some MFIs have mitigation strategies in place. The CBK (2010) report indicates that effectiveness of the organization can be promoted by the awareness of the risks involved and the management of those risks. The findings revealed that risk strategies are followed in disbursement of credit and that the institution conducts risk assessment on potential clients. The study also revealed that all institutions are affected by credit risk as the highest among the risks, followed by financial and liquidity risk while investment portfolio and strategic risk affects it on a lesser extent. The study revealed that interest rates charged on loans extended to clients played a pivotal role on loan performance. Among the reasons given were that the interest rate increases the amount loaned out and thus at some point it may become expensive for the client to make the payments due to high interest rates. The respondents' also said that if the rates charged are too high, the clients will opt to visit other MFIs that have lower interest rates or even shylocks. The respondents also pointed out that interest rates charged may contribute to a low repayment and thus lead to the maintenance of poor loan portfolios. The respondents also said that sales persons charged with the task of selling these loans to client find it hard to convince them to buy, hence low morale and eventually low productivity among these employees.

Conclusions

The research concludes that risk management affects the loan performance to a great extent. It was evident from the research that most MFIs have recognized the need for proper risk management and taken up the necessary measures to promote it. Some MFIs have developed strategies on how to mitigate the effects of credit, liquidity, interest rate, foreign exchange and investment portfolio risks.

The findings also conclude that the interest rate charged on the loans affects the loan performance on the highest scale among the variables which were used in this study. Among the reasons why it was the highest was because, interest rate affects the repayment ability of the customers, affects the sale of the loan and also may contribute to a high rate of nonperforming loans.

Recommendations

The study recommends that all the MFIs recognize the need for proper risk management strategies. This will enable the organizations in mitigating risks such as credit, liquidity, interest rate, foreign exchange and investment portfolio risks. It also recommends that MFIs evaluate the customer and market trends on risks associated so as to become aware of the risks and thus can easily address them.

The research recommends that the MFIs review the interest charged and make them favorable among the customers. This will increase the competitive advantage among the competitors and thus increase the clientele. The findings revealed that the MFIs review their operational costs and minimize them since they make up the single largest component of the expenses.

Suggestions for Further Research

Since the business environment is dynamic and

presents new challenges and opportunities, it will be important to replicate this study after duration of five years and establish the position as at that time. This study should be compared with findings from other financial

institutions in order to establish the similarities and differences that may be evident. This will assist the MFIs to benchmark with other financial institutions such as SACCOs.

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