RELATIONSHIP BETWEEN CREDIT RISK MANAGEMENT PRACTICES AND FINANCIAL PERFORMANCE OF MICRO FINANCE INSTITUTIONS IN KENYA

BY

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OCTOBER, 2013
DECLARATION

I declare that this is my original work. This research project has not been presented for award of a degree in this University or any other university or any other institution of higher learning for academic purposes.

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Date:………………………………

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This research project has been submitted for examination by the student with my approval as the University supervisor.

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DEDICATION

I dedicate this work to my loving fiancée, Maureen and my late mother. Mother, though you are gone your undying spirit of hope still lives in me as a testimony of your hard work and encouragement to see me through my studies.
ABSTRACT

The study sought to establish the relationship between credit risk management practices and financial performance of MFIs in Kenya. The main objective of the study was to establish the relationship between credit risk management practices and financial performance of MFIs in Kenya. The specific objective was to identify the credit risk management practices adopted by MFIs in Kenya. A survey of all licensed MFIs in Kenya was conducted for the purposes of collecting relevant data in order to form a conclusion on the study objectives. Questionnaires were administered among selected employees of the licensed MFIs in Kenya. The study used SPSS as a statistical tool for analyzing quantitative data. Regression analysis was utilized to determine the relationship between credit risk management practices and financial performance of MFIs. Correlation analysis was then used to determine the strength of the relationship between credit risk management practices and financial performance of the MFIs. ANOVA was also done to test the hypothesis that several group means are equal in the population by comparing the sample variance estimated from the group means to that estimated within the groups. The findings of the study indicated that there was a positive relationship between credit risk management practices and financial performance of MFIs. The study also established the CRM practices adopted by MFIs in Kenya which included loan securitization, credit limits and group lending. These finding were informed by results which indicated that MFIs have put in place effective CRM practices. The study recommended that MFIs continue improving on their CRM practices such as group lending, loan size limits, securitization and standardized loan term. The researcher suggests that a study be done on the correlation between microfinance and traditional bank strategies in light of microfinance institutions in Kenya. A research also needs to be done to establish the crucial aspects of ensuring sustainability of microfinance industry in Kenya. For the purposes of tightening loan default controls, the researcher recommends that a study be done to determine whether the age of the borrower has some influence on the likelihood of the client defaulting on repayment of their loans.
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<td>AROA</td>
<td>Average Return On Assets</td>
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<td>BCG</td>
<td>Boston Consulting Group</td>
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<td>NGO</td>
<td>Non – Governmental Organization</td>
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CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The concept of micro financing involves lending money to individuals and small-scale enterprises that either can’t afford or cannot access bank loans or other forms of financing in the market. This kind of lending activity can expose these institutions to credit risks. Thus risk management is and has been a critical part of such institutions (Sanford, 1985). Credit risk refers to the likelihood of a loss arising from the default of an individual or an enterprise to repay the loan granted. These losses directly affect financial performance of these MFIs adversely at the end of the year. In order to mitigate on the losses arising from lending activities, the MFIs must ensure that lending risks are not excessive. In other words, they should put in place effective risk management tools or systems to help keep the risk exposure within acceptable boundaries. The efficient management of credit risk is a vital part of the overall risk management system and is crucial to every FI’s profitability and eventually their survival in the market (Swarens, 1990).

The MFIs should operate within sound, well defined credit granting criteria. The criteria should include a clear indication of the institution’s target market and a thorough understanding of the borrowers as well as the purpose and structure of the credit and its source of repayment. There has to be a well defined process of loan approval as well as a clearly established procedure of amendment of the current loan agreement, renewal and re-financing of existing credits (Harker & Satvros, 1998). Credit risk management should be at the center of a Bank’s operations in order to maintain financial sustainability and reaching out to more clients (Ogilo, 2012). He further states that credit risk is the most significant of all other risks faced by commercial banks in Kenya. Ogilo’s point seems to resonate from Chjoriga (1997) study. She said that credit risk is the most expensive risk in financial institutions and its effect is more significant as compared to other risks as it directly threatens the solvency of financial institutions.
Exposure to risk continuous to be one of the greatest concerns to MFIs in Kenya who must institute risk management practices to reduce the impact of such exposure on their operations and overall performance. Such practices should include: Establishing an appropriate credit risk environment; Operating under a sound credit – granting process; Maintaining an appropriate credit administration, measuring and monitoring processes and ensuring adequate controls over credit risks. Although specific credit risk management practices may differ among MFIs, they must be informed by the following common guidelines: full disclosure of credit history, independent credit analysis, legal considerations, sharing credit information among the MFIs and prompt response to credit related problems. Based on a study by Wu and Huang (2007) top management support is most important for risk management. In essence, MFIs should have a well established internal control system separate from the approval process which provides an ongoing assessment of the institution’s credit risk management and that credit exposures are within levels consistent with prudential standards and internal limits.

1.1.1 Credit Risk Management Practices

Risk management is the practice of creating economic value in a firm by using financial instruments to manage exposure to risk, particularly credit risk and market risk. Harker & Satvros (1998) consider that risk management is the making of decisions concerning risks and their subsequent implementation, and flows from risk estimation and risk evaluation. The MFI Supervision Directorate guidelines, 2010, a department of the National Bank of Ethiopia (NBE) notes that effective credit risk management is the process of managing an institution’s activities which create credit risk exposures, in a manner that significantly reduces the likelihood that such activities will impact negatively on a microfinance institution’s earnings and capital.

There are various approaches available for MFIs in Kenya to manage credit risk. Most of these approaches have been put forth my different scholars. Ekka et al (2011) indicates that MFIs may apply certain
conventional risk management approaches to mitigate credit risk. Such approaches include setting loan limits to mitigate risk exposure especially from new clients that have no collateral, Standardized loan terms, zero tolerance to delinquency and group-based lending. Fuser & Meier (1999) had earlier on mentioned the same approaches of credit risk management as including credit limits, taking collateral, loan selling, syndicated loans, credit insurance, and securitization and credit derivatives. Boston Consulting Group (BCG), 2001 found that the sole determining success factors are not the technical development but the ability to understand risk strategically and also the ability to handle and control risk.

1.1.2 Financial Performance

Microfinance institutions face many risks that threaten their financial viability and long-term sustainability. The most notable of these risks is credit risk. Credit risk, as earlier defined, refers to the risk to earnings or capital due to borrowers late or non-payment of loan obligations. It encompasses both the loss of income resulting from the MFI’s inability to collect anticipated interest earnings as well as the loss of principal sum resulting from loan default.

Today, microfinance institutions are seeking financial sustainability. Many MFIs have been restructured in order to achieve financial sustainability and finance their growth. According to Woolcock (1999) sustainability refers to the capacity of a program to stay financially viable even if subsidies and financial aids are cut off. It embraces generating sufficient profit to cover expenses while eliminating all subsidies, even those less-obvious subsidies, such as loans made in hard currency with repayment in local currency (Tucker and Miles, 2004).

Tucker and Miles (2004) studied three data series for the period between March 1999 and March 2001 and found that self-sufficient MFIs are profitable and perform better, on return on equity (ROE) and return on assets (ROA), than developing-world commercial banks and MFIs that have not attained self-sufficiency.
However, aggregate data of all MFIs in the sample show that MFIs are unprofitable and perform bad compared to their geographic commercial peers. In order to optimize their performance, MFIs are seeking to become more commercially oriented and stress more on improving their profitability; therefore self-sustainable MFIs are not likely to be servicing the smallest and costliest loans to the poor.

According to the Central Bank of Kenya’s Bank Supervision Annual Report 2011, in the MFI sector, the net loan portfolio grew by 13.3% however, the profit before tax dropped by 19% between 2010 and 2011. The reduction in profits was partly attributed to increased provision for nonperforming loans which constitutes credit risk. According to AMFI 2012 Annual Report on microfinance sector in Kenya, 1st Edition 2013, Portfolio quality seems to be the most pressing issue for 2013 as 59.3% of respondents either ranked credit risk top or second top risk exposure of the sector.

1.1.3 Credit Risk Management and Financial Performance

Weaknesses in credit risk management, among other factors, have all along been cited as the main cause for bank problems (Richard et al., & Chijoriga, 1997). This argument, to a greater extent, holds true for micro-finance institutions in Kenya by virtue of the nature of their operations which is so close to that of commercial banks except only for the scale of their activities and regulations around them. While financial institutions have faced difficulties over the years for a multitude of reasons, the major cause of serious bank problems continue to be directly related to lax credit standards for borrowers and counterparties (Ogilo, 2012).

CRM has been shown to have some bearing on the financial performance of a financial firm. This is because, terms of potential losses, credit risk is typically the largest type of risk to FIs by the nature of their activities. The default of a small number of borrowers may result in a very large loss for the MFI (Bessis, 2003). Since these firms cannot completely do away with the possibility of such losses, it becomes imperative for management to determine what level of risk is desired. They need to develop, approve and
regularly re-evaluate policies and procedures governing management of risks. Management need to keep abreast of risk management best practices as they evolve.

1.1.4 MFI Industry in Kenya

Kenya’s microfinance industry has come a long way since the 1980s, and particularly since the landmark Microfinance Intermediaries Act of 2006. The country’s MFIs are operating under a regulatory framework assessed by the Economist Intelligence Unit (EIU) as the best in Africa. Overall, the EIU rates Kenya as having the second best business environment for MFIs in all of Africa and one of the top ten in the world. Kenya has the second largest borrower base in the continent.

The industry has grown enormously over the last 10 years, both in terms of the gross loan portfolio disbursed and the number of active borrowers served. This growth has been aided by the rapid expansion of mobile banking and complimentary regulatory policies related to deposit collection, branchless banking and agent banking. The introduction of a Credit Information System has also played an instrumental role in the growth and success of the industry. The main types of microfinance service provider in Kenya include downscaling commercial banks, non-bank financial institutions, licensed saving and credit cooperatives and NGOs. Currently, there are 53 registered MFIs in Kenya (AMFI, 2012).

MFIs in Kenya are registered under the MFI Act, 2006. The Microfinance Act of 2006 regulates the provision of microfinance in Kenya. The act applies to deposit-taking institutions; parts of the act may be declared applicable to non-deposit-taking institutions. The act addresses such issues as definitions of MFIs, licensing provisions, provisions related to governance and supervision by the Central Bank that includes protection of deposits.
1.2 Research Problem

The concept of micro-finance in Kenya is one of the most developed in the sub-saharan Africa. As such there is much interest in the knowledge regarding sustainability of the continuous growth and development of this concept of financing. This research has been designed particularly to provide the much needed knowledge on credit risk management which is one of the most sensitive areas than can determine the direction of growth an MFI can take. Studies that have been done locally have tried to link profitability and growth of MFIs to credit risk management practices. Muteru (2007) points out that good credit risk management practices impacts positively on financial performance of Pharmaceutical manufacturing firms in Kenya. This researcher’s finding seems to hold true for MFIs in Kenya.

A study carried out by Parrenas (2005) on American Banks that failed in the 1980s found out that the consistent element in the failures was the inadequacy of the Bank’s management system for controlling loan quality. According to Iqbal & Mirakhor (2007) strong risk management practices can help MFIs reduce their exposure to credit risk and enhance their ability to compete well in the industry. The two studies have documented the existence of profit and a positive link between MFIs financial performance and credit risk management practices.

Studies that have been done locally have also linked profitability of MFIs to credit risk management practices. Muteru (2007) points out that good credit risk management practices impacts positively on financial performance of Pharmaceutical manufacturing firms in Kenya. The researcher, in his recommendations, points out that there is no known study done on the relationship between credit risk management practices and financial performance of MFIs in Kenya. He says extensive research needs to be done on this area noting that most of the work that has been done on this matter was done in the developed economies. This implies that there was little or no known knowledge of such kind in developing economies like Kenya.
This study therefore sought to fill this gap of knowledge by investigating the relationship between CRM practices and financial performance of MFIs in Kenya. Although there have been attempts in the past to study MFIs in Kenya, much focus had been on the impact of MFIs in Poverty reduction. However, not much had been done to find out what relationship exist between CRM practices and financial performance of these microfinance institutions and by extension their survival and growth. Thus, this research sought to address this knowledge gap by seeking answers to the following questions: What are some of the credit risk management practices adopted by MFIs in Kenya? Is there any relationship between credit risk management practices and financial performance of microfinance institutions?

1.3 Objectives of the Study

The study was guided by the following objectives:

i. To identify the credit risk management practices adopted by MFIs in Kenya.

ii. To establish the relationship between credit risk management and financial performance of MFIs.

1.4 Value of the Study

This study will provide a theoretical framework to assist MFIs in managing credit risks. The study will also serve as a basis for further research on the MFI industry and related risks.

The study will be of great importance to the government’s regulatory agencies like the central bank as it will help in designing and coming up with policies pertaining lending by MFIs in Kenya. It will also be useful to the academic field as it will shed in more light on current practices and even provide new knowledge.
The research will also be of great importance to the academia since it will help shed more light into the already existing knowledge on MFI risk management practices and profitability while at the same time help come up with new knowledge that will be of great interest in the MFI industry in Kenya. From a practical perspective, the study will be useful to owners, directors and managers of MFIs to manage the whole process of risk in a cost efficient and economically effective way. It will also be useful to potential investors in gauging the risks of the industry before committing their investments in MFIs.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presented an overview of related literature and theories. According to Pilot & Hungler (1995) the purpose of a literature review is to orient the researcher with what is already known about the problem under investigation, to select appropriate research methods previously used by others, to avoid flaws, which may compromise validity and reliability, and also unnecessary replication. This review consulted several sources including textbooks, Journals, newspapers, newsletters, earlier research work and policy documents among other relevant materials.

2.2 Theoretical Review

This section outlined a preview of theories that gave an insight into the topic of study in this research.

2.2.1 The Commercial-Loan Theory

The commercial-loan theory, also known as real bills doctrine, argues that banks have a problem described as liquidity-earnings dilemma. It states that if a bank wants to be a safe haven for all its depositors’ funds, it would simply hold all those funds in its safe as perfectly liquid assets; then whenever a depositor requested cash from the bank, the banker would simply open the safe and give the money back to the customer. The problem here is that no earnings would be generated for the bank (Woolcock, 1999).

According to the theory, the bankers can take a position at the other extreme in order to earn some profit other than being a mere warehouse for its clients. They could employ all the funds deposited with them to make a loan to finance a high-risk venture. Such a loan might have a high earnings potential for the bank, but the loan probably will not be liquid. It would be difficult to liquidate to obtain cash when depositors want to make withdrawals. To resolve the liquidity-earnings problems, bankers must recognize the advantage of making self-liquidating loans (real bills). A loan is considered self-liquidating if it is secured...
by assets which can be resold to repay the loan. Loans of this type could ensure the banks continues liquidity and earn profits. Thus, liquidity and earnings are simultaneously gained.

### 2.2.2 The Anticipated Income Theory

The anticipated income theory argues that a bank can maintain its liquidity if loan repayments are scheduled on the basis of the anticipated income of the borrower rather than the use made of the funds or collateral offered. Thus, in making loans, this theory suggests that banks should rely on debtors’ income and its coverage of debt-service requirements Harker & Satvros (1998). This coverage is determined on the basis of inclusive cash-flow projections, which ordinarily provide a reliable indication of the liquidity of the loan being financed. Hence, the future cash-flows of the borrower, rather than the nature of particular transactions being financed, assures the self-liquidating character of a loan because it will determine a borrower’s overall ability to meet interest and principal payments as they fall due.

This theory further argues that if the debtor’s anticipated income is estimated correctly, the bank will have a flow of funds that can be used to meet depositors’ claims and other loan demands. During normal times, bank lending of this type would function in about the same way as bank lending based on commercial loan theory of liquidity Harker & Satvros (1998).

### 2.2.3 The Liability-management Theory

According to this theory, it is no longer necessary for a financial institution to observe traditional liquidity standards if it can go into the market and bid for funds whenever it experiences a need for liquidity. A bank can meet its liquidity needs by creating new liabilities. There are a number of possible sources on which the individual financial institution may draw to meet liquidity needs during the last phase of periods of cyclical expansion such as issuing CDs, purchasing federal funds, borrowing from reserve banks and issuing short-term notes (Iqbal & Mirakhor, 2007).
2.3 Determinants of Financial Performance

According to Luzzi and Weber (2006) the four most significant determinants of financial performance of MFIs are: interest rate ceiling (the higher the interest rate, the higher is the MFI financial return), number of clients per loan officer (the higher the number, the higher the financial return), competitiveness (more competitors, less profits), and number of days for processing a first loan (the shorter the processing time, the more profitable for the MFI). Ahlin et al. in his study notes that the financial performance of MFIs is determined by such variables as self-sufficiency, borrower growth and loan-size growth. He further notes that such institutional actors as control of corruption, rule of law, voice & accountability and political stability have some effect on financial performance of MFIs.

Tucker and Miles (2004) studied three data series for the period between March 1999 and March 2001 and found that self-sufficient MFIs are profitable and perform better on return on equity (ROE) and return on assets (ROA) than MFIs that have not attained self-sufficiency. Thus, the variables that will determine how well an MFI can handle credit risk include; Credit limits, Collateral, Group-lending, Loan selling and Credit insurance.

2.4 Empirical Review

When a company grants credit to clients, it incurs the risk of non-payment on the part of the client. This risk of non-payment constitutes credit risk. Credit risk adversely affects financial performance of MFIs more than any other factor. In the event of a default the company faces a risk of losing part or whole of the principal amount plus the interest accrued on the loan. This calls the need for MFIs to control credit in order to minimize this loss. Naceur and Goaied (2003) define credit risk management as the systems, procedures and controls which a company has in place to ensure the efficient collection of customer payments to minimize the risk of customer non-payments. According to Richardson (2003), however, most
small businesses have neither resources nor expertise to operate a sound credit management system which greatly contributes to most failures among such institutions.

Kombo et al. (2010) argues that strategic risk, credit risk and liquidity risk are the most frequent risks faced by MFIs in Kenya. He further says that, whereas reputation and subsidy dependence risks occur at a very low incidence for Micro Finance Institutions (MFIs) in Kenya, this does little to influence negatively the profitability of these institutions. He further points out that to tone down these risks, the Micro Finance Institutions (MFIs) employ various management strategies, which include risk avoidance, transferring of risk and mitigating risks and also regard mitigation of risks as the most effective risk management strategy. Mokoro et al. (2010) in an investigation of the various challenges facing the transition of informal MFIs into formal MFIs recognize the existence of risks emanating from both the external and internal stakeholders.

According to Diamantini (2010) MFIs are particularly vulnerable to foreign exchange rate risk, since they operate in developing countries where the risk of currency depreciation is high. This is true because currency depreciation tends to be highly correlated with a general deterioration of local economic conditions, which can cause higher loan delinquencies and a reduction in profitability of financial activities. He goes further to give a remedy to this that hedging can mitigate this risk and contributes greatly to an MFI’s success and sustainability. Through an appropriate hedging policy, the MFI can reduce or even eliminate the uncertainty of mismatches between local currency receivables and foreign currency repayments.

O’Brien (1983) theoretical models and recent modifications to reflect current practices, has given a clear set of guidelines to promote better understanding of credit agreements to assist the banking industry to improve their services while minimizing risk. These guidelines include full disclosure of credit history, Independent credit analysis, Legal considerations, Sharing credit information among agents and prompt response to problems. The implication of O’Brien’s theories is that the MFIs must adopt a pro-active
approach to credit risk management in order to ensure a long-run sustainability. Unfortunately, many MFI stakeholders in Kenya are unaware of the various components of a comprehensive risk management regiment.

Hudon (2010) analyzed the relationship between financial performance of MFIs and their management mechanisms based on three financial indicators ROA, AROA and FSS and four management dimensions like decision making, board governance competencies, Accounting and control, planning budgeting and reporting competences like competencies of the top managers and competencies of HR management. The results of Hudon (2010)’s analysis show that management ratings influence drastically the MFI financial performances. According to him, however, except for the cooperatives where the management variable (specifically HR human resources management) has a negative impact on the ROA, no organizational structure exhibits better results for the three financial indicators. He underscored that regulated MFIs have significantly better management ratings than non-regulated ones.

Banks employ several concepts which have been built to address credit risk and analysis. The banks mainly use portfolio theory in order to reduce the risk on the loans they offer. The idea here is that a group of assets held together is less risky than the risk of the individual assets making up the portfolio. Thus, the principle of portfolio analysis plays a very important role in management of credit risk. According to Harry Markowitz (1952) and William Sharpe (1964), the effect of concentrating risk has led to banks diversifying their exposure limits across the borrowers and among various types of debt facilities. William Sharp developed the CAPM model which, according to Markowitz (1952), is well applicable in investment decisions.
2.5 Summary of Literature Review

There is a number of literature available on CRM practices and financial performance of MFIs. Kombo et al. (2010) did a study on various risks facing MFIs in Kenya. He identified such risks as strategic risk, credit risk and liquidity risk. Richardson (2003) did a study on the capacity of MFIs to effectively manage credit risk. His study found out that most MFIs either lack resources or expertise to operate a sound credit management system. Diamantini (2010) underscored the vulnerability of MFIs financial performance to foreign exchange risk in his study. The study by Hudon (2010) focused on the relationship between financial performance of MFIs and their management mechanisms based on three financial indicators ROA, AROA and FSS. Another study by Muteru (2010) focused on the performance of selected MFIs in Kenya. However, none of these studies have focused on the relationship between credit risk management practices and financial performance of MFIs in Kenya. In addition, most of the studies which might have been done focuses MFIs operating in the developed economies.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter described the research design that was adopted by the researcher, the population of the study and the methods that were used in collecting data that was pertinent in answering the research question. Also it gave an outline of the approaches that were used in analyzing the data collected for the purposes of forming a conclusion relevant to the objectives of the study.

3.2 Research design

The researcher used descriptive research design in the study. Descriptive studies report summary data such as measures of central tendency including the mean, median, mode, deviance from the mean, variation, percentage, and correlation between variables (Donald, 2006). This research design was chosen because it uses a relatively small sample size given that in Kenya there were only a limited number of licensed MFIs. According to Brink & Wood (1998), the purpose of a research design was to provide a plan for answering the research question and is a blueprint for action.

3.3 Study Population

The target population in this study constituted of all the 53 licensed MFIs in Kenya. The micro finance institutions in Kenya are licensed and regulated pursuant to the provisions of the association of Micro-finance Institutions. There were 53 licensed MFIs in Kenya according to the central bank of Kenya and AMFIS, 2012.

3.4 Sample Population

The study used survey method for the purposes of collecting data. The survey constituted the 53 MFIs licensed in Kenya. This method was chosen because a non-response rate of 30% was anticipated. This
meant that a good response rate of 70% would still be realized. The method was simple, practical, economical, quick and did not require an elaborate sampling frame which was not readily available (Nachmias & Nachmias, 1992). Thus, the study specifically targeted the Microfinance managers from the licensed MFIs in Kenya.

3.5 Data collection

The researcher collected primary data by means of administering a specially designed questionnaire. The questionnaires consisted of structured questions which were dispatched to the respondents in the various MFIs to complete. After allowing the respondents reasonable time to fill, the researcher went round the respondents’ offices to pick the filled questionnaires for analysis.

The secondary data was collected from various documents as was voluntarily provided by the respondents and others obtained from other sources. The documents obtained for the purposes of obtaining secondary data included company policy documents, sample employee bio-data forms, brochures, journals, newsletters, and annual financial statements.

3.6 Data analysis

The data obtained was quantitative in nature. The data was organized and thoroughly examined for completeness and comprehensibility. The data was then summarized, coded and tabulated.

The data was analyzed using SPSS which is able to summarize, organize and provide meaningful interpretations in the forms of graphs, tables and other pictorials such as pie charts. Descriptive statistics such as mean, standard deviation, percentages and frequency distribution was also used to analyze the data obtained.

Inferential statistics was used to establish the relationship between credit risk management practices and the financial performance of MFIs. Correlation analysis was used to establish the strength of the
relationship between credit risk management and the financial performance of MFIs. The following regression equation was established:

\[ F_p = \alpha + \beta X_1 + \beta X_2 + \beta X_3 + \epsilon \]

Where:

\( F_p \) = Financial Performance
\( X_1 \) = Group lending policy
\( X_2 \) = Loan Securitization
\( X_3 \) = Credit limit
\( \epsilon \) = error term
\( \alpha \) = constant
\( \beta \) = beta

ANOVA as a method of testing the hypothesis that several group means are equal in the population by comparing the sample variance estimated from the group means to that estimated within the groups was also done.

ANOVA = Analysis of Variance

Sig = level of significance at 95%
4.1 Introduction

This chapter presents analysis and findings of the research. From the study population target of 52 respondents, 41 filled and returned their questionnaires, constituting 78.85% response rate. Data analysis was done using SPSS. Frequencies and percentages were used to display the results which were presented in tables, charts and graphs.

4.2 Analysis of General information

4.2.1 Distribution of respondents by designation

Table 1: Distribution of respondents by designation

<table>
<thead>
<tr>
<th>Designation</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branch Manager</td>
<td>7</td>
<td>17.1</td>
</tr>
<tr>
<td>Credit Manager</td>
<td>16</td>
<td>39.0</td>
</tr>
<tr>
<td>Operations Manager</td>
<td>11</td>
<td>26.8</td>
</tr>
<tr>
<td>Credit Officer</td>
<td>7</td>
<td>17.1</td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Research Data
On the respondents’ designation, the study found out that most of the respondents were Credit Managers representing 39%, 27% of the respondents were Operations Managers whereas Branch Managers and Credit Officers represented 17% each. This information, as analyzed, gives credibility to the data collected since the respondents were well versed with the topic under study.

### 4.2.2 Respondents’ number of years with MFI

Table 2: Respondents’ number of years with MFI

<table>
<thead>
<tr>
<th>Frequency Range</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 5 years</td>
<td>10</td>
<td>24.3</td>
</tr>
<tr>
<td>6 – 10 years</td>
<td>22</td>
<td>53.7</td>
</tr>
<tr>
<td>11 – 15 years</td>
<td>5</td>
<td>12.2</td>
</tr>
<tr>
<td>OVER 15 years</td>
<td>4</td>
<td>9.8</td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Research Data
Work experience

Figure 2: Respondents’ number of years with MFI

Source: Research Data

Figure 4: graph showing respondents’ years of experience

Source: Research Data

The study sought to know the respondent working experience in terms of years they have worked for the MFI. From the results, the study found out that majority of the respondents had worked for 6 to 10 years
(54%), 24% had worked for 1 to 5 years, 12% had worked for 11 to 15 years while 10% had worked for over 15 years. This information shows that most of the respondents had worked long enough with the MFIs to understand matters relating to the topic of this study.

4.2.3 MFI Branches in Kenya

Table 3: MFI branch networks

<table>
<thead>
<tr>
<th>No. of Branches</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 5 Branches</td>
<td>3</td>
<td>7.3</td>
</tr>
<tr>
<td>6 – 10 Branches</td>
<td>10</td>
<td>24.4</td>
</tr>
<tr>
<td>11 – 15 Branches</td>
<td>18</td>
<td>43.9</td>
</tr>
<tr>
<td>Over 15 Branches</td>
<td>10</td>
<td>24.4</td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Research Data
Branch Networks

Figure 3: graph showing MFIs’ branch networks

Source: Research Data

On the branch networks of the respondent MFIs, the study found out that most of the respondents, 43.9%, had between 11 and 15 branches, those respondents with 6 – 10 branches and those with over 15 branches accounted for 24.4% of the respondents whereas those with 1 – 5 branches accounted for 7.3%.

4.2.4 Number of years MFI has operated in Kenya

Table 4: No. of years in operation

<table>
<thead>
<tr>
<th>No. of years</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 5 yrs</td>
<td>7</td>
<td>17.1</td>
</tr>
<tr>
<td>6 – 10 yrs</td>
<td>17</td>
<td>41.4</td>
</tr>
<tr>
<td>11 – 15 yrs</td>
<td>12</td>
<td>29.3</td>
</tr>
<tr>
<td>Over 15 yrs</td>
<td>5</td>
<td>12.2</td>
</tr>
</tbody>
</table>
The analysis of the data collected showed that 41.4% of the respondent MFIs have operated in Kenya for a period between 6 and 10 years, 29.3% for a period between 11 – 15 years, 17.1% for a period between 1 – 5 years, whereas 12.2% had operated for a period of over 15 years. This shows that the MFI industry in Kenya has been in operation for a relatively long time to provide sufficient and relevant data for the purposes of this study.
4.3 Credit Risk Management

Table 5: illustrating the Indicators used in credit risk management approaches

<table>
<thead>
<tr>
<th>Indicators used in credit limit management</th>
<th>Very great extent</th>
<th>Great extent</th>
<th>Moderate extent</th>
<th>Less extent</th>
<th>No extent</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company liquidity</td>
<td>22</td>
<td>12</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>1.4722</td>
</tr>
<tr>
<td>Operating efficiency</td>
<td>12</td>
<td>21</td>
<td>6</td>
<td>0</td>
<td>2</td>
<td>1.5424</td>
</tr>
<tr>
<td>Portfolio indicators</td>
<td>18</td>
<td>16</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1.7994</td>
</tr>
</tbody>
</table>

Source: Research Data

Asked on the extent to which MFIs use various indicators in its credit management approaches to loans, there was evidence from the respondents that company liquidity was being used as an indicator to a very great extent as shown by the mean of 1.4722 in the table 5 above. Operating efficiency was being used to a great extent as shown by the mean of 1.5424.

4.3.4 Parties involved in formulating credit policies

Table 6: illustrating Parties involved in formulating credit policies

<table>
<thead>
<tr>
<th>Parties involved in formulating credit policies</th>
<th>Very great extent</th>
<th>Great extent</th>
<th>Moderate extent</th>
<th>Less extent</th>
<th>No extent</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board of directors</td>
<td>10</td>
<td>9</td>
<td>15</td>
<td>7</td>
<td>0</td>
<td>2.1593</td>
</tr>
<tr>
<td>Executive management</td>
<td>12</td>
<td>22</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>1.4722</td>
</tr>
<tr>
<td>Credit managers</td>
<td>29</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1.1168</td>
</tr>
</tbody>
</table>
Credit officers | 3 | 5 | 10 | 21 | 2 | 1.5423

Source: Research Data

On the extent to which various parties are involved in formulating credit policy the study found that credit managers are involved to a very great extent as shown by the mean of 1.1168 in the table 6 above. Executive management were involved to a great extent as shown by the mean of 1.4722 while the board of directors are involved to a moderate extent. The credit officers are involved to a less extent.

4.4 Loan Securitization

4.4.1 Factors to consider in determining amount of collateral on loans

<table>
<thead>
<tr>
<th>Factors to consider in determining amount of collateral on loans</th>
<th>Very great extent</th>
<th>Great extent</th>
<th>Moderate extent</th>
<th>Less extent</th>
<th>No extent</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit history of client</td>
<td>31</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1.0448</td>
</tr>
<tr>
<td>Amount of loan applied for</td>
<td>20</td>
<td>21</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1.5424</td>
</tr>
<tr>
<td>Use for which the loan is applied for</td>
<td>12</td>
<td>8</td>
<td>20</td>
<td>1</td>
<td>0</td>
<td>1.6195</td>
</tr>
<tr>
<td>Repayment period of the loan</td>
<td>3</td>
<td>7</td>
<td>12</td>
<td>19</td>
<td>0</td>
<td>1.7047</td>
</tr>
</tbody>
</table>

Source: Research Data

On the amount of collateral required to secure a loan, the study found out that most MFIs consider credit history of the client in determining how much collateral they should pledge as shown by the mean of 1.0448 in the table above. The amount of loan applied for is considered to a great extent as evidenced by
the mean of 1.5424 while use for which the loan is applied for and the repayment period of the loan being considered to moderate and less extent respectively.

4.4.2 Criteria for granting loans

Table 8: illustrating Criteria for granting loans

<table>
<thead>
<tr>
<th>Criteria for granting Loans</th>
<th>Very great extent</th>
<th>Great extent</th>
<th>Moderate extent</th>
<th>Less extent</th>
<th>No extent</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
<td>31</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1.0448</td>
</tr>
<tr>
<td>Families</td>
<td>15</td>
<td>23</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1.4082</td>
</tr>
<tr>
<td>Individuals</td>
<td>5</td>
<td>7</td>
<td>15</td>
<td>7</td>
<td>7</td>
<td>2.1593</td>
</tr>
<tr>
<td>Small enterprises</td>
<td>10</td>
<td>12</td>
<td>15</td>
<td>2</td>
<td>2</td>
<td>2.1593</td>
</tr>
</tbody>
</table>

Source: Research Data

The study sought to know the preference of MFIs in granting loans and the findings was that most MFIs prefer to grant loans to groups to a very great extent as shown by the mean of 1.0448 in the table. On the other hand MFIs consider individual small enterprise loans to a moderate extent with a mean of 2.159. Families are considered to a great extent as shown by the mean of 1.4082.
4.5 Regression Analysis

Regression analysis was undertaken with financial performance of the Micro finance as dependent variables. The findings are tabulated below:

Table 9: Illustrating the regression of the variables under study with financial performance of micro finance as the dependent variable

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>95.0% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>1.498</td>
<td>.234</td>
<td></td>
</tr>
<tr>
<td>credit lending factors</td>
<td>-.288</td>
<td>.132</td>
<td>-.720</td>
</tr>
<tr>
<td>loan securitization</td>
<td>-.244</td>
<td>.337</td>
<td>-.437</td>
</tr>
<tr>
<td>Interest risk management</td>
<td>.527</td>
<td>.260</td>
<td>1.189</td>
</tr>
</tbody>
</table>

a. Dependent Variable: financial performance

Source: Research Data

From table 9 above the following regression equation was establishes:

\[ Fp = 1.498 - 0.288x1 - 0.244x2 +0.527x3 \]

From the above equation the study found that holding the factors considered in determining credit risk, loan securitization and interest risk of the firm products to constant zero, the financial performance of the micro finance would be 1.498

A factor decrease on the factors considered in credit risk management i.e. relaxing the borrowing requirements abbreviated ( x1) would lead to a decrease on the firm financial performance by factor of -
0.288 and also a unit decrease on the securitization measure of the micro finance (x2) on loans would lead to a decrease in the financial performance of the micro finance by factor of 0.244. In addition an increase in a unit of interest rate of the firms lending would lead to an increase on the firm performance of the micro finance by factor of 0.527. This information shows that there’s negative relationship between financial performance of the micro finance financial performance and the credit management practices. Also the regression equation indicate that there’s a negative relationship between the micro finance financial performance and securitization of the loans. It also shows that there’s a positive relationship between micro finance financial performance and interest rate on the products of the micro finance.

Table 10: Regression Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R Square Change</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0.954a</td>
<td>0.909</td>
<td>0.638</td>
<td>.2383256</td>
<td>909</td>
<td>3.349</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Interest risk management, credit risk management, loan securitization
b. Dependent Variable: financial performance

R-square, known as the coefficient of determination, tells us the change in dependent variable due to changes in the independent variables. From the findings of the study the R-square was 0.909 which is equivalent to 90.9%, meaning that there was 90.9% variation in dependent variable due to changes in the independent variables which were: factors determining credit limit, loan securitization and interest risk management practices. The model was thus deemed reliable for analyzing the relationship

R is correlation coefficient. It tells the strength of the relationship between credit risk management practices and the financial performance of the MFI's. From the above table R was 0.954 hence depicting a
strong positive correlation between the credit risk management practices and financial performance of the MFI's.

**Table 11: Illustrating ANOVA analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>.571</td>
<td>3</td>
<td>.190</td>
<td>3.349</td>
<td>.377a</td>
</tr>
<tr>
<td>Residual</td>
<td>.057</td>
<td>1</td>
<td>.057</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.627</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Credit limit management, group lending management, loan securitization

b. Dependent Variable: financial performance

Analysis of variance is a method of testing the null hypothesis that several group means are equal in the population by comparing the sample variance estimated from the group means to that estimated within the groups. Sum of squares measures variability of data set.

From table 13 the regression model on the sum of squares more (0.571) than residual (0.57). Thus it can be concluded that the model accounts for most of the variations on the dependent model, which is financial performance of the MFI's.

The significance level being below our threshold of 0.05 confirms that the significance of credit management practices to financial performance of the MFI's is high and this is confirmed by the F test.

**4.6 Correlation Analysis**

Correlation is a single number that describes the degree of the relationship between two variables. A Pearson correlation indicated the direction, strength and significance of the bivariate relationships for all variables in this study. According to Sekeran (2003) theoretically there could be a perfect positive
correlation between two variables which is represented by 1.0 or a perfect negative correlation which is represented by -1.0

Table 12: illustrating correlation of variables

<table>
<thead>
<tr>
<th></th>
<th>financial performance</th>
<th>credit lending factors</th>
<th>loan securitization</th>
<th>interest risk management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation financial performance</td>
<td>1.000</td>
<td>-0.497</td>
<td>0.293</td>
<td>0.572</td>
</tr>
<tr>
<td>credit lending factors</td>
<td>-0.497</td>
<td>1.000</td>
<td>0.403</td>
<td>0.336</td>
</tr>
<tr>
<td>loan securitization</td>
<td>0.293</td>
<td>0.403</td>
<td>1.000</td>
<td>0.858</td>
</tr>
<tr>
<td>Interest risk management</td>
<td>0.572</td>
<td>0.336</td>
<td>0.858</td>
<td>1.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>financial performance</th>
<th>credit lending factors</th>
<th>loan securitization</th>
<th>interest risk management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig. (1-tailed) financial performance</td>
<td></td>
<td>0.197</td>
<td>0.316</td>
<td>0.157</td>
</tr>
<tr>
<td>credit lending factors</td>
<td>0.197</td>
<td></td>
<td>0.251</td>
<td>0.290</td>
</tr>
<tr>
<td>loan securitization</td>
<td>0.316</td>
<td>0.251</td>
<td></td>
<td>0.031</td>
</tr>
<tr>
<td>Interest risk management</td>
<td>0.157</td>
<td>0.290</td>
<td>0.031</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>financial performance</th>
<th>credit lending factors</th>
<th>loan securitization</th>
<th>interest risk management</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>financial performance</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>credit lending factors</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>loan securitization</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Interest risk management</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 12 above illustrates that there was weak negative correlation between the credit lending factors and the financial performance of the MFI's i.e. the correlation value was -0.497.

The correlation table above also provided early signs of a positive relationship between financial performance of the MFI's and interest rates. The correlation table also indicated that financial performance of the MFI's is positively correlated to loan securitization. This observation imply that where the MFI's have the loans offered to customers backed with collateral then the chances of default reduces thereby enhancing better financial performance of the MFI's.
4.8 Interpretation of results

On the parties involved in credit risk management, the executive management were found to play a very significant role at a mean of 1.1568 followed by the board and the internal auditors with a mean of 1.6195 and 1.3496 respectively. This showed the importance attached to the function of credit risk management. This function was so important that the management took it upon themselves to perform.

Based on the findings, the study established some of the factors considered in determining the amount and the need for collateral on loans granted. The factors established by the study in order of their importance are credit history of the client, amount of loan applied for, use for which the loan is applied for and the repayment period of the loan with the means of 1.0448, 1.5424, 1.6195 and 1.7047 respectively. From the above, just like in determining credit limit, the credit history of the client plays a very big role in determining how much credit is required for a loan to be granted.

The study established that most MFIs prefer to grant loans to groups as opposed to individuals. Moreover, preference is given to families and small business enterprises as per the findings of the study. The study also rated different types of risks experienced by MFIs depending on likelihood of such risks occurring. From the findings, most MFIs are likely to face credit risk as compared to any other kind of risk as shown by the mean of 1.1169. The second most occurring risk as per the findings of the study is interest rate risk with a mean of 1.5424 followed by foreign exchange risk and market risk. On credit policy formulation, the study found that credit managers play the role to a very great extent with a mean of 1.1168. The executive management also plays a very significant role followed by the board of directors. The credit officers’ views are also taken into consideration in formulating credit policies.

The study also established a regression equation from which the relationship between the dependent and independent variables was defined. From the equation established:
Fp = 1.498 - 0.288x1 - 0.244x2 +0.527x3, the study found that there was a negative relationship between the credit lending factor and the financial performance of the MFI's. The equation also revealed that there was a negative relationship between loan securitization and financial performance of the MFI's.

The regression model also indicated that there was a positive relationship between financial performance of the MFI's and interest management practices of the bank.
CHAPTER FIVE: SUMMARY OF FINDINGS, DISCUSSION CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The researcher had sought to establish whether there was a relationship between credit risk management practices and the financial performance of microfinance institutions in Kenya. From the analysis of the data collected, a discussion, conclusion and recommendations were made herein to that effect. The questionnaire that was used was designed to elicit responses based on the objectives of the study. The responses obtained were analyzed and a conclusion made based on the results of the analysis.

5.2 Summary of findings

5.2.1 Credit risk management practices adopted by MFI's in Kenya

The most notable CRM practices adopted by MFIs in Kenya, as per the findings of the study are: Loan securitization, Credit limits on loans and group lending. The study sought to know the preference of MFIs in granting loans and the findings was that most MFIs prefer to grant loans to groups to a very great extent as shown by mean of 1.0448. On the other hand MFIs consider individual small enterprise loans to a moderate extent with a mean of 2.159. Families are considered to a great extent as shown by the mean of 1.4082. A client with a long good standing credit relationship with the institution is required to pledge little or no security on the loans advanced unlike a client whose credit history is less known to the institution. Other factors considered, in order of importance, are amount of loan applied for, the use for which the loan is applied for and the repayment period of the loan. It was observed from the findings of the study that most MFIs prefer granting loans to a very great extent to Groups as opposed to individuals. Families and small enterprises also had preferences in loan advances to great extent while individuals were less favored.
On the extent to which MFIs use various indicators in its credit management approaches to loans, there was evidence from the respondents that company liquidity was being used as an indicator to a very great extent as shown by the mean of 1.4722. Operating efficiency was being used to a great extent as shown by the mean of 1.5424.

On the extent to which various parties are involved in formulating credit policy the study found that credit managers are involved to a very great extent as shown by the mean of 1.1168. Executive management were involved to a great extent as shown by the mean of 1.4722 while the board of directors are involved to a moderate extent. The credit officers are involved to a less extent.

5.2.2 Relationship between credit risk management and financial performance of the MFI's

The study also established a regression equation from which the relationship between the dependent and independent variables was defined. From the equation established, the study found that there was a negative relationship between the group lending factor and the financial performance of the MFI's. The equation also revealed that there was a negative relationship between loan securitization and financial performance of the MFI's.

The regression model also indicated that there was a positive relationship between financial performance of the MFI's and credit limit management practices of the bank. A factor decrease on the factors considered in credit risk management i.e. relaxing the borrowing requirements abbreviated (x1) would lead to a decrease on the firm financial performance by factor of -0.288 and also a unit decrease on the securitization measure of the micro finance (x2) on loans would lead to a decrease in the financial performance of the micro finance by factor of 0.244 as illustrated by regression table 9.

In addition an increase in a unit of credit limit of the firms lending would lead to an increase on the firm performance of the micro finance by factor of 0.527. This information shows that there’s negative
relationship between financial performance of the micro financial institutions and the group lending practices. Also the regression equation indicates that there's a negative relationship between the micro finance financial performance and securitization of the loans. It also shows that there’s a positive relationship between micro finance financial performance and credit limit on the products of the micro finance.

R² is the coefficient of determination which tells us the change in dependent variable due to changes in the independent variables. From the analysis of the data collected, R² was 0.909 which is equivalent to 90.9%. This means that there was a 90.9% variation in dependent variable due to changes in independent variables as illustrated by table 10.

R is the correlation coefficient and it tells us the strength of the relationship between credit risk management practices and the financial performance of MFIs in Kenya. From the findings, there was a positive relationship between credit risk management practices and the financial performance of MFIs as shown by a correlation factor of 0.954 as shown by table 10.

The correlation analysis also provided early signs of a positive relationship between financial performance of the MFI's and credit limit practice. The correlation table also indicated that financial performance of the MFI's is negatively correlated to loan securitization. This observation imply that where the MFI's have the loans offered to customers backed with collateral then the chances of default reduces thereby enhancing better financial performance of the MFI's as illustrated by correlation table 12.
5.3 Conclusion

Based on the findings of the study the second objective which sought to establish the relationship between credit risk management practices and financial performance of MFIs was met. From the results obtained, the study concluded that there was a positive relationship between credit risk management practices and financial performance of MFIs in Kenya. The study found that loan securitization and group lending policy had a negative relationship to financial performance of the MFI's. While credit limit policy had a positive relationship to financial performance of micro financial institutions.

The first objective of the study which sought to identify the credit risk management practices adopted by MFIs in Kenya was also met as per the findings of the study. Based on the findings, it was observed that most MFIs preferred granting loans to groups as opposed to individuals. Moreover, preference was given to families and small business enterprises as per the findings of the study. The study also rated different types of risks experienced by MFIs depending on likelihood of such risks occurring. From the findings, most MFIs are likely to face credit risk as compared to any other kind of risk as shown by the mean on the table. The second most occurring risk as per the findings of the study is interest rate risk followed by foreign exchange risk and market risk. The study also found that MFIs have adopted various credit risk management practices in order to mitigate against losses resulting from credit risk. These other factors adopted include loan securitization and credit limit on loans.

5.4 Recommendations

Based on the findings of the research, the study recommends that the MFIs to continue improving on their CRM practices such as group-lending, loan size limits, loan securitization and others like standardized loan terms in order to minimize as much as possible losses as a result of credit risks. From the study findings, it was also recommended that the MFIs train borrowers before and after receiving loans on such areas as
business management, book keeping and savings in order to minimize the likelihood of defaults. The MFIs should also have a mandatory supervision of borrowers on loan utilization and repayment to enable them monitor the performance of borrowers closely. This is recommended to be done regularly.

5.5 Limitations of the Study

In the course of the study, a number of limitations were encountered. One of the challenges faced include reluctance of the respondents to provide some information sought due to the confidentiality and lack of authority to disclose such information. The study also faced another challenge of time and financial resource constraint which were so crucial in data collection process. The time constraint were as a result of some of the respondents delaying in filling the questionnaire which required the researcher to travel widely in order to convince the respondents to assist in time. Moreover, a number of potential respondents never filled nor returned their questionnaires.

5.6 Suggestions for further Studies

The researcher recommends that a study be done on the correlation between microfinance and traditional bank strategies in light of microfinance institutions in Kenya. A research also needs to be done to establish the crucial aspects of ensuring sustainability of microfinance industry in Kenya. For the purposes of tightening loan default controls, the researcher recommends that a study be done to determine whether the age of the borrower has some influence on the likelihood of the client defaulting on repayment of their loans.
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APPENDICES
APPENDIX 1: QUESTIONNAIRE

AN EVALUATION OF THE IMPACT OF CREDIT RISK MANAGEMENT PRACTICES ON THE FINANCIAL PERFORMANCE OF MFIs IN KENYA

Please take a few minutes to complete this questionnaire. Your honest responses will be completely anonymous and will only be used for academic purposes only.

SECTION A: GENERAL INFORMATION OF THE MFI

1. Name of the company____________________________

2. Your position in the company____________________________

3. How long have you worked for this company?
   1 – 5 yrs   6 – 10 yrs   11 - 15 yrs   over 15 yrs

4. How many branches does the company have in Kenya?
   1 – 5   6 – 10   10 – 15   over 15

5. Ownership of the company (Please tick as appropriate)
   Local   Foreign   Hybrid of local & foreign
6. How long has the company been in operation in Kenya?

- 1 – 5yrs
- 6 – 10yrs
- 11 – 15yrs
- over 15yrs

7. Is your company a deposit taking institution?

- Yes
- No

SECTION B: CREDIT RISK MANAGEMENT

Credit limits

8. To what extend do you consider the following factors in determining how much credit/loan to lend a client? Use a scale of 1 to 5 where 1 is to a greatest extent and 5 is to no extent.

<table>
<thead>
<tr>
<th>Loan Amount</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit history</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Account balance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consistency of income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other, please specify</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Do what extent does your institution use the following indicators in its risk management approaches to loans? Use a scale of 1 to 5 where 1 is to a greatest extent and 5 is to no extent.

<table>
<thead>
<tr>
<th>Indicators used in credit limit management</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company liquidity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portfolio indicators</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Other, Please specify</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
10. To what extent does your microfinance consider the following factors in establishing a credit policy? Where 1 is to a very great extent and 5 is to no extent.

<table>
<thead>
<tr>
<th>Factors to consider in establishing credit policy</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing credit policy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overhead cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General trend of credit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State of the economy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other, Please specify</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

10 To what extent do the following people participate in formulating your credit policies? Use a scale of 1 to 5 where 1 is to a greatest extent and 5 is to no extent.

<table>
<thead>
<tr>
<th>Parties involved in formulating credit policies</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board of directors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit manager</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit officers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Collateral

11 To what extent does your institution consider the following factors in determining how much collateral a customer should provide? Use a scale of 1 to 5 where 1 is to a greatest extent and 5 is to no extent.
Factors to consider in determining amount of collateral on loans

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit history of client</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amount of loan applied for</td>
<td></td>
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</tr>
<tr>
<td>Use for which the loan is applied for</td>
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<tr>
<td>Repayment period of the loan</td>
<td></td>
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</tr>
</tbody>
</table>

12 To what extent do your loaning criteria favor the following? *Use a scale of 1 to 5 where 1 is to a greatest extent and 5 is to no extent.*

<table>
<thead>
<tr>
<th>Criteria of granting Loans</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Families</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individuals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small enterprises</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Risk Type**

13 Rate the following types of risks depending on how often your institution experiences them. *Use a scale of 1 to 5 where 1 is to a greatest extent and 5 is to no extent.*

<table>
<thead>
<tr>
<th>Type of risk</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate risk</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Exchange rate risk</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Credit risk
Market risk
Other, Please specify

14 To what extent does the institution involve the following parties in the risk management? Use a scale of 1 to 5 where 1 is to a greatest extent and 5 is to no extent.

<table>
<thead>
<tr>
<th>Parties to risk management</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>The board</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal auditors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External auditors</td>
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<td></td>
</tr>
<tr>
<td>Other, Please specify</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

15 To what extent do you agree with the following statement about the importance of risk management? Use a scale of 1 to 5 where 1 is strongly agree and 5 strongly disagree.

<table>
<thead>
<tr>
<th>Importance of risk management</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk management helps minimize losses to the company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk management has no implication to the financial performance of the company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk management is an ongoing process rather than a onetime event</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Measures of financial performance

16 Which measure of performance does your institution use in assessing the impact of credit risk management? Use a scale of 1 to 5 where 1 is to a great extent and 5 is to no extent.

<table>
<thead>
<tr>
<th>Measure of performance</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved shareholders’ value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve microfinance wealth</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Development of alternative investment products</td>
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<td></td>
</tr>
<tr>
<td>Increase in shareholders of the institution</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved reduction of defaults</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other, Please specify</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

17 To what extent does your institution use the following accounting ratios to measure portfolio quality? Use a scale of 1 to 5 where 1 is to a greatest extent and 5 is to no extent.

<table>
<thead>
<tr>
<th>Accounting ratios for measuring portfolio quality</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio at risk (PAR) (measures the portion of the loan portfolio contaminated by arrears as a % of the total portfolio where the desired level is less than 10%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Risk Coverage Ratio (shows what proportion of the portfolio at risk is covered by actual loan losses where the rate could be as high as 90%)</td>
<td></td>
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</tr>
<tr>
<td>Loans Written off Ratio (represents the amount of loans</td>
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</tbody>
</table>
18 The application of up-to-date approaches to risk management, particularly to mitigate against credit risk, is very vital for financial performance of MFIs. To what extent do you agree with this statement in view of risk management practices by MFIs?

- Strongly agree
- Agree
- Not sure
- Disagree
- Strongly disagree

THANK YOU
APPENDIX 2: LIST OF LICENSED MFIs IN KENYA

K-rep Bank Ltd
Kenya Post Office Savings Bank
Kenya Women Finance Trust-DTM
Rafiki Deposit taking Microfinance Ltd
Faulu Kenya DTM
SMEP DTM
Remu DTM Ltd
Uwezo DTM Ltd
Century DTM Ltd
Sumac Credit DTM Ltd
Blue Limited
K-rep Development Agency
Eclof Kenya
KADET
BIMAS
SISDO
Micro Africa Ltd
Opportunity Kenya
Yehu Microfinance Trust
Fusion Capital Ltd
Canyon Rural Credit Ltd
One Africa Capital Ltd
Jitegemea Credit Scheme
AAR Credit Services  
Aga khan Foundation Microcredit Programme  
Musoni Kenya Ltd  
ADOK TIMO  
Pamoja Women Development Programme  
Molyn Credit Ltd  
Renewable Energy Technology Assistance Programme (RETAP)  
Rupia Ltd  
Taifa Options Microfinance  
U&I Microfinance Ltd  
Select Management Services Ltd  
Greenland Fedha Ltd  
Youth Initiatives – Kenya (YIKE)  
Biashara Factors  
Platinum Credit Limited  
Ngao Credit Ltd  
Indo Africa Finance  
Springboard Capital  
Mini Savings & Loans Ltd  
KEEF-Kenya Entrepreneurship Empowerment Foundation  
Women Enterprise Solutions  
Focus Capital Limited  
Samchi Credit Limited  
Fountain Credit Services Ltd  
Jitegemee Trust
OIKOCREDIT

MESPT

Women Enterprise Fund

Juhudi kilimo Co. ltd