A SURVEY ON THE OPERATING EFFICIENCY AND LOAN PORTFOLIO QUALITY INDICATORS USAGE BY MICROFINANCE INSTITUTIONS IN KENYA

BY

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DECLARATION

This management research project is my original work and has not been presented for the award of a degree in any other university.

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DEDICATION

This research project is dedicated to my wife and dear friend Esther, to my daughter Angela and to my son George, to the Association of Microfinance Institutions, to the microfinance Institutions in Kenya and all those who supported me in the completion of this project writing.

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ABSTRACT

Over the years, there has been an increase in the number and significance of microfinance in both matured and emerging economies. In year 2008, the Kenyan Government operationalized the Microfinance Act 2006 with an aim to mainstream microfinance to the financial system proper and also to regulate the many Microfinance Institutions (MFIs) operating under different legislations. The main objective of this study was to survey the credit risk management practices among MFIs in Kenya.

This was a descriptive survey study. The population of interest of this study was the MFIs in Kenya. The researcher used structured questionnaires as the main data collection instrument. The questionnaires had both open and close-ended questions. The close-ended questions provided more structured responses to facilitate tangible recommendations. The researcher perused completed questionnaires and document analysis recording sheets. Quantitative data collected was analysed by the use of descriptive statistics using SPSS and presented through percentages, means, standard deviations and frequencies. Correlation inferential analysis was employed for analysis. Content analysis was used to test data that was qualitative in nature or aspect of the data collected from the open ended questions. The information was displayed by use of bar charts, graphs and pie charts and in prose-form.

The study concludes that most of the MFIs used operating efficiency and loan portfolio quality indicators as a credit risk management practice. Most MFIs employs loan portfolio quality and operating efficiency indicators such as repayment rate, portfolio at risk, number of active borrowers per credit officer, number of active borrowers per staff, gross portfolio outstanding per credit officer, number of active borrowers per branch, cost per loan made and cost per unit of currency lent to measure credit risk.

The study recommends that MFIs need to strengthen the credit risk management practices by using credit referencing and profitability indicators. In addition, the study recommends that
MFIS to employ a combination of portfolio quality, operating efficiency and profitability indicators to measure performance. These indicators provide an indication of whether an MFI is earning an adequate return on the funds invested in the MFI by shareholder and investors.
CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

Microfinance has been defined as the provision of financial services such as deposits, loans, payment services, money transfers and insurance to low-income, poor and financially excluded populations enabling them to raise their income and living standards (Rhyne, 2001). It consists of lending and recycling very small amounts of money for short periods of time. Microfinance or microcredit has therefore been associated with empowering the low income to account properly and independently for their small enterprise businesses and thus take control of their livelihoods. On the other hand, poverty alleviation has been a long term goal of governments and key international institutions such as the World Bank and United Nations seeking more effective ways of reaching the poor. The importance of microfinance as a targeted strategy for poverty alleviation lies in its ability to reach the grassroots with financial services based more on a “bottom-up” as opposed to “top-down” approach.

Managing credit risk is a fundamental component in the safe and sound management of all licensed financial institutions. Sound credit risk management involves prudently managing the risk/reward relationship and controlling and minimizing credit risks across a variety of dimensions, such as quality, concentration, currency, maturity, security and type of credit facility (Donaghue, 2004). If deployed correctly and effectively, credit risk management can be a value-enhancing activity that goes beyond regulatory compliance and can provide a competitive advantage to institutions that execute it appropriately (Greuning and Bratanovic, 2003).

As an innovative form of financial intermediation with the poor (Nissanke, 2002), microfinance is in effect “double tasked” to achieve specified developmental ends and goals through particular means such as group lending methodologies (Donaghue, 2004), through which the poor can borrow money and mutually assure their own progressive empowerment towards independent survival and self-management (CGAP, 2000). Financial institutions (FIs) play a very important
intermediation role in any economy. Their role is similar to that of blood arteries in the human body, because FIs pump financial resources for economic growth from the depositors ‘savers’ to where they are required as credit ‘borrowers’ (Shanmugan and Bourke, 1990). MFIs play even a most critical role to emergent economies where people have limited or no access to commercial banks (Greuning and Bratanovic, 2003).

MFIs face various risks that can be categorized into three groups; financial [with credit risk (CR) being a component], operational and strategic (Cornett and Saunders, 1999). These risks have different impact on the financial performance of MFIs. The magnitude and the level of loss caused by CR compared to others are more severe to MFIs (Chijoriga, 1997).

Loan portfolio which constitutes a large proportion of the assets in most MFIs, are relatively illiquid and exhibits the highest CR and a threat to operational efficiency (Koch and MacDonald, 2000). The theory of asymmetric information argues that it may be impossible to distinguish good borrowers from bad borrowers (Auronen, 2003), which may result in adverse selection and moral hazards problems. The management of CR in microfinance business follows the process of risk identification, measurement, assessment, monitoring and control. It involves identification of potential risk factors, estimate their consequences, monitor activities exposed to the identified risk factors and put in place control measures to prevent or reduce the undesirable effects. This process is applied within the strategic and operational framework of the MFI. Several risk-adjusted performance measures have been proposed (Heffernan, 1996). The measures, however, focus on risk-return trade-off, i.e. measuring the risk inherent in each activity or product and charge it accordingly for the capital required to support it. This does not solve the issue of recovering loanable amount. Effective system that ensures repayment of loans by borrowers is critical in dealing with asymmetric information problems and in reducing the level of loan losses, thus the long-term success of any MFI (IAIS, 2003). Effective credit risk management involves establishing an appropriate CR environment; operating under a sound credit granting process; maintaining an appropriate credit administration that involves monitoring process as well as adequate controls over CR (Greuning and Bratanovic, 2003). It requires top management to ensure that there are proper and clear guidelines in managing CR, i.e. all guidelines are properly
communicated throughout the MFI: and that everybody involved in credit risk management understand them.

The assessment of borrowers can be performed through the use of qualitative as well as quantitative techniques. One major challenge of using qualitative models is their subjective nature (Chijoriga, 1997). However, borrowers attributes assessed through qualitative models can be assigned numbers with the sum of the values compared to a threshold. This technique is termed as "credit scoring" (Heffernan, 1996). The technique cannot only minimize processing costs but also reduce subjective judgments and possible biases (Kwan and Eisenbeis, 2005). The rating systems if meaningful should signal changes in expected level of loan loss (Satta 2004). Chijoriga (1997) concluded that quantitative models make it possible to, among others, numerically establish which factors are important in explaining default risk, evaluate the relative degree of importance of the factors, improve the pricing of default risk, be more able to screen out bad loan applicants and be in a better position to calculate any reserve needed to meet expected future loan losses. Clear established process for approving new credits and extending the existing credits has been observed to be very important while managing CR (Heffernan, 1996). Further, monitoring of borrowers is very important as current and potential exposures change with both the passage of time and the movements in the underlying variables (Edmister and Hatfield, 1995), and also very important in dealing with moral hazard problem. Monitoring involves, among others, frequent contact with borrowers, creating an environment that the bank can be seen as a solver of problems and trusted adviser; develop the culture of being supportive to borrowers whenever they are recognized to be in difficulties and are striving to deal with the situation; monitoring the flow of borrower's business through the bank's account; regular review of the borrower's reports as well as an on-site visit; updating borrowers credit files and periodically reviewing the borrowers rating assigned at the time the credit was granted (Donaldson, 1994; Joh, 2003).

Tools like covenants, collateral, credit rationing, loan securitization and loan syndication have been used by microfinance in developing the world in controlling credit losses (Hubbard and Palia, 1999). It has also been observed that high-quality staffs are critical to ensure that the depth
of knowledge and judgment needed is always available. Thus successfully managing the CR (Jaffee and Russell, 1976) and Donaldson (1994) observed that computers are useful in enhancing operational efficiency and also in credit analysis, monitoring and control, as they make it easy to keep track on trend of credits within the portfolio. Marphatia and Tiwari (2004) argued that risk management is primarily about people – how they think and how they interact with one another which are core in enhancing operational efficiency. Technology is just a tool; in the wrong hands it is useless. This stresses further the critical importance of qualified staff in managing CR.

1.1.1 Microfinance Institutions in Kenya

MFIs are defined as institutions whose major business is the provision of microfinance services. Their aim is to become sustainable and expand their microfinance services. Microfinance is the supply of loans, savings, money transfers, insurance, and other financial services to low-income earners. MFIs which encompass a wide range of these financial service providers that vary in legal structure, mission, and methodology offer these financial services to clients who do not have access to mainstream banks or other formal financial service providers (Anyanwaokoro, 1996). MFIs offer loans and/or technical assistance in business development to low-income community in developing countries. Microfinance has established itself as an integral part of financial sector policies of emerging and developing countries in the past decade. In the field of international finance, it is renowned for its bottom-up approach, because of the main role of Non-Governmental Organizations (NGOs) in the launching and the development of the sector, with the financial support of donors. According to Randhawa and Gallardo (2003), a classification of the sector is done by mapping the institutions in two axes: the profit motive (profit vs not-for-profit) and the decision-making style (centralized vs. de-centralized).

Microfinance is not a recent phenomenon in Kenya; This is due to the fact that some of the current informal sector practices such as money lending, Rotating Savings and Crédit Associations (ROSCAS), date back to ancient societies in Kenya and elsewhere (Anyanwaokoro, 1996). The Kenyan microfinance sector began in the late 1960s with a few NGOs that set up
pilot programs providing donor funded credit services. Some of these organizations have evolved over time to become commercialized, self-sustaining and hugely profitable institutions with over 100,000 clients (Basu, Blavy and Yulek, 2004). Microfinance is also rapidly becoming Kenya’s most accessible and affordable financial service. Microfinance is provided by formal (commercial banks and Post bank), semi formal savings and credit co-operatives, MFIs and informal institutions such as accumulation and rotating savings and credit associations (ASCAs), ROSCAs, shopkeepers and money lenders. As at 31st December 2009, 4 mainstream commercial banks namely Equity, Co-operative, K-Rep and Family Bank were undertaking microfinance business in Kenya. Several other commercial banks including the foreign-owned such as Standard Chartered and Barclays have shown a lot of interest in the microfinance sector and are down streaming. By 31st Dec. 2009, there were a total of 41 MFIs registered under the Association of Microfinance Institutions in Kenya, all with a total of over 4 Million borrowers and Ksh. 2.3 Billion as outstanding loans (Amfi, 2010).

The Microfinance Act 2006 of Kenya, seeking to streamline the operation of the MFIs in Kenya, addresses licensing provisions, minimum capital requirements and minimum liquid assets, submission of accounts to the Central Bank, supervision by the Central Bank, and limits on loan and credit facilities. It also seeks to protect depositors by requiring that deposit-taking MFIs contribute to the deposit protection fund (Mutua, 2003). A wide range of financial services are provided by these MFIs: ranging from savings and credit facilities, money transfer and micro insurance to the economically active poor low income households and small micro scale enterprises in both rural and urban areas, using innovative delivery methodologies and channels. They ultimately contribute to poverty eradication (Ndulu, 2008).

1.2 Statement of the Problem

Over the years, there has been an increase in number and significance of microfinance in both matured and emerging economies. In year 2008, the Kenyan Government operationalized the Microfinance Act 2006 with an aim to mainstream microfinance to the financial system proper and also to regulate the many MFIs operating under different legislations. Various researchers
have studied reasons behind Microfinance's challenges and identified several factors (Ariff, 1999). Credit risks, especially weakness in credit risk management have been identified one of the main reasons behind the failure of majority MFls (Khanna and Palepu 2000). Scharfstein and Stein (2000) observed that loan portfolio constitutes the only income generating asset and normally accounts for 10-15 times the equity of MFls. They indicated that MFls are likely to face difficulties when there is a slight deterioration in the quality of the loan portfolio. Lamont (1997) and Jansson (2002) on the other hand indicated that poor loan quality has its roots in the information processing mechanism. BrownBridge (1998) observed that these problems are at their acute stage in developing countries. The problem often begins right at the loan application stage (Leff, 1998) and increases further at the loan approval, monitoring and controlling stages. Richardson, (2002) emphasize that this is especially so when credit risk management guidelines in terms of policy and strategies/procedures for credit processing do not exist or are weak or incomplete.

Lending has been, and still is, the mainstay of MFls. and this is more so for emerging economies like Kenya where capital markets are not yet fully developed. To most of the transition economies and Kenya in particular, lending activities have been controversial and a difficult matter. This is because business firms on one hand are complaining about lack of access to credit and the excessively high standards set by banks and financial institutions, while MFls on the other hand have suffered large losses on bad loans (Richardson, 2002). It has been found out that in order to minimize loan losses and CR, it is essential for Microfinance's to have an effective lending system in place (Berger 1995). Loan portfolios are the major asset of banks, thrifts, and other lending institutions (Jansson, 2002) while operational efficiency is the percentage measure of a management's ability to generate sales revenue and to control costs. Operational efficiency allows investors to make transactions that move the market further toward the overall goal of prudent capital allocation, without being chiselled down by excessive frictional costs, which would reduce the risk/reward profile of the transaction.

Despite the importance of operating efficiency and loan portfolio as indicators of MFls credit risk management performance, there is limited research on them. In their study, (Bluhm, 2003)
found that the prerequisites to operational efficiency include the adaptation of an effective service delivery methodology and significant institutional competence in such areas as delinquency control, information management, and staff development. Athanasoglou et al (2005) established that Revenue sources of MFIs were from credit extended to various individuals and organizations. In Kenya, studies have been done on the operating efficiency and loan portfolio indicators usage by the MFIs such as Kilonzo (2003) who studied the effect of changes in interest rates credit granted by commercial banks in Kenya. His finding showed that interest rates have no significant effect on the amount of credit granted by MFIs in Kenya between 1992 and 2003, hence showing the importance of interest rates on performance hence profitability of MFIs. According to Ndung’u (2003), sound asset and liability management have significant influence on profitability. Among the external factors, high market interest rate was found to have an adverse effect on financial institution’s profitability in Kenya. On the other hand, market share was found to have a positive impact on profitability. Recognizing the importance of operating efficiency and portfolio quality indicators as a measure of credit risk, this study focused on the usage of these two credit risk management indicators by the MFIs in Kenya with a less developed financial sector.

1.3 Objectives of the Study

1.3.1 General Objective

The main objective of this study was to survey the credit risk management practices among MFIs in Kenya.

1.3.2 Specific Objectives

i. To survey the extent of usage of operating efficiency indicator as a risk management practice among MFIs in Kenya.

ii. To survey the extent of use of loan portfolio quality indicators as a risk management practice among MFIs in Kenya.
1.4 Importance of the Study

The study will be of importance to:

**Microfinance Institutions Portfolio Managers**

The study will help the portfolio managers of emerging MFIs to develop sound credit risk policies that will help them come up with efficient tools of measuring, controlling and evaluating credit risk in their loan portfolio so as to effectively contribute to the development of more efficient financial systems.

**Government and other Regulatory Authorities**

The Government, Ministry of Finance, Central bank of Kenya as the regulator of MFIs of both deposit taking MFIs and credit only MFIs will derive information on the overall usage and application of operating efficiency and portfolio quality indicators in the microfinance sector. The study will inform on the critical prudential regulations that the Government needs to issue to the microfinance sector to prevent moral hazards and information asymmetry.

**Association of Microfinance Institutions (AMFI)**

AMFI is the umbrella body of microfinance’s in Kenya. The study will provide critical information for the development of a code of ethic and best practices in management of various risks facing the sector.

**Investors and Academicians**

This research will hopefully add to the body of knowledge about the microfinance sector. Being a developing and dynamic sector, microfinance has been recognised as one of the vehicles for the attainment of Kenya’s vision 2030 and will continue to derive a lot of interest for investors and researchers in the developing world.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter summarizes the information from other researchers who have carried out their research in the same field of study. The specific areas covered here are MFIs, regulation and supervision of MFIs, operating efficiency and loan portfolio, portfolio quality, efficiency and productivity, portfolio quality and profitability, loan portfolio and financial structure, performance evaluation, poverty reduction, competition, interest rate policy and conceptual framework.

2.1.1 Micro Finance Institutions

The development of MFIs in Kenya is generally agreed to be a key ingredient in poverty reduction. However, these institutions suffer from a range of problems in their establishment and development. Out of the several problems affecting their growth, difficulties on accessing finance is arguably the central. So far there is a consensus view from theoretical investigation supported by numerous empirical studies that MFIs as opposed to commercial banks face specific constraints in raising finance (Berger et al., 1998). In Kenya, quite large percentages of MFIs are found to face difficulties in accessing finance from financial institutions as the major constraint to their development (Satta, 2003).

Several reasons have been put forward to explain the difficulties MFIs face in accessing credit from formal financial institutions. Among them MFIs access to the formal financial sector is constrained by high risk and transaction costs brought about by information asymmetry, difficulties in enforcing contracts, and lack of appropriate instruments to manage the risks involved. To counter these challenges, operating efficiency and loan portfolio indicators are used to measure the performance of MFIs. In some cases the problem is aggravated by supervisory and capital adequacy requirements that restrict commercial banks from extending uncollateralized loans to MFIs (Wright, 2000). Using a number of accounting ratios this paper
evaluates the operating efficiency and loan portfolio indicators usage by MFIs in Kenya in terms of specific financial and operational aspects. Evaluating the operating efficiency and loan portfolio partly requires an examination of how various operational issues affect its financial position (Ledgerwood, 1999). Such issues include what is the quality of loan portfolio of an institution, what is the institution's position in terms of financial structure, how efficient and productive is an institution, and how profitable is an institution.

The exclusion of other operational issues such as the quality of management, environmental factors in the analysis, is admittedly one of the limitations of this evaluation. MFIs are special financial institutions. They have both a social nature and they take a profit making nature. Their performance can be measured by means of financial ratios. This research proposal will evaluate the usage of financial ratios to measure the credit risk management by MFIs.

2.1.2 Regulation and Supervision of Microfinance Institutions

Regulation refers to the set of government rules (including laws, regulations, and their implementation) that apply to microfinance. On the other hand, in the developing world control credit losses using tools like covenants, collateral, credit rationing, loan securitization and loan syndication (Greenbaum and Thakor, 1987; Hugh, 2001). The government aims at overseeing the financial soundness of licensed intermediaries’ businesses in order to prevent financial system instability and losses to depositors. Supervision is the process of ensuring compliance with those rules. The Kenyan Government enacted the Microfinance Act 2006 to regulate the deposit taking MFIs in order to comply with the requirements of financial sector safety and soundness.

2.1.3 Credit Risk Management

Loans that constitute a large proportion of the assets in most banks' portfolios are relatively illiquid and exhibit the highest CR (Koch and MacDonald, 2000). The theory of asymmetric information argues that it may be impossible to distinguish good borrowers from bad borrowers (Auronen, 2003), which may result in adverse selection and moral hazards problems. Adverse
selection and moral hazards have led to substantial accumulation of non-performing accounts in banks (Bofondi and Gobbi, 2003). The very existence of banks is often interpreted in terms of its superior ability to overcome three basic problems of information asymmetry, namely ex ante, interim and ex post. The managements of CR in banking industry follow the process of risk identification, measurement, assessment, monitoring and control. It involves identification of potential risk factors, estimate their consequences, monitor activities exposed to the identified risk factors and put in place control measures to prevent or reduce the undesirable effects. This process is applied within the strategic and operational framework of the bank.

Several risk-adjusted performance measures have been proposed (Kealhofer, 2003). The measures, however, focus on risk-return trade-off, i.e. measuring the risk inherent in each activity or product and charge it accordingly for the capital required to support it. This does not solve the issue of recovering loanable amount. Effective system that ensures repayment of loans by borrowers is critical in dealing with asymmetric information problems and in reducing the level of loan losses, thus the long-term success of any banking organization. Effective CRM involves establishing an appropriate CR environment; operating under a sound credit granting process; maintaining an appropriate credit administration that involves monitoring process as well as adequate controls over CR (IAIS, 2003). It requires top management to ensure that there are proper and clear guidelines in managing CR, i.e. all guidelines are properly communicated throughout the organization: and that everybody involved in CRM understand them.

Considerations that form the basis for sound CRM system include: policy and strategies (guidelines) that clearly outline the scope and allocation of a bank credit facilities and the manner in which a credit portfolio is managed, i.e. how loans are originated, appraised, supervised and collected (Greuning and Bratanovic, 2003). Screening borrowers is an activity that has widely been recommended by, among others, Derban et al. (2005). The recommendation has been widely put to use in the banking sector in the form of credit assessment. According to the asymmetric information theory, a collection of reliable information from prospective borrowers becomes critical in accomplishing effective screening.
The assessment of borrowers can be performed through the use of qualitative as well as quantitative techniques. One major challenge of using qualitative models is their subjective nature (Bryant, 1999). However, borrowers attributes assessed through qualitative models can be assigned numbers with the sum of the values compared to a threshold. This technique is termed as “credit scoring” (Heffeman, 1996). The technique can not only minimize processing costs but also reduce subjective judgments and possible biases. The rating systems if meaningful should signal changes in expected level of loan loss. Chijoriga (1997) concluded that quantitative models make it possible to, among others, numerically establish which factors are important in explaining default risk, evaluating the relative degree of importance of the factors, improving the pricing of default risk, be more able to screen out bad loan applicants and be in a better position to calculate any reserve needed to meet expected future loan losses.

Clear established process for approving new credits and extending the existing credits has been observed to be very important while managing CR. Further, monitoring of borrowers is very important as current and potential exposures change with both the passage of time and the movements in the underlying variables, and also very important in dealing with moral hazard problem (Derban et al., 2005). Monitoring involves, among others, frequent contact with borrowers, creating an environment that the bank can be seen as a solver of problems and trusted adviser; develop the culture of being supportive to borrowers whenever they are recognized to be in difficulties and are striving to deal with the situation; monitoring the flow of borrower's business through the bank's account; regular review of the borrower's reports as well as an on-site visit; updating borrowers credit files and periodically reviewing the borrowers rating assigned at the time the credit was granted (Mwisho, 2001).

Tools like covenants, collateral, credit rationing, loan securitization and loan syndication have been used by banks in developing the world in controlling credit losses (Hugh, 2001). It has also been observed that high-quality CRM staffs are critical to ensure that the depth of knowledge and judgment needed is always available, thus successfully managing the CR in the CBs. Donaldson (1994) observed that computers are useful in credit analysis, monitoring and control, as they make it easy to keep track on trend of credits within the portfolio.
2.2 Microfinance Theories

2.2.1 Economic Theory of Microfinance

Microfinance theoreticians have advanced two theories regarding their aims – an economic and a psychological. The economic theory treats MFIs as infant industries while the psychological theory differentiates MFIs from traditional money lenders by portraying them as “social consciousness driven people” (Bofondi and Gobbi, 2003). The gist of the economic argument is that success in any business venture including MFIs is determined by the entrepreneurs ability to deliver appropriate services and profitably. However studies conducted in different parts of the third world show that there are no successful MFIs by this definition. Some cover their operating cost while others can cover part of their capital employed. This situation suggests that the MFIs will not become financially viable in the long run.

The economic theory treats microfinance institutions (MFIs) as infant industries, while the psychological theory differentiates microfinance entrepreneurs from traditional money lenders by portraying them as "social consciousness driven people." According to (Wagner et al., 2002), the gist of the economic argument is that success in any business venture, including MFIs, is determined by the entrepreneurs' ability to deliver appropriate services and profitably.

Economic Theory provides an outlet for research in all areas of economics based on rigorous theoretical reasoning and on topics in mathematics that are supported by the analysis of economic problems. Published articles contribute to the understanding and solution of substantive economic problems.

2.2.2 Psychological Theory of Microfinance

The psychological component of the microfinance/credit theory known as social consciousness-driven capitalism has been advanced by the most ardent promoter of microfinance, (Cho and Park, 2001). His theory argues that a species of profit making private ventures that cares about the welfare of its customers can be conceived. In other words, it is possible to develop capitalist enterprises that maximize private profits subject to the fair interests of their customers. However,
studies conducted show that there are no successful MFIs by this definition. At best, some MFIs cover their operating costs while some of the better known among them are able to cover in part the subsidized cost of capital employed. This situation suggests that the MFIs will not become financially viable in the long run.

The psychological component of the micro credit theory - known as social consciousness-driven capitalism - has been advanced by the most ardent promoter of micro finance, Yunus (2003). His theory argues that a species of profit-making private venture that cares about the welfare of its customers can be conceived. In other words, it is possible to develop capitalist enterprises that maximize private profits subject to the fair interests of their customers.

The rationale of the theory is straightforward. Although altruism is not totally absent, capitalism is founded mainly on the premise that human beings are selfish by nature. Accordingly, individuals interested in businesses are naturally motivated by the principle of profit-maximization, with little consideration for the interests of their clients. This premise is too limited to be a general model for capitalism, however, because it excludes individuals who are concerned about the welfare of their fellow human beings. A more generalized principle would assume that an entrepreneur maximizes a bundle consisting of financial return or profit and social return. This assumption creates three groups of entrepreneurs (Zhu, 2000).

2.2.3 Legitimacy Theory

Since MFIs have a two-fold nature – social and financial (Cho and Park, 2001) – they are particularly interesting to analyse under legitimacy theory. Donors are concerned with impact, so for an MFI to appear legitimate, it must disclose information on social issues. Likewise, since some investors and regulators are concerned with sustainability, it must also disclose financial information.

Under the umbrella of legitimacy theory, researchers have put forward a series of hypotheses relating to the information that companies disclose voluntarily. After testing the hypotheses
Empirically, they found evidence of relationships between some of the following variables: size, sector of activity and public exposure (Phan and Stata, 2002).

Legitimacy theory argues that a relationship exists between a company's size and its disclosure practices. This is because a larger company carries out more activities, receives more attention from the general public and has more shareholders who are concerned with its social programs than a smaller company. Research that has specifically focused on legitimacy theory has found a positive and significant relationship between size and disclosure (Athanasoglou et al., 2005).

2.2.4 Principal-Agent Theory

This is the problem of designing mechanisms that will induce agents to act in their principals' interests. In general, unless there is costly monitoring of agents' behaviour, the problem cannot be completely solved. Hired managers (like hired gardeners) will generally wish to pursue their own goals. They cannot ignore profits, however, because if they perform badly enough they will lose their jobs. Just how much latitude they have to pursue their own goals at the expense of profits depends on many things, including the degree of competition in the industry and the possibility of takeover by more profit-oriented management (Jansson, 2002).

The principal-agent problem arises within the firm when ownership and control are separated and the self-interest of managers may lead them to act other than in the interest of the shareholders. The problem is to design monitoring or incentive systems that will make managers act in the best interest of the shareholders.

2.3 Operating Efficiency and Loan Portfolio Quality

While companies strive for credit risk management initiatives in order to experience cost savings, a recent survey has identified that it is not the most common reason. In a recent survey, 94 per cent of executives stated that the main reason they launched credit risk management initiatives was to provide or receive superior customer service and satisfaction (Violina, 1999; Rosa, 2000). This result shows that organizations intend to develop a better tie with their own customers, thus leading to increased loyalty. It also shows that a firm integrating with its own
suppliers will receive improved service and satisfaction. This will lead to increases in the efficiency of operations and the performance of the business. By connecting the extended organization, credit risk management improves the capability of internal operations. It allows separate departments to work together. The collaboration and coordination capabilities among departments tremendously improve productivity in the workplace.

The evaluation of the business efficiency has become increasing important for fine-tuning their current operations and creating new strategies to keep up with competitions. As agreed by other researchers, business efficiency is a multidimensional construct (Wagner et al., 2002; Charnes and Cooper, 1978). Single output to input financial ratios, such as return on investment (ROI) or return on sales (ROS) may not be adequate for use as indices to characterize the overall business efficiency. Since a company’s efficiency is a complex phenomenon requiring more than a single criterion to characterize it, a number of studies have suggested that a multi-factor performance measurement model may be applied for the evaluation of business efficiency (Chakravarthy, 1986; Zhu, 2000; Cho and Park, 2001). The development of a multi-factor performance measure, which reflects the efficiency of functional units and technologies implemented in a business, is important to policy makers by knowing how far this particular industry or company can be expected to increase its multiple outputs and decrease its input level through the improvement of its efficiency. In e-commerce, Web sites are the most important interface helping business organizations to interact directly with customers and to outperform their competitions. The performance measurement for e-commerce needs to include success factors for a Web site design, in addition to those used for a traditional business format (Liu and Arnett, 2000; Liu et al., 2001; Phan and Stata, 2002).

2.3.1 Portfolio Quality

The largest source of risk for any financial institution resides in its loan portfolio. Loan portfolio is ideally expected to be the MFIs largest asset. It should also be noted that since most MFIs financing is not supported by bankable collateral, the quality of the loan portfolio is absolutely crucial.
Three accounting ratios are used to measure portfolio quality including:

1. Portfolio at risk which measures the portion of the loan portfolio "contaminated" by arrears as a percentage of the total portfolio where the desired level is less than 10 per cent;
2. Repayment rate which shows what proportion of the loan installment is paid compared to the expected installment amount in a given period. The desired repayment rate is more than 97% (Jansson, 2002) and
3. Loans written off ratio which represents the amount of loans removed from the accounting books because of a substantial loss where a maximum of 4 per cent is envisaged (Saltzman and Salinger, 1998).

2.3.2 Efficiency and Productivity

Efficiency and productivity ratios are used to determine how well an MFI streamlines its operations. While productivity ratios reflect the amount of output per unit of input, efficiency ratios take into account of the cost of inputs and/or the price of outputs.

Empirical evidence from Athanasoglou et al. (2005) shows that labour productivity growth has a positive and significant effect on bank profitability. This suggests that higher productivity growth generates income that is partly channelled to bank profits. Banks target high levels of labour productivity growth through various strategies that include keeping the labour force steady, ensuring higher quality of newly hired labour, reducing the total number of employees, and increasing overall output via increased investment in fixed assets which incorporate new technology.

The accounting ratios used to measure operating efficiency include;

1. Number of active borrowers per credit officer which is a ratio that measures performance of credit officers and efficiency of methodology.
2. Number of active borrowers per staff member which is a ratio that measures the overall efficiency of the institution.

3. Gross Portfolio outstanding per credit officer which is a ratio that measures the productivity of the credit officer.

4. Number of active borrowers per branch. This is a ratio which measures efficiency of each branch office.

5. Cost per loan made. This ratio measures the total operating costs over the number of loans disbursed in a period.

6. Cost per unit of currency lent. This is a ratio of total operating costs over total amount of loans disbursed in a period.

2.3.3 Portfolio Quality and Profitability

Profitability indicators are used to gauge the schemes' net income in relation to the structure of its balance sheet. These indicators provide an indication of whether an MFI is earning an adequate return on the funds invested on the institution. This performance indicator is also linked with portfolio quality and efficiency indicators. MFI's capital can be seen in two ways. Narrowly, it can be seen as the amount contributed by the owners of the institution (paid-up share capital) that gives them the right to enjoy all the future earnings of the bank. More comprehensively, it can be seen as the amount of owners' funds available to support a bank's business (Athanasoglou et al., 2005). The later definition includes reserves, and is also termed total shareholders' funds (Anyanwaokoro, 1996). No matter the definition adopted, a MFI's capital is widely used to analyze the status of its financial strength (Bobáková, 2003).

Positive correlation between returns and capital has been demonstrated by Furlong and Keeley (1989), Keeley and Furlong (1990), Berger (1994), Berger (1995) and Kwan and Eisenbeis (2005). Investigating the determinants of Tunisian banks' performances during the period 1980-1995, Naceur and Goaied (2003) indicated that the best performing banks are those who have
struggled to improve labour and capital productivity and those who have been able to reinforce their equity. Bourke (1989) agree that well-capitalized banks face lower need to external funding and lower bankruptcy and funding costs; and this advantage translates into better profitability. Therefore, researchers widely posit that the more capital a financial institution has, the more resistant it will be to failure.

If portfolio quality is poor or efficiency is low for example, this is reflected in profitability. Profitability is measured using three ratios:

1. Return on assets which provide an overall measure of profitability by assessing of net income to average total assets whereby the desired level is around 3.7 per cent for smaller MFIs in the developing countries (Jansson, 2002).
2. Financial self sufficiency which measures the total income as a ratio of adjusted operating expenses. The total expenditure is adjusted for inflation costs, market interest rates for donated capital and all in-kind subsidies and donations. The ideal ratio is over 100 per cent.
3. Portfolio yield which measure the total loan income to average net loan portfolio. The targeted level for this ratio is at least 10 per cent (Ledgerwood, 1999; Richardson, 2002).

2.3.4 Loan Portfolio and Financial Structure

Financial structure is the single most important factor in assessing growth potential, earnings capacity and overall financial strength (Richardson, 2002). The financial structure of the microfinance institutions is evaluated using the following two accounting ratios:

1. Net loans to total assets which measures the percentage of total assets invested in the loan portfolio where the desired level for this ratio is between 70 and 80 per cent (Richardson, 2002) and;
2. Non-financial investments to total assets which measures the percentage of total assets in non-financial investments. The targeted level for this ratio is 0 per cent (Richardson, 2002).
A firm's structural affiliation could have positive or negative effects on its profitability. On the positive side, Leff (1998), Hubbard and Palia (1999) and Khanna and Palepu (2000) are of the view that firms affiliated with business groups have advantages over independent firms through intragroup trading and internal capital markets, especially in less developed economies. Also, through diversification, business groups can reduce risk and uncertainty in firm operations. Furthermore, a business group can exploit its large size to borrow money at a lower cost (Joh, 2003). But, on the negative side, Lamont (1997) and Scharfstein and Stein (2000) argue that multi-divisional firms sometimes overinvest capital in weak divisions and underinvest it in stronger ones; and this adversely affects the profitability of the entire business group. Firms associated with business groups can also suffer greatly, as their controlling shareholders have the tools to divert firm resources through the transfer of assets from one subsidiary to another. Controlling shareholders of firm groups can move away resources for their private benefits by means such as self-dealing, as well as divert resources from one subsidiary in which they own less to firms in which they own more. The end result is inefficient investments and reduced profitability of the entire business group.

2.4 Performance Evaluation

Recent years have witnessed an increased global push for performance evaluation of MFIs (Von Stauffenberg, 2002). In Kenya it is notable that the number of MFIs has been growing since the implementation of financial sector reforms in 1991 (Satta, 2004) and the introduction of Microfinance Regulation and Supervision Resource Centre. While the number of MFIs in Kenya increases, these institutions are faced by the challenge of supporting the large number of poor people (Rhyne, 2001). MFIs have prompted innovative financing approaches to achieving and maintaining financial sustainability of their services. While the country has witnessed the growth of these institutions, most MFIs continue to experience difficulties in accessing finance. Notably, most MFIs continue to depend on personal resources and loans from other financial institutions like the commercial banks and development agencies.
2.4.1 Poverty Reduction

This study is motivated by the role MFIs are considered to play in poverty reduction. Existing literature indicates that MFIs play a key role in poverty reduction. As such an overview of the country's background information is important. After four decades of independence, Kenya remains to be one of the poorest countries in the world (Randhawa and Gallardo, 2003). The Republic of Kenya has an estimated population of 38 million of which 57 per cent live below the poverty line (UNDP, 2007).

Another equally important premise to this study is the presence of a significant number of MFIs, which do not fit into the country's conventional enterprise recognition. At present, unemployment remains to be a significant problem the country has to deal with. Most end up in the small business sector, and especially in the informal sector. In addition to jobs creation, it is also estimated that about a third of the country's GDP originates from this sector. As more microfinance programs cross the hurdles of operational efficiency and then full profitability, with strategically applied external support, they can begin to reach tens of millions of poor families with high quality financial services. In so doing they help those families lead more secure, empowered, and healthy lives and to provide their children with better economic opportunities. Enlarging opportunities is the ultimate purpose of micro enterprise finance.

2.4.2 Competition

Economy theories suggest that MFIs, as profitable entities, provide services, until marginal cost equals marginal revenue, unlike under perfect competition where production stops when price equals marginal cost. Albon (1985) states that financial institutions like the MFIs are expected or required to operate under an imposed and minimum required rate of return which reflects different degrees of inefficiency. The importance of setting a financial performance indicator to MFIs is highlighted by Ariff (1999), who opines that monopolistic institutions should be evaluated in terms of a single-rate-of-return criterion for external comparison among similar organizations, in terms of economic goods provided as well as their own investments through using the cost of capital as the "hurdle rate". Ariff (1999) accordingly suggest the need for
evaluating the MFIs in terms of its own performance compared with other similar private enterprises.

2.4.3 Interest Rate Policy

MFIs should insist that enterprises they support price their services at a level that supports financial viability. In particular, MFIs must adjust adequately to the potentially erosive effects of inflation. They should also insist that supported organizations report on their performance according to generally understood and accepted standards in a way that makes subsidies transparent. They should be prepared to offer technical assistance to organizations to develop the capacity to do so.

2.5 Empirical Review

In a study by (Asabere, Huffman and Mehdian 1992) ten out of eleven institutions reviewed had achieved operational self-sufficiency: they covered administrative expenses out of interest income and client fees. This finding led to the important generalization that operational efficiency can be achieved consistently in micro enterprise finance, in a range of settings, and with a variety of clientele.

In their study, Edmister and Hatfield, (1995) observed that few institutions reported financial and outreach data at a sufficiently high standard. They further found that relevant information plays a crucial role both in internal management and in convincing outsiders (donors, lenders, investors, depositors, regulatory authorities) of the soundness of an institution. Inability to provide such information will slow the development of an institution and limit its access to funding.

According to Brueckner (1994), the prerequisites to operational efficiency appear to include the adaptation of an effective service delivery methodology, stable financial structure and significant institutional competence in such areas as delinquency control, information management, and staff development.
Studies about the efficiency and productivity of MFI on the basis of default risk have been well discussed by Brueckner (1994). Most of the literature is based on demand analysis of credit, and they mainly emphasize that rationing the borrower improves the quality of the loan performance. Jaffee and Russell (1976) also found that the optimal loan size depends on the marginal loan loss, and not on the initial portfolio position of the MFI. Tse, (1996a) shows that under conditions of uncertainty when default risk is present, and if absolute risk aversion is increasing in wealth, a rise in profitability of the bank will lower the amount of asset to be allocated in risky loans even if credit can be properly priced. This is an important indicator of the profitability of the MFI.

Kilonzo (2003) studied the effect of changes in interest rates credit granted by commercial banks in Kenya. His finding showed that interest rates have no significant effect on the amount of credit granted by MFIs in Kenya between 1992 and 2003, hence showing the importance of interest rates on performance hence profitability of MFIs. The study established that Revenue sources of MFIs were from credit extended to various individuals and organizations.

Mbote (2006), did a study on the relationship between the type of mortgages & the level of loan portfolio in the mortgage companies in Kenya while Maithulia (1995), studied the portfolio diversification: an empirical investigation of Commercial banks in Kenya. These studies established that few institutions reported financial and outreach data at a sufficiently high standard and that inability to provide such information will slow the development of an institution and limit its access to funding.

N'gene (2002) did an empirical investigation into portfolio performance measures by pension fund managers and the challenges they face in portfolio management in Kenya. The study established that the challenges include taxes, investor preferences, portfolio constraints, lack of knowledge from consultants and cultural hurdles. The study thus shows that these challenges led to reduction in return on assets, financial self sufficiency and portfolio yield. It was also clear that multi-divisional firms sometimes over invest capital in weak divisions and underinvest it in stronger ones: and this adversely affects the profitability of the entire business group.
Koyengo (2005) conducted an evaluation of investor returns under active versus passive equity portfolio management strategies and found that higher productivity growth generates income that is partly channelled to bank profits and that well-capitalized banks face lower need to external funding and lower bankruptcy and funding costs; and this advantage translates into better profitability.

According to Ndung’u (2003), sound asset and liability management have significant influence on profitability. Among the external factors, high market interest rate was found to have an adverse effect on financial institution's profitability in Kenya. The study also found that the prerequisites to operational efficiency include the adaptation of an effective service delivery methodology and significant institutional competence in such areas as delinquency control, information management, and staff development.

2.6 Conclusion

So far there is a consensus view from theoretical investigation supported by numerous empirical studies that MFIs as opposed to commercial banks face specific constraints in raising finance. In Kenya, quite large percentages of MFIs are found to face difficulties in accessing finance from financial institutions as the major constraint to their development. Evaluating the operating efficiency and loan portfolio partly requires an examination of how various operational issues affect its financial position.

Recent years have witnessed an increased global push for performance evaluation of MFIs. While the number of MFIs in Kenya increases, these institutions are faced by the challenge of supporting the large number of poor people. MFIs have prompted innovative financing approaches to achieving and maintaining financial sustainability of their services. At present, unemployment remains to be a significant problem the country has to deal with. Most end up in the small business sector, and especially in the informal sector.
Economy theories suggest that MFIs, as profitable entities, provide services, until marginal cost equals marginal revenue, unlike under perfect competition where production stops when price equals marginal cost. MFIs should insist that enterprises they support price their services at a level that supports financial viability. They should also insist that supported organizations report on their performance according to generally understood and accepted standards in a way that makes subsidies transparent. In particular, MFIs must adjust adequately to the potentially erosive effects of inflation.

Operational efficiency can be achieved consistently in micro enterprise finance, in a range of settings, and with a variety of clientele. Relevant information plays a crucial role both in internal management and in convincing outsiders (donors, lenders, investors, depositors, regulatory authorities) of the soundness of an institution. The prerequisites to operational efficiency appear to include the adaptation of an effective service delivery methodology, stable financial structure and significant institutional competence in such areas as delinquency control, information management, and staff development.

Most of these studies cited in this chapter were done in the developed countries whose strategy approach and financial footing is not similar to that of Kenya. None of them focused on loan portfolio and operational efficiency among MFIs in Kenya. Thus there exist a literature gap on loan portfolio and operational efficiency among MFIs in Kenya. This study therefore seeks to fill the gap in knowledge by surveying the usage of operating efficiency and loan portfolio indicators as a measure of credit risk among MFIs in Kenya.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter is a blueprint of the methodology that was used by the researcher to find answers to the research question. In this chapter the research methodology was presented in the following order: research design, target population, data collection methods, instruments of data collection and finally the data analysis.

3.2 Research design

This was a descriptive survey study aimed at establishing the operating efficiency and loan portfolio indicators usage by MFIs in Kenya. A descriptive study is concerned with finding out the what, where and how of a phenomenon (Mugenda, 2008). Descriptive Research is the investigation in which quantity data is collected and analysed in order to describe the specific phenomenon in its current trends, current events and linkages between different factors at the current time. Descriptive research design was chosen because it enables the researcher to generalise the findings to a larger population. This study therefore was able to generalise the findings to all the MFIs in Kenya.

3.3 Population

The population of interest of this study were all the MFIs in Kenya. By end of 2009, a total of 41 MFIs were registered with the Association of Microfinance Institutions in Kenya. The researcher targeted the 41 MFIs for the study. This therefore means that census survey method was used.

3.4 Data Collection

In order to identify the operating efficiency and loan portfolio indicators usage by MFIs in Kenya, self-administered drop and pick questionnaires were distributed to Credit Managers of the target MFIs. The questionnaire was designed to identify the evaluation of the usage of
efficiency and loan portfolio quality indicators by the MFIs. The researcher used structured questionnaires as the main data collection instrument. The questionnaires had both open and close-ended questions. The close-ended questions provided more structured responses to facilitate tangible recommendations. The open-ended questions provided additional information that may not be captured in the close-ended questions.

3.5 Data Reliability and Validity

The researchers carried out a pilot study to pre-test and validate the questionnaire. A pilot group can range from 25 to 100 subjects depending on the method to be tested but it does not need to be statistically selected. This was in line with a qualitative research design methodology employed in this research project.

According to Berg and Gall (1989) validity is the degree by which the sample of test items represents the content the test is designed to measure. Content validity which was employed by this study is a measure of the degree to which data collected using a particular instrument represents a specific domain or content of a particular concept. Mugenda and Mugenda (1999) contend that the usual procedure in assessing the content validity of a measure is to use a professional or expert in a particular field. To establish the validity of the research instrument the researcher sought opinions of experts in the field of study especially the researcher's supervisor and lecturers. This facilitated the necessary revision and modification of the research instrument thereby enhancing validity.

According to Shanghverzy (2003), reliability refers to the consistency of measurement and is frequently assessed using the test-retest reliability method. Reliability is increased by including many similar items on a measure, by testing a diverse sample of individuals and by using uniform testing procedures (ibid).

The researcher selected a pilot group of 7 individuals from the target population at the MFIs to test the reliability of the research instrument. This was achieved by first stratifying the
individuals according to level of management, level of education, number of years worked. The researcher also put in consideration gender equity and geographical background of individuals.

The pilot data was not included in the actual study. The pilot study allowed for pre-testing of the research instrument. The clarity of the instrument items to the respondents was established so as to enhance the instrument's validity and reliability. The pilot study enabled the researcher to be familiar with research and its administration procedure as well as identifying items that require modification. The result helped the researcher to correct inconsistencies arising from the instruments, which ensured that they measure what was intended.

3.6 Data Analysis

The researcher perused completed questionnaires and document analysis recording sheets. Quantitative data collected was analysed by the use of descriptive statistics using SPSS version 17.0 and presented through percentages, means, standard deviations and frequencies. This was done by tallying up responses, computing percentages of variations in response as well as describing and interpreting the data in line with the study objectives and assumptions. Correlation inferential analysis was employed for analysis. It's a measure of the degree of association between two or more variables that have been obtained from the same group of subjects. Content analysis was used to test data that was qualitative nature or aspect of the data collected from the open ended questions. This offered a systematic and qualitative description of the objectives of the study. The information was displayed by use of bar charts, graphs and pie charts and in prose-form.
4.0 DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents analysis and findings of the study as set out in the research methodology. The data was gathered exclusively from questionnaire as the research instrument. The questionnaire was designed in line with the objectives of the study. To enhance quality of data obtained, Likert type questions were included whereby respondents indicated the extent to which the variables were practiced in a five point Likert scale. The data has been presented in form of quantitative, qualitative followed by discussions of the data results. The chapter concludes with critical analysis of the findings.

4.2 Respondents' demographic characteristics.

4.2.1 Gender

The study in this section aimed at establishing the gender. Majority of the respondents were males comprising 63 percent while female respondents were 37 percent.

Table 4.1 Gender

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>22</td>
<td>63</td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
<td>37</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Research Findings.
4.2.2 Designation

The aim of this section of study was to establish the designation of the respondents. Majority of the respondents were credit managers comprising 38 percent, credit officers 34 percent, branch managers 16 percent while 12 percent were operation managers.

Figure 4.1 Designation

<table>
<thead>
<tr>
<th>Designation</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branch Manager</td>
<td>16</td>
</tr>
<tr>
<td>Credit Manager</td>
<td>38</td>
</tr>
<tr>
<td>Credit Officer</td>
<td>34</td>
</tr>
<tr>
<td>Operations Manager</td>
<td>12</td>
</tr>
</tbody>
</table>

Source: Research Findings.

4.2.3 Highest level of education

In this section, the aim was to establish the highest level of education of the respondents. Results depicted in table 4.2 revealed that a majority of the respondents had college level of education comprising 58 percent while 30 percent had university level of education. Only 12 percent had secondary level of education.

Table 4.2 Highest level of education

<table>
<thead>
<tr>
<th>Level</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>College</td>
<td>11</td>
<td>33</td>
</tr>
<tr>
<td>University</td>
<td>22</td>
<td>63</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Research Findings.
2.4 Number of years worked in the MFI

The study went further to establish the number years worked in the institution. Findings from the figure showed that majority of the respondents had worked for a period of 7 to 9 years comprising 32 percent while 28 percent had worked for a period of 12 years and above. 20 percent had worked for a period of 10 to 12 years, while 12 percent had worked for a period of 4 to 6 years.

Figure 4.2 Number of years worked in the MFI

Source: Research Findings.

4.3 Evaluation of microfinance institutions in Kenya.

4.3.1 Extent into which various evaluation factors are applied to measure the performance of microfinance institution.

This section aimed at establishing the extent into which various evaluation factors are applied to measure the performance of MFIs. Findings from the study revealed that most MFIs applied profitability to a great extent than financial structure as was shown by a mean of 3.95 compared to the financial structure with a mean of 3.7. In addition, the companies applied portfolio quality evaluation factor to measure performance to a moderate extent as was shown by a mean of 3.1. The least applied evaluation factor to measure performance was productivity shown by a mean of 2.5.
Table 4.3 Extent into which various evaluation factors are applied to measure the performance of the MFI

<table>
<thead>
<tr>
<th>Evaluation factor</th>
<th>No extent Mean</th>
<th>Little extent</th>
<th>Moderate extent</th>
<th>Great extent</th>
<th>Very great extent</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio quality</td>
<td>8% 12% 14% 34%</td>
<td>32%</td>
<td>3.122 .654</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profitability</td>
<td>4% 8% 12% 30%</td>
<td>46%</td>
<td>3.956 .675</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial structure</td>
<td>18% 10% 18% 12%</td>
<td>42%</td>
<td>3.787 .989</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Productivity</td>
<td>2% 14% 32% 31%</td>
<td>21%</td>
<td>2.504 .545</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Findings.

The study revealed that MFIs included quality of management and environmental factors as operational issues in performance evaluation. The study further inquired from the respondents on the importance of regulating and supervising MFI in Kenya. The respondents cited reasons such as to curb fraud, increased depositor confidence, to facilitate an enabling playground for all institutions and to show good public image. In addition, the respondents cited that regulation was mandatory in the financial system.

4.4 Operating efficiency and loan portfolio quality indicators

4.4.1 Use of various loan portfolio indicators

This section aimed at identifying the various loan portfolio quality indicators used by the MFIs. Findings from the study revealed that most MFIs used repayment rate indicator as was shown by 76 percent, Cost per unit of currency lent shown by 72 percent. Number of active borrowers per branch shown by 70 percent, Portfolio at risk shown by 64 percent and Gross portfolio outstanding per Loan officer shown by 62 percent. The least used loan portfolio indicator was number of active borrowers per loan officer.
Table 4.4 Use of various loan portfolio indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio at risk</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>Repayment rate</td>
<td>76%</td>
<td>24%</td>
</tr>
<tr>
<td>Cost per loan made</td>
<td>58%</td>
<td>42%</td>
</tr>
<tr>
<td>Cost per unit of currency lent</td>
<td>72%</td>
<td>28%</td>
</tr>
<tr>
<td>Number of active borrowers per branch.</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td>Gross portfolio outstanding per business dev.</td>
<td>62%</td>
<td>38%</td>
</tr>
<tr>
<td>Number of active borrowers per staff member</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>Number of active borrowers per business dev.</td>
<td>32%</td>
<td>68%</td>
</tr>
</tbody>
</table>

Source: Research Findings.

4.4.2 Length of time in which the operating efficiency and loan portfolio indicators cover

Table 4.5 Length of time in which the operating efficiency and loan portfolio indicators cover

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1 - 3 Months</th>
<th>4 – 6 Months</th>
<th>7 - 9 Months</th>
<th>8 - 12 Months</th>
<th>1 - 3 Years</th>
<th>Over 3 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio at risk</td>
<td>30%</td>
<td>24%</td>
<td>20%</td>
<td>15%</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Repayment rate</td>
<td>45%</td>
<td>22%</td>
<td>15%</td>
<td>12%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Cost per loan made</td>
<td>18%</td>
<td>24%</td>
<td>26%</td>
<td>20%</td>
<td>12%</td>
<td>6%</td>
</tr>
<tr>
<td>Cost per unit of currency lent</td>
<td>10%</td>
<td>18%</td>
<td>20%</td>
<td>16%</td>
<td>32%</td>
<td>4%</td>
</tr>
<tr>
<td>Number of active borrowers per branch.</td>
<td>20%</td>
<td>20%</td>
<td>24%</td>
<td>28%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Gross portfolio outstanding per credit officer</td>
<td>24%</td>
<td>16%</td>
<td>12%</td>
<td>18%</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>Number of active borrowers per staff member</td>
<td>14%</td>
<td>20%</td>
<td>26%</td>
<td>28%</td>
<td>12%</td>
<td>6%</td>
</tr>
<tr>
<td>Number of active borrowers per credit officer</td>
<td>20%</td>
<td>30%</td>
<td>16%</td>
<td>20%</td>
<td>10%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Source: Research Findings.

This section aimed at establishing the length of time in which the operating efficiency and loan portfolio quality indicators covered. Results depicted in table 4.5 revealed that in most MFIs,
payment rate covered a period of 1-3 months as shown by 45 percent, portfolio at risk covered a period of 1-3 months as shown by 30 percent, number of active borrowers per credit officer covered a period of 4-6 months as shown by 30 percent, number of active borrowers per branch cover a period of 8-12 months shown by 28 percent while cost per loan made cover a period of 7-9 months as was shown by 26 percent.

4.3 Presence of a management committee responsible for evaluating the indicators usage.

The study established that all the respondents were involved in the evaluation of the credit risk management indicators used in the MFIs. The study went further to inquire whether there was a committee responsible for evaluating the indicators usage. Majority of the respondents cited that there was a management committee responsible for evaluating the credit risk indicators usage as shown by 86 percent while in 14 percent there was no management committee responsible for evaluating the indicators usage.

Table 4.6 Presence of a management committee responsible for evaluating the indicators usage.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>30</td>
<td>86</td>
</tr>
<tr>
<td>No</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Research Findings.

4.4.4 Rating of various factors according to their contribution to difficulties on accessing finance of the MFIs.

This section aimed at establishing the rating of various factors according to their contribution to difficulties on accessing finance to the MFIs. Findings presented in table 4.7 revealed that most respondents agreed to a great extent that lack of appropriate instruments to manage the risk involved and high risk and transaction costs were the major factors that led to difficulties on accessing finance to the MFIs as was shown by means of 3.9 and 3.8. In addition, majority of the
respondents cited to a moderate extent that difficulties in enforcing contracts and information asymmetry led to difficulties on accessing finance of the MFIs shown means of 3.3 and 3.1 respectively.

Table 4.7 Rating of various factors according to their contribution to difficulties on accessing finance to the MFIs.

<table>
<thead>
<tr>
<th>Factor</th>
<th>No extent</th>
<th>Little extent</th>
<th>Moderate extent</th>
<th>Great extent</th>
<th>Very great extent</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulties in enforcing contracts</td>
<td>10%</td>
<td>12%</td>
<td>20%</td>
<td>24%</td>
<td>32%</td>
<td>3.326</td>
<td>1.775</td>
</tr>
<tr>
<td>High risk and transaction costs</td>
<td>5%</td>
<td>5%</td>
<td>8%</td>
<td>34%</td>
<td>48%</td>
<td>3.832</td>
<td>1.638</td>
</tr>
<tr>
<td>Information asymmetry</td>
<td>15%</td>
<td>10%</td>
<td>20%</td>
<td>25%</td>
<td>30%</td>
<td>3.100</td>
<td>1.656</td>
</tr>
<tr>
<td>Lack of appropriate instruments to manage risks</td>
<td>8%</td>
<td>10%</td>
<td>20%</td>
<td>14%</td>
<td>48%</td>
<td>3.945</td>
<td>1.69</td>
</tr>
</tbody>
</table>

Source: Research Findings.

4.5 Correlation

The table below presents the correlation (R) and the coefficient of determination between credit risk management as the dependent variable and the independent variables (operating efficiency indicator and loan portfolio quality indicators). From the findings, the study found that there was a positive relationship between the dependent variable and the independent variables.

Of the two independent variables, loan portfolio quality indicators had the highest relationship with credit risk management with a correlation of 0.450 followed by operating efficiency indicator with 0.428.
As aforementioned, of all two predictors to credit risk management practices, loan portfolio quality indicators had the highest coefficient of determination (strength of relationship between loan portfolio indicators and credit risk management) of 0.226 while operating efficiency indicator had a coefficient of determination of 0.183.

Table 4.8: Correlation and the Coefficient of Determination

<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>
</tr>
</thead>
<tbody>
<tr>
<td>Operating efficiency indicator</td>
<td>0.428</td>
<td>0.183</td>
<td>0.149</td>
<td>0.8125</td>
</tr>
<tr>
<td>Loan portfolio quality indicators</td>
<td>0.450</td>
<td>0.226</td>
<td>0.151</td>
<td>0.8825</td>
</tr>
</tbody>
</table>

Source: Research Findings.

Table 4.9: Coefficient of Determination

<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>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.681(a)</td>
<td>0.463</td>
<td>0.361</td>
<td>0.752</td>
</tr>
</tbody>
</table>

Source: Research Findings.

Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (credit risk management) that is explained by the two independent variables (operating efficiency indicator and loan portfolio quality indicators).
The correlation and the coefficient of determination of the dependent variables when all independent variables are combined can also be measured and tested as in the table below. From the findings 46.3% of credit risk management was attributed to combination of the two independent factors (operating efficiency indicator and loan portfolio quality indicators) investigated in this survey. A further 53.7% of credit risk management is attributed to other factors not investigated in this survey.

4.6 Discussion of findings

The study revealed that most MFIs to a great extent used various operating efficiency and loan portfolio quality indicators such as Repayment rate indicator, Cost per unit of currency, Number of active borrowers per branch, Portfolio at risk and Gross portfolio outstanding per Credit officer. These findings confers to Mbote (2006), who did a study on the relationship between the type of mortgages & the level of loan portfolio in the mortgage companies who found that use of loan portfolio quality indicators leads to improved performance.

The study further revealed that lack of appropriate instruments to manage the risk involved and high risk and transaction costs were the major factors that led to difficulties on accessing finance to the MFIs. This confers to (Berger et al., 1998) who found that out that there are several problems affecting growth of MFIs, difficulties on accessing finance is arguably the central. So far there is a consensus view from theoretical investigation supported by numerous empirical studies that MFIs as opposed to commercial banks face specific constraints in raising finance.

The study established that productivity was an evaluation factor that was being used to measure performance. Empirical evidence from Athanasoglou et al. (2005) shows that productivity growth has a positive and significant effect on bank profitability. This suggests that higher productivity growth generates income that is partly channelled to bank profits. Banks target high levels of productivity growth through various strategies that include keeping the labour force steady, ensuring higher quality of newly hired labour, reducing the total number of employees, and increasing overall output via increased investment in fixed assets which incorporate new technology.
CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter presents the summary of the findings of the data collected from the field and a conclusion on the findings in line with the objectives of the study. The chapter also includes the limitations of the study and concludes with recommendations of the findings and suggestions on areas of further research.

5.2 Summary

The study revealed that a majority of the respondents were males comprising 63 percent while 37 percent were females. In addition, most of the respondents were credit managers comprising 38 percent, 34 percent were credit officers, 16 percent were branch managers while 12 percent were operations managers. Further, a majority of the respondents had university level of education comprising 63 percent while 33 percent had college level of education. In addition, majority of the respondents had worked for a period of 7 to 9 years comprising 32 percent while 28 percent had worked for a period of 12 years and above. 20 percent had worked for a period of 10 to 12 years.

On the extent into which various evaluation factors are applied to measure the performance of the institution, the study revealed that most MFIs applied profitability and financial structure to a great extent as an evaluation factor to measure their performance. In addition, the MFIs applied portfolio quality evaluation factor and productivity to measure performance to a moderate extent.

The study revealed that the MFIs included quality of management and environmental factors as operational issues in performance evaluation. The study further established the importance of regulating and supervising of microfinance Institutions in Kenya. The reasons were to curb fraud, increase depositor confidence, enhance accountability, to facilitate an enabling playground.
for all institutions and to portray good public image. In addition, the respondents cited that regulation was mandatory in the financial system.

On the use of various loan portfolio quality indicators as a credit risk management practice, the study revealed that most MFIs used repayment rate, portfolio at risk, cost per unit of currency lent, number of active borrowers per branch, operating efficiency and gross portfolio outstanding per credit officer indicators. On the issue of the length of time in which the operating efficiency and loan portfolio quality indicators covered, the study established that in most MFIs, repayment rate, portfolio at risk indicators covered a period of 1-3 months; number of active borrowers per credit officer covered a period of 4-6 months; cost per loan made covered a period of 7-9 months; number of active borrowers per staff member and number of active borrowers per branch covered a period of 8-12 months while cost per unit of money lent covered a period of 1-3 years. The study further revealed that all the respondents were involved in the evaluation of the various credit risk management indicators used in the MFIs.

The study revealed that in majority of the MFIs, there was a management committee responsible for evaluating the credit risk. On the issue of the rating of various factors according to their contribution to difficulties on accessing finance of the MFIs, the study established that most respondents agreed to a great extent that lack of appropriate instruments to manage the risk involved and high risk and transaction costs were the major factors that led to difficulties on accessing finance to the MFIs.

On correlation, the study found that there was a positive relationship between the dependent variable and the independent variables. Of the two independent variables, loan portfolio indicators had the highest relationship with risk management with a correlation of 0.450 followed by operating efficiency indicator with 0.428.

5.3 Conclusion

The study concludes that most of the MFIs to great extent used operating efficiency indicator as a credit risk management practice. Efficiency and productivity ratios are used to determine how
well an MFI streamlines its credit operations. While productivity ratios reflect the amount of output per unit of input, efficiency ratios take into account of the cost of inputs and/or the price of outputs.

The study further concludes that the MFIs used to a great extent the loan portfolio quality indicators as a risk management practice such as portfolio at risk, repayment rate, cost per unit of currency lent, number of active borrowers per branch, operating efficiency and gross portfolio outstanding per credit officer.

5.4 Limitations

The researcher encountered problems in eliciting information from the respondents as the information required was subject to areas of transparency, and confidentiality which could not be accurately quantified and/or verified objectively. The researcher encouraged the respondents to participate without holding back the information they had as the research instruments did not bear their names.

The researcher encountered problems of time as the research was being undertaken in a short period. Also some of the respondents approached were reluctant in giving information while others were too busy to respond to the questionnaire. The researcher had to persuade them in order for them to fill the questionnaire.

5.5 Recommendations

The study recommends that MFIs continue to build on the credit risk management practices highlighted in this study as a good practice. As an industry policy, the MFIs should adopt other credit risk management practices such as use of credit referencing and use of profitability indicators. In addition, the study recommends that MFIs need to employ a combination of performance indicators such as profitability, operating efficiency and portfolio quality indicators to measure MFI overall performance so as to provide an indication of whether an MFI is earning an adequate return on the funds invested on the institution by shareholders and investors.
This study focussed on the current credit risk management practices among MFIs in Kenya. More research needs to be carried out on the current risk management practices in other financial institutions such as SACCOs, ROSCAs and ASCAs. In addition, there is need to research on the effects of microfinance regulations on corporate governance practices and pricing strategies in MFIs as well as the factors affecting creditworthiness of borrowers in the microfinance industry.
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Appendix 1

Questionnaire for Credit Risk Management among Microfinance Institutions in Kenya.

Please answer all the questions in the three parts

Section A: General Information

1. Name of your institution

..........................................................

2. Please indicate your Gender.

( ) Male ( ) Female

3. Your designation.(Tick as appropriate)

Operations Manager ( ) Credit Manager ( )
Credit Officer ( ) Branch Manager ( )
Other (specify) ...........................................

4. What is your highest level of education?

Secondary certificate ( ) College Diploma ( )
Bachelors Degree ( ) Masters Degree ( )
Other (please state) .................................

5. How many years have you worked in this MFI?

1-3 years ( ) 4-6 years ( ) 7-9 years ( )
10-12 years ( ) Over 12 years ( )
Section B: Evaluation of microfinance institutions in Kenya.

6. To what extent are the following four evaluation factors applied to measure the performance of your institution?

<table>
<thead>
<tr>
<th>Evaluation factor</th>
<th>No extent</th>
<th>Little extent</th>
<th>Moderate extent</th>
<th>Great extent</th>
<th>Very great extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profitability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Productivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Does your institution include these operational issues in its performance evaluation?
   a) Quality of management Yes ( ) No ( )
   b) Environmental factors Yes ( ) No ( )
   C) Others (specify) .................................................................

8. In your own views, what are the importance of regulating and supervising of microfinance Institutions in Kenya?
   a) ...............................................................................................
   b) ...............................................................................................
   c) ...............................................................................................

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Section C: Operating efficiency and loan portfolio indicators

9. Does your company use any of the following indicators?
   a) Portfolio at risk
      [ ] yes  [ ] no
   b) Repayment rate
      [ ] yes  [ ] no
   c) Cost per loan made
      [ ] yes  [ ] no
   d) Cost per unit of currency lent
      [ ] yes  [ ] no
   e) Number of active borrowers per branch.
      [ ] yes  [ ] no
   f) Gross portfolio outstanding per business development officer
      [ ] yes  [ ] no
   g) Number of active borrowers per staff member
      [ ] yes  [ ] no
   h) Number of active borrowers per business development officer
      [ ] yes  [ ] no

10. If your answer is Yes, what length of time does your operating efficiency and loan portfolio quality indicators cover?
   a) Portfolio at Risk
      1 - 3 Months [ ] 4 - 6 Months [ ]
      7 - 9 Months [ ] 8 - 12 Months [ ]
      1 - 3 Years [ ] Over 3 Years [ ]
   b) Repayment rate
      1 - 3 Months [ ] 4 - 6 Months [ ]
<table>
<thead>
<tr>
<th></th>
<th>0-3 Months</th>
<th>4-6 Months</th>
<th>7-9 Months</th>
<th>8-12 Months</th>
<th>Over 3 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-9 Months</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>1-3 Years</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>c) Cost per loan made</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 3 Months</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>7-9 Months</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>1-3 Years</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>d) Cost per unit of currency lent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 3 Months</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>7-9 Months</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>1-3 Years</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>e) Number of active borrowers per branch.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 3 Months</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>7-9 Months</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>1-3 Years</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>f) Gross portfolio outstanding per business development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 3 Months</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>7-9 Months</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>1-3 Years</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>g) Number of active borrowers per staff member</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 3 Months</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>7-9 Months</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td></td>
</tr>
</tbody>
</table>
h) Number of active borrowers per business development officer

<table>
<thead>
<tr>
<th>Time Period</th>
<th>[ ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 3 Months</td>
<td>[ ]</td>
</tr>
<tr>
<td>7- 9 Months</td>
<td>[ ]</td>
</tr>
<tr>
<td>1 – 3 Years</td>
<td>[ ]</td>
</tr>
<tr>
<td>Over 3 Years</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

11. Are you involved in the evaluation of the indicators used in your firm?

Yes [ ] No [ ]

12. Is there a management committee responsible for evaluating the indicators usage?

Yes [ ] No [ ]

13. Rate the following factors according to their contribution to difficulties on accessing finance of the MFIs.

<table>
<thead>
<tr>
<th>Factor</th>
<th>No extent</th>
<th>Little extent</th>
<th>Moderate extent</th>
<th>Great extent</th>
<th>Very great extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulties in enforcing contracts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High risk and transaction costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information asymmetry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of appropriate instruments to manage risks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

55
14. Due to competition, microfinance institutions should be evaluated in terms of

<table>
<thead>
<tr>
<th>Factor</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-rate-of-return criterion for external comparison among similar organizations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic goods provided as well as their own investments through the cost of capital</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Its own performance with other similar private enterprises</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. To what extent are the following accounting ratios used in the evaluation of financial structure of your microfinance institution?

<table>
<thead>
<tr>
<th>Factor</th>
<th>No extent</th>
<th>Little extent</th>
<th>Moderate extent</th>
<th>Great extent</th>
<th>Very great extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net loans to total assets which measure the percentage of total assets invested in the loan portfolio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-financial investments to total assets which measures the percentage of total assets in non-financial investments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
16. Apart from giving loans and employment, how else does your institution participate in poverty reduction?
   a) ........................................................................................................................................
   b) ........................................................................................................................................
   c) ........................................................................................................................................

17. To what extent are the following ratios applied in evaluation of profits and loan portfolio in your institution?

<table>
<thead>
<tr>
<th>Factor</th>
<th>No extent</th>
<th>Little extent</th>
<th>Moderate extent</th>
<th>Great extent</th>
<th>Very great extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Self Sufficiency</td>
<td></td>
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<tr>
<td>Portfolio Yield</td>
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Thank you!!!!!!
<table>
<thead>
<tr>
<th>Appendix 2</th>
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<tbody>
<tr>
<td>List of AMFI Member MFIs</td>
</tr>
<tr>
<td>1.  AAR Credit Services</td>
</tr>
<tr>
<td>2.  Adok Timo</td>
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<tr>
<td>3.  Aga Khan Foundation</td>
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<td>4.  AIG Global</td>
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<tr>
<td>5.  Barclays Bank of Kenya</td>
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<tr>
<td>6.  Biashara Factors</td>
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<td>7.  BIMAS</td>
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<tr>
<td>8.  Blue</td>
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<tr>
<td>9.  Canyon Rural Credit</td>
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<tr>
<td>10. Chartis Insurance</td>
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<tr>
<td>11. CIC Insurance</td>
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<tr>
<td>12. Cooperative Bank</td>
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<tr>
<td>13. Elite Microfinance</td>
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<tr>
<td>14. Equity Bank</td>
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<tr>
<td>15. Faulu Kenya DTM</td>
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<td>16. Fusion Capital</td>
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<td>17. Greenland Fedha</td>
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<td>18. Jamii Bora</td>
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<tr>
<td>19. Jitegemea Credit Scheme</td>
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<td>20. Jitegemee Trust</td>
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<td>22. KADET</td>
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<td>23. Kenya Eclof</td>
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<td>24. KEEF</td>
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<tr>
<td>25. Kenya Post Office Savings Bank</td>
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<td>26. KWFT DTM</td>
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<td>27. MIC Microcredit</td>
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<td>28. Micro Africa</td>
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<td>29. Molyn Credit</td>
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<td>30. Oiko Credit</td>
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<td>31. Opportunity International</td>
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<tr>
<td>32. Pamoja Women Development Programme</td>
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<td>33. RETAP</td>
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<tr>
<td>34. Rupia Limited</td>
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<td>35. SISDO</td>
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<td>36. SMEP</td>
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<td>37. Swiss Contact</td>
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<td>38. Taifa Option Microfinance</td>
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<td>39. U &amp; I Microfinance limited</td>
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<td>40. WEEC</td>
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<td>41. Yehu Enterprises Support Services</td>
</tr>
</tbody>
</table>