

**EFFECTS OF CREDIT ASSESSMENT ON LOAN REPAYMENT IN MICROFINANCE  
INSTITUTIONS IN NAKURU CENTRAL BUSINESS DISTRICT (CBD)**

**LUCY JEROP KIPCHUMBA**

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**DECLARATION AND APPROVAL**

**Declaration**

This research project is my original work and to the best of my knowledge, it has not been submitted to any institution or university for examination

Signature .....Date .....

**LUCY JEROP KIPCHUMBA**

GMB/NE/0126/01/14

**Approval**

This research project has been submitted with our approval as the supervisors

Signature .....Date .....

**DR. SYMON KIPROP**

Lecturer, Egerton University

Signature .....Date .....

**DR. JOEL KOIMA**

Lecturer, Kabarak University

## **DEDICATION**

This work is dedicated to my parents, brothers, sisters, and friends for their moral support.

## **ACKNOWLEDGEMENTS**

I express my gratitude to Almighty God for giving me strength and good health while I was writing this research project

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## ABSTRACT

The main goal of every microfinance institutions is to maximize profits in order to maintain their financial stability, improve growth and sustainability. However, high levels of loan delinquency create credit volatility which constrains the ability or capacity to offer credit to borrowers because microfinance institutions have to compensate loan delinquency losses. Microfinance institutions lend money to lower tier people in the society who are prone to credit risk due to their nature of service and need proactive credit assessment techniques for controlling credit risk. This study was conducted in microfinance institutions in Nakuru CBD, Kenya. The objectives of this study were to determine the effects of client appraisal on loan repayment and to ascertain the effects of credit terms on loan repayment. In addition, it aimed to evaluate the effect of credit collection policies on loan repayment. Descriptive survey research design was adopted. The target population was 32 credit officers drawn from four (4) licensed microfinance institutions in Nakuru CBD. Reliability and validity was conducted to ensure instruments used and data collected were reliable and valid. This study used census survey. The researcher collected data through administering questionnaires to the respondents because it was cheap and easy to administer. The results were analyzed using descriptive statistics (frequencies and percentages) followed by inferential statistics (chi-square and multiple linear regression model). The findings of the study show a strong relationship between credit assessment and loan repayment. A correlation coefficient of 0.74 was found out between credit assessment and loan repayment. The study concluded that credit assessment significantly influenced loan repayment in MFIs in Nakuru CBD. The researcher recommended that MFIs should ensure that they enhance use of credit assessment techniques in ascertaining reliability of information given by loan applicant so as to reduce portfolio which would have been held at risk. Findings from this study is useful to credit staff of microfinance institutions in dealing effectively with different kind of loan borrowers, equipping them with adequate knowledge about loan recovery procedures and use of effective credit assessment techniques and thus averting defaults.

**Keywords:** Credit assessment, Client appraisal, Credit terms, Credit assessment techniques, Loan repayment, portfolio at risk, Microfinance institutions

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## **LIST OF ABBREVIATION**

<b>5C's</b>	:	Character, Capacity, Collateral, Capital and Condition
<b>5P's</b>	:	People, Purpose, Payment, Protection and Prospective
<b>AROA</b>	:	Adjusted Return On Assets
<b>CAMPARI</b>	:	Character, Ability, Margin of influence, Purpose, Amount, Repayment Terms and Insurance
<b>CBD</b>	:	Central Business District
<b>CBK</b>	:	Central Bank of Kenya
<b>CRR</b>	:	Currency Recovery Rate
<b>DTMs</b>	:	Deposit Taking Microfinance
<b>FAPE</b>	:	Financial Analysis and Previous Experience Methods
<b>FSS</b>	:	Financial Self-Sufficiency
<b>ILO</b>	:	International Labour Organization
<b>ISA</b>	:	In-Kind Subsidy Adjustments
<b>KWFT</b>	:	Kenya Women Finance Trust
<b>LAPP</b>	:	Liquidity, Activity, Profitability and Potential
<b>MFI's</b>	:	Micro financial Institutions
<b>NCCK</b>	:	National Council of Churches of Kenya
<b>PAR</b>	:	Portfolio At Risk
<b>SACCO</b>	:	Savings and Credit Cooperative Organization
<b>SASRA</b>	:	SACCO Society Regulatory Authority
<b>SMEs</b>	:	Small and Medium Enterprises
<b>US</b>	:	United state
<b>USA</b>	:	United State of America

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background to the study**

The field of microfinance has received a lot of attention since Muhammed Yunus received a Nobel Prize in 2006 after founding the Grameen Bank in 1976. Grameen Bank dispersed and recovered loans in Bangladesh. By 1990's lenders had learned how to increase loan repayment rates to make microfinance sustainable. Women were targeted as borrowers and they gave them money to invest in businesses that would create wealth for themselves (Lindsay, 2010) and thus improving their living standards.

Many microfinance institutions provide financial services at a community level in Kenya and have changed the lives of many small scale entrepreneurs. They provide their members with financial and social intermediation services to help improve their businesses. It has expanded to scores of other developing countries since its beginning in Bangladesh and even to some developed countries. However, the role of Microfinance Institutions (MFI) is a critical issue especially in financing the small and medium enterprises who find it too costly to access credit from Commercial Banks (Warue, 2012).

Banks in United States of America (USA) gave credit to customers with high interest rates which at some point discouraged borrowers. The concept of credit did not become popular until the economic boom in USA in 1885 when the banks wanted to lend the excess cash since they had excess liquidity (Ditcher, 2003). In Africa credit was largely appreciated in the 1950's when majority of banks started opening the credit departments to give loans to white settlers. Initially in Kenya credit was given to reputable companies and rich people and not the lower tier people in the society. The liberalization of the Kenyan banking industry in early 1990's led to intense competition among financial institutions. They started extending huge amounts of credit with the primary objective of increasing profitability. It is noted that some of the loans were given with little or no credit assessment and others were advanced to insiders. All these loans given to borrowers ended up being nonperforming. This subsequently reduced the profits of financial institutions. In late 1990's many financial institutions collapsed and it was argued that, the collapse was due to high level of non-performing loans. It was further noted that adoption of different credit risk management policies have been adopted such as credit reference bureaus and

credit scoring systems to credit risk in the Kenya's financial institutions (Wangai, Bosire and Gathogo, 2014).

In 1990's loan delinquency was experienced which called for an intervention. Evaluation of customer's ability to repay the loan was highly suggested but it failed as loan defaults continued (Modurch, 1999). However, the concept of credit management became widely appreciated by MFI's in the late 1990's to reduce credit risk but this did not end loan defaults to this date (Modurch, 1999). It is critical to have comprehensive credit assessment in place so as to establish a prospective associates or new loan borrower's creditworthiness. There are a number of universally relevant questions one should ask to initiate credit assessment, whether one is assessing a small new business, established or larger corporation. Credit assessment should be able to qualify, within the limits of borrower's income, for most loans and clients receive the best interest rates available. MFI's serves different range of business people who involve themselves in micro business activities and informal activities. Their credit demands vary depending on their businesses. If client's credit is fair, he or she will probably not have trouble qualifying for a loan, but they may not receive the best available interest rate. Moreover, loan borrowers should identify issues that could limit their ability to qualify for many loans.

The Kenya government in the Vision 2030 plan, which is anchored in three pillars i.e. economic, social and political has identified and prioritized the Small and Medium enterprise (SMES) as important as per economic pillar; since SMEs face challenge of unstable income, lower literacy levels, high monitoring costs and insufficient collateral to support their loans. Their involvements in micro business activities or informal activities contribute a number of total employment and gross domestic product to the country. To achieve vision 2030 goals adequate sources of finance are needed for small and medium enterprises so as to give credit facilities to low income people. Therefore there is need to engage MFI's to finance the SMEs since commercial banks shun SMEs because they perceive small business as lacking the ability to provide the quality services (Mbogo, 2014)

Borrower misreporting which is associated with seriously adverse loan outcomes is most frequent in areas with low financial literacy and social capital. However, applicants with unverified assets had increase in delinquency. Credit assessment in MFI's helps to uncover potential delinquencies though at cost of mischaracterizing some safe loans (Garmaise, 2008)

Credit to small business is critical underpinning for job creation and macroeconomic growth. Poor people are typically excluded from wage earning employment opportunities that traditional economic theory presupposes. They live and work in the informal economy not by choice, but by necessity. In economic terms, they are consuming households and self-employed firms at the same time and hence, consumption and production decisions are intertwined. However, they need a broad range of financial services to create and sustain livelihoods, build assets, manage risks, and smooth consumption (CGAP, 2014).

Microfinance Institutions are responsible for delinquencies even when the proximate cause seems external to the MFI simply because it sets its own principles, instills credit discipline in staff borrowers, promotes its own repayment culture and must plan beyond its control. There are many stakeholders in delinquency, but only the MFI has influence about it. Cost of delinquency is expensive for an MFI. It affects a program by slowing rotation of the portfolio, delaying earnings, increasing collection costs ( for example visits, analysis and legal costs), decreasing operating spreads, causing program to and loss credibility, leading to ever increasing repayment problems and threatening long-term institutional viability (CGAP, 2001).

### **1.1.1 Microfinance industry in Kenya**

The Kenyan Microfinance industry is one of the oldest and most established in Africa (Mugwanga, 1999). Interest in informal sector in Kenya date back as early as 1970s after the seminal International Labor Organization (ILO) report on employment was issued to Kenya in 1972. The report identified the informal sector as a potentially important contributor to employment and economic growth in Kenya and other developing countries. In the 1970's the main organization providing credit to the informal sector were church based organizations such as National Council of Churches of Kenya (NCCCK) and other smaller church based Non-Governmental Organizations(NGOs). These programmes were heavily subsidized and were ad hoc additions to other social outreach programmes offered to the poor. Outreach was extremely limited. In the 1980's other specialized organizations which included KREP, a subsidiary of a United States (U. S) based NGO and Kenya Women Trust (KWFT) began operations. These programmes were heavily subsidized and credit and training approach to assist microenterprises. In the 1990's, interest and knowledge about the microfinance industry had grown substantially and the approach to the industry became more focused and sustainability oriented. The

“minimalist” Grameen approach was adopted by most MFIs and other ancillary activities like training were either stopped completely or spun off into separate programmes. A few specialized product based institutions began to emerge in the sector as many church based organizations died out or collapsed due to lack of funding. The most prominent institutions that emerged were KREP, KWFT, PRIDE, and Faulu and increasingly other institutions like NCKK and CARE-WEDCO. All these institutions continued to be reliant on donor funds. In 1999, KREP transformed to a commercial bank (Warue, 2012).

In the 2000’s, the microfinance sector witnessed emergence of large number of MFIs with some transforming to commercial banks and deposit taking institutions (DTM). The focus of these institutions gradually shifted from emphases on the very poor to the enterprise poor as demands on these institutions to be become financially sustainable increased. The Microfinance Act 2006 became operational in May 2008. The Act empowered the Central Bank of Kenya (CBK) to license and supervises deposit taking microfinance institutions. By January 2015, the CBK had licensed Faulu Kenya, Kenya Women Finance Trust (KWFT), SMEP, Uwezo, Remu, Rafiki, Century, Sumac, U&I and Daraja as Deposit Taking Microfinance (DTMs) to conduct nationwide deposit taking microfinance business. As of May 2010, non-deposit-taking microfinance institutions did not fall under the jurisdiction of the Central Bank’s microfinance regulations, and as such they fall under either the SACCO category supervised by the SACCO Societies Regulatory Authority (SASRA), or the informal microfinance category, which is unregulated except for the licensing required of all NGOs in Kenya. The Central Bank is currently consulting with a variety of industry stakeholders to determine the best practices for incorporating non-deposit-taking MFIs into their regulatory framework (Warue, 2012).

## **1.2 Statement of the problem**

Microfinance institutions generate their revenue from credit extended to low income individuals in the form of interest charged on the funds granted and the loan repayments may be uncertain. According to Central Bank Annual Supervision Report, (2014) indicates high incidence of credit risk reflected in the rising levels of non- performing loans by the MFI’s. This trend threatens the financial stability and sustainability of the MFI’s despite the growth in microfinance banks. In addition it hinders the achievement of the goals of MFI’s to provide credit to the rural unbanked population. However, it has increased importance of controlling credit risk due to default in loan

repayment create credit volatility. These adverse effects falls back not only on MFI's but also borrowers are facing serious problems from paying back their loans. Repayment crisis subsequently lead to high default rate which negatively influenced loan performance.

Numerous approaches have been developed in client appraisal process by financial institutions. They range from relatively simple methods, such as the use of subjective or informal approaches, to fairly complex ones, such as the use of computerized simulation models (Horne, 2007). Despite rigorous use of these methods in credit assessment, loan default is still experienced. Hence, the need to conduct this study on effects of credit assessment on loan repayment in MFI's was to establish effective ways of dealing with credit borrowers effectively and thus averting loan defaults.

### **1.3 Objectives of the Study**

#### **1.3.1 General objective**

This study examined the effects of credit assessment on loan repayment in Microfinance Institutions in Nakuru CBD.

#### **1.3.2 Specific objectives of the Study**

This study was guided by the following specific objectives;-

- i. To determine the effects of client appraisal on loan repayment in MFI's in Nakuru CBD.
- ii. To examine the effects of credit terms on loan repayment in MFI's in Nakuru CBD.
- iii. To evaluate the effects of credit collection policies of MFI's on loan repayment by customers.

### **1.4 Research Questions**

- i. What are the effects of client appraisal on loan repayment in MFI's in Nakuru CBD?
- ii. What are the effects of credit terms on loan repayment in MFI's Nakuru CBD?
- iii. What is the relationship between credit collection policies of MFI's and loan repayment by customers?

### **1.5 The Scope of the Study**

This study covered four (4) licensed microfinance institutions in Nakuru Town by CBK as at 12<sup>th</sup>January, 2015. This was for the reason of representation and that they have been in operation



for more than 3 years. This study focused on effects of credit assessment on loan repayment in microfinance institutions in Nakuru CBD.

### **1.6 Limitations and delimitations of the study**

The study was carried out in Nakuru Town and the study findings are limited to MFI's and may not be generalized to cover other credit facilities offered by Commercial banks and non-government organizations and MFI's in other towns. Data inaccessibility was a major problem since the researcher found it difficult in getting information from respondents who found it hard to disclose confidential information. The researcher issued introductory letter to the respondents and confirmed to them that all information that they provided was to be treated with utmost confidentiality for purely academic purposes.

### **1.7 Significance of the Study**

The outcome of this study is to assist the management to understand and appreciate effects credit assessment on loan repayment that if not dealt with, will affect the performance of loans and hence the profitability of the microfinance institutions. Recommendation of this study is of help to credit staff in dealing effectively with different kind of credit customers by using effective credit assessment techniques, credit terms and collection policies, so as to avert loan defaults. In addition, this study is useful to future researchers as literature review, and further provokes research in the area of lending and portfolio management.

### **1.8 Definition of Operational Terms**

**Credit Appraisal:** is basic stage in the lending process. This involves gathering, processing and analyzing of quality information as a way of discerning the client's creditworthiness and reducing the incentive problems between the lenders as principals and the borrowers as agents (Matovu and Okumu, 1996).

**Credit documentation:** involves the legal drafting, document review, collateral checks and the waiver of terms (Odongo, 2004).

**Default:** Refers to a situation where borrower fails to repay a loan and MFI's no longer expects to receive payment.

**Loan delinquency:** Refers to loan repayment rate. A loan is delinquent when a payment is late (Warue 2012).

**Non-Performing loan:** Refers to a loan that is not paid or serviced as per agreement (Gatimu, 2014).

**Microfinance Institutions:** These are regulated financial institutions that include non-profit making organizations, which provide microfinance services and products to lower tier people in the society who are prone to credit risk.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter reviews literature done by accredited scholars on effects of credit assessment on loan repayment in microfinance institutions.

#### **2.2 Credit Assessment**

Credit is a transaction between two parties (the creditor or lender) which one supplies money or monetary equivalent goods services, etc., in return for a promise of future payment by the other (the debtor or borrower. Prudent use of credit results in the economic growth of the borrowers, which in turn leads to overall economic well-being of the society and ultimately the country. As purchasing power increases, people tend to spend more on consumer goods and this stimulates further economic growth. Credit losses are the results of the ability and willingness to repay the credit. The reasons vary from increase in competition, new technology, substitutes, increase in prices, decline in demand overestimation of demand, oversupply position in the market government regulations, mismanagement, death of key persons business cycles, over-ambitious projects, financial losses, excessive leverage, concentrated exposure, defective diversification and so on. Only a proper credit-risk analysis will bring to light the probability of credit loss arising out of genuine business factors and explore the possible mitigates regarding this ominous situation to put a check on it (Kabir, Jahan, Chisty & Hasin, 2010)

Credit risk refers to the probability of loss (due to non-recovery) emanating from the credit extended, as a result of the non-fulfillment of contractual obligations arising from unwillingness or inability of the counter-party or for any other reason'. If the probability of the loss is high, the credit risk involved is also high, and vice-versa (Kabir *et al*, 2010). Credit assessment is the first stage in the lending process. It is the process through which the credit applicant presents the necessary documentations to the bank in order to obtain a loan (Nsereko 1995).

##### **2.2.1 Credit Appraisal**

Credit Appraisal is basic stage in the lending process. This involves gathering, processing and analyzing of quality information as a way of discerning the client's creditworthiness and reducing the incentive problems between the lenders as principals and the borrowers as agents. The bank's credit policy, procedures and directives guide the credit assessment process. Banks should base

their credit analysis on the basic principles of lending which are Character, Capacity, Capital, Collateral and Conditions (Matovu and Okumu, 1996).

### **2.2.2 Collateral**

This is the borrower's asset pledged in exchange for the receipt of a loan. Banks request for collateral before extending loans to customers. The collateral is always higher value than the loan taken to ensure that the loan is paid back. When one member fails to pay, the guarantors will pay on their behalf. Thus, this system makes it possible for guarantors to monitor one another thus leading to improved loan repayment. Collateral helps align borrowers' intentions with those of the bank and provides a security in case of loan defaults. Banks also need timely and accurate information and continued updating of accounting records. However the low-income households and individuals are the primary clients of microfinance institutions. However, they do not have financial resources of financial assets to offer as collateral to guarantee their loans. They do not normally have a credit history. As such they are excluded from the formal financial sector. Banks would regard these groups as having a high credit risk profile (Robinson 2001).

Banks factor debtors, where the accounts are passed onto finance house (Kakuru, 2005). The finance house advances the value of these debtors to the bank after deducting a commission. The finance house then undertakes to collect losses if they incur. The debtors are notified of the transfer and are asked to make payment directly to the finance house. Since the factoring firm assumes that risk of default on bad accounts, it makes a credit check before it commits it.

### **2.2.3 Credit Documentation**

It encompasses the maintenance of orderly up dated credit files and the imposition of relevant fees, updating of records and prompt notification of credit reviews and renewal dates. Loan documentation involves the legal drafting, document review, collateral checks and the waiver of terms. Loan documentation defines the necessary security and covenant before the loan is made. It provides risk protection by providing grounds for the bank to take legal action when borrowers fail to honor their obligations. Repayment of bank loans occurs after the credit assessment and disbursement is done, then the credit customer is expected to payback the installment as per agreed schedule. Each bank has a different repayment mechanism. Based on the specifics of the bank, customers can pay weekly, bi-weekly or monthly installments (Odongo, 2004).

Monitoring and follow up of disbursed loans has to be monitored keenly by credit officers by supervising loan repayment as scheduled. According to Robinson (1962), many of the agonies and frustrations of slow and distresses credits can be avoided by good loan supervision. Supervision helps keeping good loan portfolios.

There are various policies that an organization should put in place to ensure that credit management is done effectively; one of these policies is a collection policy which is needed because all customers do not pay the firms bills in time. Some customers are slow payers while some are non-payers. The collection effort should, therefore aim at accelerating collections from slow payers and reducing bad debt losses (Kariuki, 2010).

Portfolio management is an important aspect of credit assessment process. It is management process that focuses on measuring and containing individual credit risk within strategic guidelines. The success of Banks depends on its ability to adapt to changing circumstances (Kagwa, 2003). MFI's should have a culture of handling funds that must be repaid. They should be prepared to seize the client collateral if necessary.

## **2.3 Credit assessment techniques**

MFI's employ various credit assessment techniques to ascertain credit worthiness of borrowers. These are;

### **2.3.1 The 5 C's Model of Client Appraisal**

Microfinance Institutions use the 5C's model of credit to evaluate a customer as a potential borrower (Abedi, 2000). The 5C's help MFI's to increase loan performance since they are able to ascertain creditworthiness. These 5C's are: character, capacity, collateral, capital and condition. The 5C's model needs to be incorporated in the credit scoring model. The credit scoring model is a classification procedure in which data collected from application forms for new or extended credit line are used to assign credit applicants to good or bad credit risk classes.

Character is a tool used by microfinance institutions to provide them with weighting values for various characteristics of a credit applicant and the total weighted score of the applicant is used to estimate his credit worthiness. Ouma, (1996) notes that the factors that influence a client can be categorized into personal, cultural, social and economic factors.

According to Kurui and Kalio (2012), they assert that psychological factor is based on a man's inner worth rather than on his tangible evidences of accomplishment. MFI's consider this factor by observing and learning about the individual. In most cases it is not considered on first application of credit by an applicant but from the second time. Under social factors, lifestyle is the way a person lives. This includes patterns of membership groups, consumption and entertainment. A lifestyle typically also reflects an individual's attitudes, values or worldview. Reference groups in most cases have indirect influence on a person's credibility. MFI's try to identify the reference groups of their target as they influence a client's credibility. Personal factors include age, life cycle stage, occupation, income or economic situation, personality and self-concept.

The MFI's takes into consideration the cash flow from the business, the timing of the repayment, and the successful repayment of the loan by tracking and monitoring loan borrowers. Cashflow enable MFI to determine if the borrower business net cashflow will enable her him to repay the loan. Anthony (2006) defines cash flow as the cash a borrower has to pay his debt. It may include more than simply comparing income and expenses. MFI's determines cash flow by examining existing cash flow statements and reasonable projections for the future ratios. Collateral represents assets that the company pledges as alternative repayment source of loan. Most collateral is in form of hard assets such as real estate and office or manufacturing equipment. Alternatively accounts receivable and inventory can be pledged as collateral. Lenders of short term funds prefer collateral that has duration closely matched to the short term loan. Capital is measured by the general financial position of the borrower as indicated by a financial ratio analysis, with special emphasis on tangible net worth of the borrower's business. Capital is the money a borrower has invested in the business and is an indication of how much the borrower has at risk should the business fail. Condition refers to the borrower's sensitivity to external forces such as interest rates, inflation rates, economic cycles and competition .They focus on the vulnerability of borrowers.

### **2.3.2 The 5P's method of evaluating credit applications**

It was developed by the Federal Reserve Center (Fed 2004) which consists of people, purpose, payment, protection and prospective. People are loan borrowers and it involves checking whether the borrower have a history of being honest, reputable and timely in honoring his or her financial

obligations. Purpose refers to specific explanation of how the borrower is going to use the funds. Don't settle for a simple description such as "working capital." Payment refers knowing the purpose helps identify sources of repayment and aids in structuring the loan repayment schedule based on the timing of the borrower's receipt of funds (cash flow). Protection is collateral and other secondary sources of loan repayment. Protection is last on the list of P's for good reason. Prospective (Plan) shows the loan will be supervised and action the bank will take in the case of borrower default. The plan to supervise should specify how the loan will be monitored, including financial reporting by the borrower, and periodic inspections of the borrower's operations.

### **2.3.3 LAPP Method**

LAPP was developed by Benz (1979) is used more for evaluating corporate credit applications than individual borrowers. LAPP is an abbreviation for Liquidity, Activity, Profitability and Potential. Liquidity measures the ability of the firm to repay its short term obligations. Banks use quick ratio or liquidity ratio to measure the liquidity of the firm. Activity measures the size of the firm and its operations, some percentages are used, such as asset turnover, inventory turnover, average collection period, and average payment period. Profitability measures how profitable the firm is. Some ratio is used such as return on assets (ROA), return on equity (ROE), gross or profit margin. Potential measures the resources and strength the firm has, such as financial resources, human resources, management level, and other strength the firm might have.

### **2.3.4 The CAMPARI Model**

It represents 7 variables the bank can use to evaluate credit applications. Some of them are similar to the 5C's, and some to the 5P's, (Business coaching 2008). They include: Character, Ability, Margin of influence, Purpose, Amount, Repayment Terms and Insurance. Character is similar to the one in 5C's. Ability to pay is similar to capacity. Margin of Finance is the amount the customer contributes from the loan. The bank seldom grants 100% financing. For any asset financing the customer has to pay a certain percentage of the value of the asset that needs to be financed. Purpose implies the purpose of the loan. Some are risky loans some are not. Amount refers to the amount of the loan refers to how much is too much for a client. This depends on the capacity of the client. Repayment Terms is the structure terms of the repayment. Insurance: Involves checking if the borrower has life insurance or not. This is used mainly for long term loans such as housing loans.

### **2.3.5 Financial Analysis and Previous Experience Methods (FAPE)**

This method depends on analyzing the financial records of the applicants and on its past records of credit. The bank analyzes financial statements such as the income statement, Balance sheet, cash flow statement and from these statements computes some ratios, such as the liquidity ratio and profitability ratios such as: ROA, ROE, and operation ratios such as Asset Turnover ratio, and other ratios such as: EPS, Debt Ratio etc. From these ratios the credit officer can evaluate the firm and decide if it is credit worthy or not (Karsh, 2005). This method is usually used in addition to some of the above methods and banks do not depend on it alone, because some information is lacking, especially about the customer's attitude and past experience or credit records (Dang 2011).

### **2.3 Economic Cycles**

Economic cycle refers to economy-wide fluctuations in production or economic activity over several months or years. According to Pandey, (2008) economy fluctuation occur around a long-term growth trend, and it involve shifts over time between periods of relatively rapid economic growth that is an expansion or boom and periods of relative stagnation or decline that is contraction or recession. Warue, (2012) notes that loan borrowers are affected by external factors such as livestock disease outbreak and bad weather. However, economic cycles play an important role on MFI's choice of issuing or not issuing loans.

### **2.5 Indicators of MFI's Performance**

According to CGAP Financial Disclosures Guidelines (2003), it posits that experience has shown that funding agencies' microfinance interventions produce better results when design, reporting, and monitoring focus explicitly on key measures of performance. Unfortunately, many projects fail to include such measurement. This note, written for staff who design or monitor projects that fund microfinance institutions (MFIs), offers basic tools to measure performance of microfinance institutions (MFIs) in five core areas:

#### **2.5.1 Outreach**

The best measurement of outreach is straightforward: The number of clients or accounts that are active at a given point in time .This indicator is more useful than the cumulative number of loans made or of clients served during a period. Among other distortions, cumulative numbers make an MFI offering short-term loans look better than one providing longer-term loans. The



recommended measure counts active clients rather than “members” in order to reflect actual service delivery: members may be inactive for long periods of time, especially in financial cooperatives. Microfinance Institutions (MFIs) face unique challenges since it must achieve a double bottom line outreach and sustainability (Mustafa and Saat, 2013).

However, expanding the number of clients being served is an ultimate goal of almost all microfinance interventions. But rapid expansion sometimes proves to be unsustainable, especially during an MFI’s early years when it needs to design its products and build its systems. It has very seldom been useful for funders to pressure MFIs for rapid expansion. (CGAP 2003)

### **2.5.2 Client poverty level**

Many, though not all, microfinance projects are expected to reach poor clients. There are various techniques for measuring client poverty levels, some quite expensive and others simpler, but as yet there is no widespread agreement on any one of them. If the project does not use a more sophisticated indicator, it should at a minimum report the following rough proxy for the poverty level of loan or savings clients at a point in time:

$$\text{Avg. Outstanding Balance} = \frac{\text{Gross amount of loans or savings outstanding}}{\text{Number of active clients or accounts}}$$

This point of time number should not be confused with total amounts loaned or deposited during the reporting period, or with the average initial amount of loans in the portfolio. The Average Outstanding Balance includes only loan amounts that clients have not yet repaid, or savings that the clients have not withdrawn. For comparison purposes, it is useful to express this indicator as a percentage of the host country’s per capita GDP (atlas method). An average outstanding loan balance below 20% of per capita GDP or \$US 150 is regarded by some as a rough indication that clients are very poor.

Hence, average Outstanding Balance is roughly related to client poverty, because better off clients tend to be uninterested in smaller loans. But the correlation between loan balances and poverty is very far from precise. Low loan sizes do not guarantee a poor clientele. Likewise, growth in average loan size does not necessarily mean that a MFI is suffering “mission drift.” As an MFI matures and growth slows, a lower percentage of its clients are first-time borrowers, and average loan sizes will rise even if there has been no shift in the market it is serving.

Funders who want to reach very poor clients should usually look for MFIs that are already committed to a low-end clientele, rather than trying to encourage higher-end MFIs to change their market. Most MFIs that focus on poor people use formal tools to screen potential clients' income level ( CGAP, 2003).

### **2.5.3 Collection performance**

Reporting of loan collection is a minefield. Some indicators camouflage rather than clarify the true situation. Moreover, terminology and calculation methods are not always consistent. Therefore, whenever any measure of loan repayment, delinquency, default, or loss is reported, the numerator and denominator of the ratio should be explained precisely.

MFIs' self-reported collection performance often understates the extent of problems, usually because of information system weaknesses rather than intent to deceive. Collection reporting should be regarded as reliable only if it is verified by a competent independent party. The standard international measure of portfolio quality in banking is Portfolio at Risk (PAR) beyond a specified number of days:

*PAR (\* days)*

$$= \frac{\textit{Outstanding principal balance of all loans past due more than } x \textit{ days}}{\textit{Outstanding principal balance of all loans}}$$

The number of days (\*) used for this measurement varies. In microfinance, 30 days is a common breakpoint. If the repayment schedule is other than monthly, then one repayment period (week, fortnight, and quarter) could be used as an alternative.

Many young or unsophisticated MFIs don't yet have loan tracking systems strong enough to produce a PAR figure. Most of these, however, should be able to calculate Loans at Risk (LAR), a simpler indicator that counts the number of loans instead of their amounts. As long as repayment is roughly the same for large loans and small loans, LAR will not differ much from PAR.

$$\textit{LAR (* days)} = \frac{\textit{Outstanding principal balance of all loans}}{\textit{total number of outstanding loans}}$$

When an MFI “writes off” a loan, that loan disappears from the MFI’s books and therefore from the PAR or LAR. Thus, it’s useful when reporting these measures to include a description of the MFI’s write-off policy. An alternative measure, the Current Recovery Rate (CRR), can be computed by most MFIs, and gives a good picture of repayment performance but only if it is interpreted very carefully.

$$CRR = \frac{\text{Cash collected during the period from borrowers}}{\text{Cash falling due for the first time during the period under the terms of the original loan contract}}$$

This ratio can be calculated using principal payments only, or principal plus interest. CRR and variants of it are often misunderstood. It is tempting, but badly mistaken, to think of the CRR as a complement of an annual loan loss rate. For instance, if the MFI reports a 95% collection rate, one might assume that its annual loan losses are 5% of its portfolio. In fact, if an MFI making 3-month loans with weekly payments has a 95% collection rate, it will lose well over a third of its portfolio every year. Thus, the CRR indicator should never be used without translating it into an Annual Loan-loss Rate (ALR). Formula:

$$ALR = \frac{1 - CRR \times 2}{T}$$

Where T is average loan term expressed in years

Variations in late payments and prepayments cause the Current Recovery Rate to jump around over short periods, often registering above 100 percent. Thus, it must be applied to a period long enough to smooth out random or seasonal variations typically a year. Repayment of an MFI’s loans is a crucial indicator of performance. Poor collection of microloans is almost always traceable to management and systems weaknesses. The strongest repayment incentive for uncollateralized microloans is not probably peer pressure, but rather the client’s desire to preserve her future access to a loan service she finds very useful to her and her family: thus, healthy repayment rates are a strong signal that the loans are of real value to the clients. Finally, high delinquency makes financial sustainability impossible. As a rough rule of thumb when dealing with uncollateralized loans, Portfolio or Loans at Risk (30 days or one payment period) above 10%, or Annual Loan-Loss Rates above 5%, must be reduced quickly or they will spin out of control (CGAP 2003).

#### 2.5.4 Financial Sustainability (Profitability)

According to CGAP (2001), it states that in banks and other commercial institutions, the commonest measures of profitability are Return on Equity (ROE), which measures the returns produced for the owners, and Return on Assets (ROA), which reflects that organization's ability to use its assets productively

$$ROE = \frac{\textit{After tax profits}}{\textit{Starting (or period average)equity}}$$

$$ROA = \frac{\textit{After tax profits}}{\textit{Starting (or period average)assets}}$$

These are appropriate indicators for unsubsidized institutions. But donor interventions more typically deal with institutions that receive substantial subsidies, most often in the form of grants or loans at below-market interest rates. In such cases, the critical question is whether the institution will be able to maintain itself and grow when continuing subsidies are no longer available. To determine this, normal financial information must be "adjusted" to reflect the impact of the present subsidies. Three subsidy-adjusted indicators are in common use: Financial Self-sufficiency (FSS), Adjusted Return on Assets (AROA), and the Subsidy Dependence Index (SDI). FSS and AROA use similar adjustments. An Inflation Adjustment (IA) reflects the loss of real value of an MFI's net monetary assets due to inflation:

$$IA = (\textit{Assets that are dominated in currency amounts minus Liabilities that are dominated in currency amounts}) \textit{ times the inflation rate for the period}$$

This adjustment is usually based on net asset values at the beginning of the period, but using period averages may be appropriate for MFIs that receive large grants, or other infusions of equity capital, during the period. A subsidized Cost of Funds Adjustment (CFA) compensates for the effect of soft loans to the MFI:

$$CFA = \textit{Period average borrowings by the MFI times Market interest rate} \\ \textit{ minus actual amount of interest paid by the MFI during the period}$$

A common benchmark for a market interest rate is the rate that commercial banks pay on 90-day fixed deposits. Arguably a more appropriate rate is a few points above the “prime” rate that banks charge on loans to their best customers, because few MFIs could actually borrow at a lower rate. ROE calculations should use starting equity unless there has been a substantial infusion of new equity from an outside source during the reporting period. For instance cash, investments, or loans; but not buildings or equipment. A more sophisticated benchmark would be based on the probable cost (including interest, administrative expense, and reserve requirements) of the specific form(s) of commercial funding the MFIs is likely to be raising when it moves beyond soft funding sources. The In-kind Subsidy Adjustment (ISA) quantifies the benefit an MFI gets when it receives goods or services without paying a market price for them (computers or free services of a manager are common examples).

$$ISA = \text{Market price an unsubsidized MFI would pay for a good or service} \\ \text{minus Actual price paid by the MFI}$$

Financial Self-Sufficiency (FSS) is a subsidy-adjusted indicator often used by donor-funded microfinance NGOs. It measures the extent to which an MFI’s business revenue (mainly interest received) covers the MFI’s adjusted costs. If the FSS is below 100%, then the MFI has not yet achieved financial break-even.

$$FSS = \frac{\text{Business revenue(excluding grants)}}{\text{Total expenses} + IA + CFA + ISA}$$

Adjusted Return on Assets measures an MFI’s net profit or loss (including adjustments) in relation to the MFI’s total assets.

$$ARO A = \frac{\text{Accounting } \frac{\text{profit}}{\text{loss}} \text{(excluding grants)} - IA - CFA - ISA}{\text{Period average total assets}}$$

Some believe that, absent exceptional circumstances, donors should only support financial intermediaries that are on a credible track to financial sustainability. On the other hand, some people believe that there should be room for permanently-subsidized financial services for certain client groups. Whatever one’s position on this question, it makes sense to measure intermediaries’ financial sustainability, either to tell whether they’re meeting a goal of the

project, or else to quantify clearly the level of subsidy that is being invested for a particular result. The fact that an MFI's sustainability indicator improves over a period of years does not necessarily mean that the MFI will reach financial sustainability. Sustainability indicators for MFIs will improve almost automatically in the early years; but the majority of MFIs never become fully sustainable, and thus can never expand beyond the limits of scarce subsidized funding.

It takes some sophistication to judge whether an MFI's sustainability is improving fast enough. Most MFIs that have become profitable have done so within 10 years of start-up. However, now that microfinance knowledge and expertise are more widely available, MFIs should usually not take more than 5 years to reach sustainability, with the possible exception of MFIs working in rural areas with very low population density. One important factor is the pace of growth: rapid growth will temporarily depress an MFI's profitability because such growth requires new investments in staff and facilities that take a period of time to become fully productive. For MFIs that are growing fast, analysis of mature branches and loan officers can often reveal whether the institution is on a trajectory that leads to sustainability (CGAP, 2003).

### **2.5.5. Efficiency**

According to CGAP, 2003 it depicts that the most commonly used indicator of efficiency expresses non-financial expenses as a percentage of the gross loan portfolio:

$$\text{Operating Expense Ratio} = \frac{\text{Personnel and administrative expense}}{\text{Period average gross loan portfolio}}$$

Gross loan portfolio refers as the total outstanding (not yet repaid) amounts of all loans. For an MFI that provides voluntary savings, average total assets could be used as the denominator. This ratio is sometimes called "Administrative Expense Ratio" or simply "Efficiency Ratio." The Operating Expense Ratio is the most widely used indicator of efficiency, but its substantial drawback is that it will make an MFI making small loans look worse than an MFI making large loans, even if both are efficiently managed. Thus, a preferable alternative is a ratio that is based on clients served, not amounts loaned:

$$\text{Cost per client} = \frac{\text{Personnel and administrative expense}}{(\text{Period average number of active borrowers} * \text{GNI per capital})}$$

MFI can become more efficient by simply dropping its smaller borrowers, even without making any improvements in operating systems. Cost per Client avoids this perverse result. When a microfinance market starts to mature and MFIs have to compete for clients, price competition on interest rates will usually push the MFIs to get more efficient. But many MFIs face little real competition. External monitoring of efficiency is especially important in those cases. Young or fast-growing MFIs will look less efficient by either of these measures, because those MFIs are paying for staff, infrastructure, and overhead that are not yet fully used (CGAP, 2003).

Warue, (2012) asserts that group consists of two or more individuals. Any MFI that aims to increase outreach and achieve sustainability may have to do it through mass numbers, which is possible through groups. In many African societies, many poor people are already members of a group; either in the church or within their immediate community. Groups consist of individuals who have something in common; they come from the same community, they worship in the same church, they are the same age group or they simply work in the same market. Understanding the reasons for continued existence of such groups would help lending MFIs develop long lasting groups, which translates to long life client base. This would enhance client creditworthiness assessments, which has direct link to delinquency. Group solidarity and self-regulation which includes group constitution would be expected to facilitate loan repayment among group members. Therefore group formation process may have a direct effect on loan delinquency among group members.

## **2.6 Liquidity**

Liquidity refers to an organization's ability to meet short term obligations as they fall due. It is the ability of an organization to sell an asset quickly without having to make a substantial price concession(Sharp et al, 1999).From the above definitions, it can be concluded that the an organization's liquidity is the value of easily disposable assets held, vis-à-vis the value of its short term obligations. Easy to dispose assets include inventories, trade debtors, bill receivable and treasury bills. Immediate obligations are those falling due within the next twelve months, e.g trade creditors, taxes due, salaries and outstanding staff benefits and the benefits and the portion of borrowings (bank loans, hire purchase loans etc.) repayable within the next twelve months. The balance sheet can readily provide this information. A strong liquidity position provide a margin of safety to lenders.

An analysis of the financial statement of the customer is always helpful, financial statement constitute an important source of information for appraising the financial health of a business venture. For the purpose of comparison, the audited figures are expressed as ratios computed from audited figures of two consolidated years immediately preceding the request for loans will help to determine the credit worthiness of the customer and his ability to repay the loan (Sharp *et al*, 1999).

In short the ratio helps the banker to assess the degree of risk being taken-emphasis being placed on earning capacity and operating efficiency. Various liquidity ratios are computed by lenders using the information provided by balance sheet, for instance, current ratio (current assets divided by current liabilities) and the quick ratio (current assets less stock, divided by current liability).(Sharp *et al*, 1999). Mather (1979), grouped financial ratios as follows:-

### 2.6.1 Liquidity ratios

Liquidity ratios provide a measure of times ability to meet its short-term obligation as they fall due. The two commonly used liquidity ratios are the current ratio and the quick ratio.

$$\text{Current ratio} = \frac{\text{Total current asset}}{\text{Total current liability}}$$

$$\text{Quick ratio} = \frac{\text{Total liquid Asset}}{\text{Total current liability}} \text{ or } \frac{\text{Total current assets less inventory}}{\text{Total current liability}}$$

Some creditors argue that under adverse conditions, stocks may not have sufficient liquidity. Therefore the quick ratio is modified version of the current ratio which measures the firm's ability to pay off current liabilities without relying on the sale of stock. Obviously an important factor to watch closely here is the underlying quality of the debtors.

### 2.6.2 Leverage Ratios

The debt/equity ratio is the most important of the leverage ratios. It measures total claim on a business of all forms of creditors in relation to owners' equity.

$$\frac{\text{Debt}}{\text{Equity}} \text{ Ratio} = \frac{\text{Total liabilities}}{\text{Networth (shareholders equity)}}$$



All others debt ratios are complementary to this one and are designed to measure the appropriateness of the capital structure.

### **2.6.3 Efficiency Ratios**

As indicators of managerial efficiency in the use of the firm's assets, efficiency ratios are very useful in judging the performance of the firm. They help in explaining any improvement or decline in the solvency of a business and may also help to explain underlying changes in profitability. Some of the ratios include:

$$\text{Average period of credit taken} = \frac{\text{Average creditors} * 360 \text{ days}}{\text{Purchases}}$$

$$\text{Average period of credit granted} = \frac{\text{Average debtors} * 360 \text{ days}}{\text{Sales}}$$

$$\text{Fixed asset turnover} = \frac{\text{Net sale}}{\text{Net fixed asset}}$$

$$\text{Stock Turnover} = \frac{\text{Net Sales}}{\text{Stock}}$$

## **2.7 Credit Risk Management and Loan Repayment in MFI's**

According to Kiplimo, (2012) loan portfolio refers to the total amount of money given out in different loan products to different types of borrowers. This may be comprised of salary loans, group guaranteed loans, individual loans and corporate loans. Loan portfolio looks at the number of clients with loans and the total amount in loans (Wester, 1993). Survival of most MFIs depends entirely on successful lending program that revolves on funds and loan repayments made to them by the clients (Sindani, 2012). This requires a restrictive credit control system to be put in place so as to restrain from unnecessary lending thus, improving on profitability of micro finance institutions (Kakuru, 2000).

Credit management is the executive responsibility of determining customer's credit ratings as part of the credit control function. According to Tucker and Miles (2004) who studied three data series for the period between March 1999 and March 2001 and found that self-sufficient MFIs are profitable and perform better on return on equity (ROE) and return on assets (ROA). In order

to optimize their performance, MFIs are seeking to become more commercially oriented and stress more on improving their profitability. Loan portfolio in MFIs is the most important since portfolio quality reflects the risk of loan delinquency and determines future revenues and ability to increase outreach and serve existing customers. Portfolio quality is measured as portfolio at risk over 30 days. How best a loan portfolio is performing is looked at in terms of profitability and rate of return on different loan products. This is a function of the number of the loans and the cost of administering these loans. However, in Nakuru town the need for microcredit has been noted and several MFIs have opened branches in the area. Consequently studies were required to examine the effects of credit assessment on loan repayment in Microfinance Institutions in Nakuru CBD.

## **2.8 Quality of the Portfolio**

A portfolio report provides information about the lending and savings operations of an MFI (CGAP, 2001). It provides timely and accurate data about the quality of the portfolio. It also includes other key loan repayment indicators for example MFI outreach, client poverty level, financial sustainability etc. Portfolio report information normally includes number and value of loans outstanding end of period, total value and number of loans disbursed during the period, average outstanding balance of loans written off loan terms, loan officers, savings accounts and balances.

Portfolio quality ratios can be calculated from portfolio information. This information together with the aging analysis can give a true picture of the health of the portfolio and can also give valuable insight into a MFI's sustainability. Portfolio report relates to income statements in that it is portfolio that generates the income for the MFI. Also, it relates to the balance sheet in that it provides information on the value of outstanding loans and income statement in that the portfolio data is used as input to calculate the loss reserve on the balance sheet, from which the amount of loan loss provision on the income statement is calculated. Hence, most MFI's create financial statements that will show the impact of donors' funds on the MFI's financial position and its relationship sustainability. This is due to MFI's depend on donor funds but do not realize to what extent and that donor money is not limitless (CGAP, 2001)

## **2.8 Empirical Review**

Moti *et al*, (2012) investigated effectiveness of Credit Management System on Loan Performance of microfinance institutions in Meru Town. The objective of their study was to assess the effectiveness of credit management systems on loan performance in microfinance institutions. The findings were that the credit terms formulated by the microfinance institutions do affect loan performance; the involvement of credit officers and customers in formulating credit terms affects loan performance. They adopted descriptive survey design, combined with data analysis to establish the effectiveness of credit management systems on loan performance in microfinance institutions. The researchers suggests further research on reasons for loan default from clients' perspective in microfinance institution and the effect of credit referencing of customers on loan performance in microfinance institutions.

Omara (2007) conducted a study on credit assessment process and repayment of bank loans in Barclays Bank Uganda ltd. The objective of the research was to examine the appropriateness of credit assessment process used by Barclays bank Uganda ltd. The findings of the study were that information on customers' existing borrowing in other financial institutions could be validated by credit assessment official. The research used sample survey research design, random sampling method to establish the appropriateness of credit assessment process used by Barclays bank Uganda ltd. He concluded that the bank required a letter from the employer as part of credit assessment documentations. He recommended that the bank needs to fasten the credit assessment process to attract more business.

Ahiable, (2012) investigated an assessment of credit management practices at Agricultural Development Bank (ADB) Branches in the Eastern Region of Ghana. The researcher's objective was to explore how credit is managed in ADB branches in Eastern Region. The findings was not withstanding the establishment of guidelines in access to credits, customers who want to access credit must meet certain conditions in terms of cash flows, purpose of the loans, amount, age of client and the provision of security in order to access loan. The researcher used cluster sampling method combined with the survey method research design by employing quantitative instruments for data collection and analysis. He recommended that the policy of access should be flexible so that customers can easily access credit.

Gyamfi, (2012) did a research on effectiveness of credit risk management techniques of microfinance institutions firms in Accra. The study adopted a cross sectional study approach. The study established that the small microfinance firms were more vulnerable to credit risk than the bigger firms. The study recommended microfinance firms to invest in computerized systems that would enable them compute and assess on a continuous basis their credit risk track records and generate reports on credit granted. The study further notes that firms should encourage their clients to insure against risk that might affect their businesses invest in quality manpower so that they could assess their clients risk bearing portfolio. In addition, he recommended that continuous use of written policies that guided most of the firms on credit granting should be encouraged by all the firms.

Nawai and Shariff, (2013) did a research on loan repayment in microfinance programs that used individual lending approach. The study used in-depth interviews to collect data from MFI client of Peninsular Malaysia. This study found out that factors affecting the ability of the borrowers to repay loans are business factors, borrowers' attitude towards their loans, amount of loan received, other debt burden, business experience, family background and business formality. This study recommended the MFI to enhance their monitoring through peer monitoring through peer monitoring like group lending approach such as mentor mentee program or entrepreneur's club program to reduce the borrower's attitude to no to pay back loans and help them to enhance their business.

Lewis and Edward, (1990) asserts that Small businesses purposefully misstate tax accounting statements, particularly profit, to reduce their tax burden and microfinance borrowers are rarely included in credit bureaus or credit bureaus themselves are underdeveloped in many markets. In light of such data limitations, thoughtful innovation is required to identify meaningful risk factors for microfinance clients and to measure them in terms of characteristics that are feasible to collect. Credit bureau information if available will definitely enhance the value of credit score system but it is not a pre- requisite for developing scorecard. Similarly the presence of good bureau data does not eliminate the need to analyze institution's specific client data and experience.

Salazar, (2003) did a further research in March 2007 and developing scorecards appropriate to microfinance require a combination of technical modeling skills and practical knowledge of the

credit risks associated with borrowers in the micro segment. Banks and MFIs often lack the technical expertise in-house, but it can be purchased for varying costs from large international credit bureau operators and a wide range of consultancies. However, practical knowledge of the credit risks associated with micro-borrowers should come at least partially from the microfinance organization itself.

Norell, (2001) notes that borrowers have problem to pay back their loans which make them delinquent. In addition, it indicates that when the borrower has personal problems such as sickness or family member is sick or sales of his or her business drop etc. will affect their loan repayment. Unpredictable challenges such as illness or death of family member may affect borrowers' repayment. The study further notes that there is high tendency of loan default by borrowers who receive bigger total loans. This is because there is high probability of excess loan may be diverted to other unproductive, children's school fees, non-business uses such as for personal use and payment of other debt.

Radhamani, (2014) did a study on improving credit scoring model of microfinance institutions. This study explores credit scoring of microfinance institutions. Microfinance institutions who would lend money to financially weaker people are prone to the credit risk management techniques for their long-term sustainability. The study established support vector machine is better classification techniques than other traditional techniques. It was found out that support vector machine would be suitable for the microfinance institutions who would deal with customers from economically weaker sections. The sustainability of the MFI depends on how they accurately differentiate the customer who would pay or not and in this regard support vector machine would be an appropriate method and would help to have a competitive advantage to the microfinance industry over other commercial banks.

Kisaka and Simiyu, (2014) did a survey of credit risk management techniques in Kenya. Researchers' objectives were to identify the techniques used by microfinance institutions in management of credit risk and to examine the main challenges facing the microfinance institutions in risk management. This study used descriptive research design and a sample size of 30 MFI were surveyed. It was established that a majority of the institutions used credit metrix to measure the credit migration and default risk. The results also show that microfinance institutions are faced with the challenge of strict operational regulations from the CBK. The

government had not put any policy in place to govern the operations of MFI's. They concluded that loan recovery is a major challenge to the majority of the institutions.

Olomola, (2002) found that repayment performance is significantly affected by borrower's characteristics, lenders characteristics and loan characteristics. Repayment problems can be in form of loan delinquency and default. Whatever the form however, the borrowers alone cannot be held responsible wherever problems arise; it is important to examine the extent to which both borrowers and lenders comply with the loan contract as well as the nature and duties, responsibilities and obligations of both parties as reflected in the design of the credit programme rather than heaping blames only on the borrowers.

Korie *et al*, (2012) carried out a study on determinants of loan repayment of Microfinance Institutions in Southeast States of Nigeria The objective of the study was to analyze the loan repayment performance, institutional factors, and factors affecting repayment rate of microfinance institutions (MFIs) in the South-east states of Nigeria. It was carried out in three states namely; Eboni, Enugu and Imo, out of the five southeast states. Using a cross-sectional data a multi-stage sampling technique was employed in selecting a total of 36 MFIs from the three states, that is, 12 MFIs per state. The three states were purposively selected based on the performance index of United Nations Development Programme in the selection of Micro start Projects, which made the final list in the Southeast states of Nigeria. For the sample size, four MFIs were chosen each from formal (commercial and development banks), semi-formal 24 (NGO-MFIs and community banks and informal. Results from the study, affirmed that the formal segment was more organized, better equipped with higher quality and well-motivated staff than the semi-formal and informal segments. The informal sector presented the best repayment picture of the three segments, followed by the semi-formal institutions. Outstanding among the determinants of loan repayment of microfinance institutions were outreach, shocks, training duration, loan size and credit officer's experience.

Korir, (2011) study was to investigate the impact of credit risk management practices on the financial performance of Deposit Taking Microfinance institutions in Kenya. The study used a descriptive survey approach in collecting data from the respondents. The number of the respondents was 36 staff working in all licensed Deposit taking microfinance institutions in Kenya. From the findings the study concludes that Deposit taking microfinance institutions in

Kenya adopted credit risk management practices to counter credit risks they are exposed to and it also concluded that Deposit taking microfinance institutions adopt various approaches in screening and analyzing risk before awarding credit to clients to minimize on loan loss. This included establishing capacity/competition and conditions and use of collateral/security and character of borrower were used in screening and risk analysis in attempt to reduce manages credit risks. The study further concludes that there was a positive relationship between credit risk management practices and the financial performance of Deposit taking microfinance institutions.

Warue, (2012) investigated empirical analysis of external factors affecting loan delinquency performance in MFIs in Kenya. The study used primary data. The study target population comprised 49 MFIs registered by Association of Microfinance Institutions of Kenya (AMFIK). A survey research design was used and a census of the 49 MFIs was taken. The data was collected through a self-developed structured questionnaire and administered to MFIs loan officers for response. Multiple regression analysis was used to establish relationship between loan delinquency and microfinance institutions, self-help groups and external factors in MFIs in Kenya. The estimated regression coefficients and t-values were interpreted. The study found evidence on external factor was found positive and significantly ( $\beta = 2.549$ , t-value 2.069) related to loan delinquency performance in microfinance institutions in Kenya.

Sindani, (2012) carried out a study on effectiveness of credit management system on Loan Performance, Empirical evidence from Micro Finance Sector in Meru, Kenya. The overall objective of the study was to assess the effectiveness of credit management systems on loan performance in microfinance institutions. The study adopted a descriptive survey design. This design investigates the current status and nature of the phenomena. A census survey of all the 70 credit officers in 14 microfinance institutions in Meru town was conducted. Specifically the study sought to establish the effect of credit terms, client appraisal, credit risk control measures and credit collection policies on loan performance. The respondents were the credit officers of the MFIs in Meru town. Collection policy was found to have a higher effect on loan repayment.

Ndwiga, (2011) investigated the relationship between credit risk management practices and 26 financial performance of microfinance situations in Kenya. The objective of the study was to examine the effects of credit risk management practices on financial performance of Microfinance Institutions in Kenya. Exploratory research design was chosen because it enabled

the researcher to generalize the findings to a larger population. The population of this study comprised of all licensed Microfinance institutions in Kenya. The population of this study comprised all the 43 licensed Microfinance institutions in Kenya. Inferential statistic was used to establish the relationship between credit risk management practices and the financial performance of MFIs, performance of MFIs will be measured by their profitability . From the findings the study concludes that microfinance institutions in Kenya have adopted various the credit risk management practices which are credit risk management, risk monitoring, risk identification and Risk Analysis and Assessment. The study concluded that there is positive relationship between credit risk management practices and financial performance of Microfinance Institutions in Kenya.

Kosgei, (2012) investigated effects of lending methodology on performance of loan portfolio in microfinance institution in Kenya .The purpose of the study was to assess the effect of lending methodology on the performance of gross loan portfolio/assets in micro-finance institutions. The specific objectives were to establish the effect of group and individual lending on performance of loan portfolio in Micro-finance institutions, and to establish the effect of moderating factors on performance of gross loan portfolio. Secondary data was used in the study of 8 out of 56 microfinance institutions under umbrella Association of Microfinance Institutions of Kenya (AMFI). This was motivated by availability of data. Panel data analysis was applied to test hypothesis that there is no relationship between group lending on performance of loan portfolio.

Frame *et al*, (2001) in his research in March 2001 on Credit score card concluded that if credit scorecard is thoughtfully developed, flexibly implemented and properly managed which speed loan processing and inform pricing and provisions it will help banks and MFI's save cost, reduce subjectivity and improve risk management, this will also increase profitability and expand micro borrowers access to credits.

Report by Business Banking Board, (2000) indicated that Application credit scoring is used throughout the world to process many types of small-value loan transactions. It has been applied most widely and successfully for personal credit cards and consumer and mortgage loans. Repayment risk for these products is closely linked to verifiable factors such as income, credit bureau information, and demographic factors such as age, education and homeowner status. More recently, credit scoring has been used to evaluate loans to small and micro businesses, but



even in the most developed financial markets, credit scoring for small business loans generally works in conjunction with a judgmental process rather than as an independent decision-making tool. Credit scoring systems help to streamline the lending process, improve loan officer efficiency, increase the consistency of the evaluation process and reduce human bias in the lending decision. Credit scoring system also helps in enabling the bank to vary the credit policy according to risk classification, such as underwriting or monitoring some lower risk loans without on-site business inspections, better quantifying of expected losses for different risk classes of borrowers and reducing time spent on collections, which in some markets claim up to 50 percent of loan officers' time, (Credit Scoring for Microenterprise Brief - [www.accion.org](http://www.accion.org)).

Dellien and Schreiner, (2005) did a research in December 2005 and noted that one conceptual difficulty with embracing credit scoring for microfinance is that a data-driven business approach does not intuitively seem like a good fit for reaching data-poor clients who have been typically excluded by banks. Some examples of data limitations in the microfinance field are: - The self-employed poor frequently cannot document income and credit history.

Schreiner, (2005) argued that growth in consumer credit market can hold either positive or negative implications for the economy and micro finance. Economic activity is stimulated when consumers borrow within their means to buy cars and other major purchases. On the other hand, if consumers pile up too much debt relative to their income levels, they may have to stop spending on new goods and services just to pay off old debts otherwise they may experience financial difficulties to pay the lenders. Lenders, who failure to or less capable to identify consumers' ability to payback may be associated with having weak credit risk management practices.

Altman, (1996) established that if the demand to borrow money exceeds the supply of the willing lenders, interest rate rises, if credit demand falls and many willing lenders are fighting for consumers, they may offer lower interest rates to attract business. In order to balance this, an accurate Credit risk management practice and corresponding underwriting credit risk criteria should be established so that lenders can survive in the current price competition in the market.

Fuser and Meier, (1997) observed that risk of consumer credit industry consist of two major categories; Credit risk and systematic risk. Credit risk in general is an estimate of the probability

that a borrower will not pay all or a portion of a loan on time and a systematic risk is often used to describe the risk of a sudden unexpected event that would harm the financial system to an extent that economy may suffer.

Linbo, (2004) examined efficiency versus risk in large domestic USA banks. He found that 22 profit efficiency is sensitive to credit risk and insolvency risk but not to liquidity risk or to the mix of loan products.

Harker and Satvros (1998) conducted an empirical study on interest rate and exchange rate exposures of institutions in pre-crisis Korea. Results indicated that Korean commercial banks and merchant banking corporations had been significantly exposed to both interest rate and exchange rate risks, and that the subsequent profitability of Microfinance Institutions was significantly associated with the degree of pre-crisis exposure. The results also indicated that the Korean case highlights the importance of upgrading financial supervision and credit risk management practices as a precondition for successful financial liberalization.

Reta, (2011) carried out a study on determinants of Loan Repayment Performance using on a Case Study in the Addis Credit and Saving Institution, Addis Ababa, Ethiopia. The objective was to analyze and identify the factors that influence the loan repayment performance of the beneficiaries of AdCSI Microfinance Institution. In order to achieve this objective, primary data was collected from 200 randomly selected clients (100 defaulters and 100 non- defaulters) by using structured interview. Moreover secondary data were obtained from the record of AdCSI the data analysis involved, descriptive statistics including mean, frequency and percentages to describe the socio-economic characteristics of the borrowers. Moreover, t- test and chi-square analyses were employed to compare the defaulters and non-defaulters group. A binary logit model was used to analyze the socio-economic factors that influence loan repayment. A total of twelve explanatory variables were included in the regression. Out of these, six variables were found to be significant for the probability of being defaulter. Age and five business types (baltina & petty market, kiosk & shop, services providing, weaving & 23 tailoring and urban agriculture) were important in influencing loan repayment performance of the borrower. In addition, sex and business experience of the respondents were found to be significant determinants of loan repayment rate. Addis microfinance institution has a number of internal and external problems like shortage of loanable funds for further expansion, competition, and

improper interference of third party in the decision of loan approval (Gestel and Baesens , 2009) risk management is primarily concerned with reducing earnings volatility and avoiding large losses. In a proper risk management process, one needs to identify the risk, measure and quantify the risk and develop strategies to manage the risk. The highest concern in risk management is the most risky products. The prior concern for the risk management is those products that can cause the highest losses: high exposures with high default risk

Asarnow, (1995) in his research concluded that the assessment of credit risk can be done in two stages in most cases: 1) loan application and underwriting, and 2) during the course of the loan payment. In the first case, the lender can only assess the credit risk by studying the borrower's credit history, while in the second case, the lender can not only continue to examine the credit history, but also monitor the current payment behavior to better assess the credit risk. Commonly, lenders refer to the first stage as underwriting credit risk management practices, and the second stage as the portfolio credit risk management practices. Portfolio credit risk management is particularly critical for revolving products, such as credit card, whose loan outstanding is purely driven by the behavior and financial situation of the consumers. Both credit risk and systemic risk management practices are tightly regarded to as the loan losses preventive practices.

Several studies show that when a loan is not repaid, it may be a result of the borrowers' unwillingness and/or inability to repay. Stiglitz and Weiss (1981) recommend that the banks should screen the borrowers and select the "good" borrowers from the "bad" borrowers and monitor the borrowers to make sure that they use the loans for the intended purpose.

## **2.9 Theoretical literature**

### **2.9.1 Self-efficacy theory**

The conceptual base for this study will be drawn from the theory of self-efficacy postulated by Bandura (1995). It "refers to beliefs in one's capabilities to organize and execute the courses of action required to manage prospective situations". Self-efficacy affects people's thoughts, feelings, actions, motivations, efforts, and determinations to confront the obstacles faced in life. High self-efficacy means that people are more likely to participate in activities in which they believe they can succeed. It promotes the premise that individuals have the potential to mitigate

and improve their situations. Finally, the theory identifies factors that affect the success or failure of individuals, including their collective or group actions.

### **2.9.2 Adverse selection theory**

Stiglitz and Weiss (1981) originated a paper on adverse selection theory. In the adverse selection theory, the interest rate may not raise enough to guarantee that all loan applicants secure credit, in times when loanable funds are limited. Borrowers who have greater wealth to put as collateral obtain cheaper credit, have incentives to work harder, and earn more income as a result. Existing asset inequalities within the borrowing class are projected and possibly magnified into the future by operation of the credit market. By exchange information about their customers banks can improve their knowledge of applicants' characteristics and behavior.

### **2.9.3 Austrian Theory of the Business Cycle**

The Austrian theory of the business cycle emerges straight forwardly from a simple comparison of a savings induced boom (Boldizzoni, 2008) .An increase in savings by households and credit expansion orchestrated by the central bank sets into motion market processes whose initial allocation effects on the economy's capital structure are similar but whose ultimate consequences are sharply different. The general argument of the theory though not the full argument can be stated in terms of the conventional macro-economic aggregates of savings and investments. The levels of investment are determined by the supply of and demand for loanable funds. Supply reflects the willingness of households to save at various rates of interest; demand reflects the willingness of business to borrow in order to finance investment projects (Gatimu, 2014).Each represents a state of equilibrium in the loan market. An increase in the supply of loanable funds has obvious initial effects on the rate of interest and on the level of investment borrowing. But the ultimate consequences differ importantly depending upon whether the increase supply of loanable funds derives from increased saving by households or from increase credit creation by the central bank. Even in this simple loanable funds framework many aspects of the Austrian theory of the business cycle are evident. The natural rate of interest is the rate that equates saving and investment. The bank rate diverges from the natural rate as a result of credit expansion. When new money is injected into credit markets, the injection effects which the Austrian theorist emphasizes over price level effects take the form of too much investment. (Boldizzoni, 2008)

## **2.10 Research gap**

Based on the literature review above, many researchers have done research focusing on effects of credit risk management practices on loan performance in MFI's. There is little attention on effects of credit assessment on loan repayment in MFI's by reseachers. These studies have been conducted in different towns in Kenya and other countries at different times and used diverse methodologies. The result of these studies show mixed result. Gyamfi, (2012) adopted cross sectional research design in his research. This study took different dimension by studying effects of credit assessment on loan repayment in MFI's in Nakuru CBD. This study used survey research design with help of questionnaires to collect data from the respondents. However, the findings of this study was to help credit staff to deal effectively with different kind of credit customers by undertaking effective client appraisal, having flexible credit terms and effective collection policies so as to avert loan defaults.

## **2.11 Conceptual Framework**

The conceptual framework below shows loan repayment which is dependent variable of this study. It is influenced by independent variables. The independent variables considered client appraisal, credit terms and collection policies. Client appraisal involves use of wrong information to acquire MFI's loans, which may include giving or accepting collaterals whose values have been overstated or impaired due to forging of documents by loan borrowers. This leads to low levels of loan repayments. Credit terms specify credit period and interest rates which has an effect on timely loan repayment. A high level of loan repayment arises from borrowers who make payments as per the stipulated credit period. Low levels of loan repayment may results to loan delinquency. Collection policies are needed because all customers do not adhere to credit terms and they end up not repaying the loans in time. Some borrowers make timely repayment, others are slow to repay and others do not stick to credit policies at all. Government policy through the central bank of Kenya and economic cycles act as intervening variables between independent variable and dependent variable.

**Independent variables**

Client appraisal

Credit terms

Collection policies

**Dependent variable**

**Loan repayment**

- Value of portfolio at risk
- Financial sustainability
- Collection performance
- Client poverty level
- MFIs outreach

**Intervening variables**

- Government policy
- Economic cycles

**Figure 2.1: Conceptual Framework**

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the research design and methodology of the study. It spells out the techniques and methods of data sampling, collection, processing and analysis used.

#### **3.2 Research Design**

The study used descriptive survey research design. The survey research design is most appropriate for use in social sciences. This is because survey research design can be used to collect people's attitudes, opinions, habits and other social issues (Mugenda and Mugenda, 2001). Survey research design is suitable in collecting primary data, taking into account the limitation of time; survey design is the most appropriate. However, the main reason for the use of descriptive survey research design is that it provides as much information on the entire population under study in relation to the factors influencing loan repayment in MFI's. Hence, census survey was carried out to seek the opinions of credit officers on effects of credit assessment on loan repayment.

#### **3.3 Population of The Study**

A population is a well-defined or set of people, services, elements, events, groups of things or households that are being investigated (Cooper and Schindler, 2006). The target population was 32 credit officers drawn from four (4) licensed microfinance institutions in Nakuru CBD during the study period. Since the target population of 32 credit officers was relatively small, the researcher included all the units of analysis. A census survey was employed therefore there was no sampling. This method was suitable not only to the small target population but also it enhances the accuracy and reliability of the study because it eliminates the sampling biasness.

#### **3.3 Data Collection**

This study used primary data by collected from every MFI's credit officers using structured questionnaires to gather information relevant in achieving research objectives. Questionnaires were preferred since they are suitable to survey research and that it is cheap and easy to administer.

### 3.4 Data Analysis

The data collected was coded, organized and analyzed with the help of statistical computer package for social sciences (SPSS). The results were analyzed using descriptive statistics (frequencies and percentages). Presentation of data was done using tables and pie-charts for easy understanding and analysis. Inferential statistics such as multiple linear regression model and chi-square tests were used to show the strength of association between the variables.

Multiple linear regression equation:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \alpha$$

Y is the dependent variable (loan repayment)

$\beta_0$  is the regression intercept

$\beta_1, \beta_2$  &  $\beta_3$  are the slopes of the regression equation

The independent variables are;

$X_1$  is Client appraisal

$X_2$  is Credit terms

$X_3$  is credit collection policies

$\alpha$  is Error term

### 3.6 Reliability and validity of research instruments

Reliability is the measure of the consistency of the results from the tests of the instruments. Reliability of research instruments was calculated using Chronbach's coefficient alpha for either even or uneven items based on the order of number arrangement of the questionnaire items. Validity of the instruments was determined by the researcher through discussing the items in the instrument with the supervisors.

According to Fraenked and Wallen (2000), a proposed psychometric instrument should only be used if a value of 0.70 or higher is obtained on substantial sample. Cronbach's coefficient alpha formular which was used was as follows:



$$\alpha = \frac{N\bar{C}}{\bar{V} + (N-1)\bar{C}}$$

$\alpha$  is the Cronbach's coefficient alpha

$N$  is the number of items

$\bar{C}$  is the average inter-item co-variance among items

$\bar{V}$  is the average variance

This study obtained a Cronbach Alpha value of 0.761 from the pretest prior to administration of questionnaires which was above 0.70 which is recommended value. This means that the accuracy level of the questionnaires was of 76.1%. Hence, after ascertaining consistency results of the instruments was giving consistent results, it was adopted as the main tool used for data collection.

## CHAPTER FOUR

### DATA ANALYSIS, PRESENTATION AND DISCUSSION

#### 4.1 Introduction

The chapter presents results of the study based on the formulated objectives in chapter one. The chapter analyses various variables involved in the study so as to investigate the inherent meaning of the research data obtained from the empirical study. Results are presented in tables, graphs and charts

#### 4.2 Demographic information

Demographic information shows the statistic characteristics of human population in a sample size. Table 4.1 shows demographic information of the respondents.

Demographic factor one (1): Analyzed the gender of the respondents. It enabled the researcher to obtain information on the portion of respondents who were male or female. Fifty six point three percent (56.3%) of the respondents were male whereas forty three point eight percent (43.8%) were female.

Demographic factor two (2): Depicts the age brackets of the respondents. Twenty eight point one percent (28.1%) percent of the respondents are between 20-30 years of age. Fifty percent (50%) of the respondents are between 30-40 years of age. Twenty one point nine percent (21.9%) of the respondents are between 40-50 years of age and none had above 50 years of age. This indicates that most credit staffs are generally between 20-30 years of age.

Demographic factor three (3): Shows the education level of the respondent. This information was necessary so as to assist the researcher to know whether the respondents are illiterate or educated. Three point one percent (3.1%) of the respondents had attained PHD (Doctor of Philosophy). Thirty one point three (31.3%) of the respondents had masters. Forty point six (40.6%) of the respondents had degree and twenty five percent (25 %) of the respondents had diploma. This information illustrates that the majority respondents had attained degree level of education meaning that the respondents were fairly educated and were literate.

Demographic factor four (4): Examined number of years of experience of the respondents. This information was necessary to obtain information on whether the respondents had work experience or not. Six point three percent (6.3%) of the respondents had less than 1 year work

experience. Fifty three point one percent had work experience between 1-2 years. Thirty seven point five percent (37.5%) of the respondent had work experience between 2-4 years and three point one percent (3.1%) had work experience above four years. This indicates that most credit staffs had work experience.

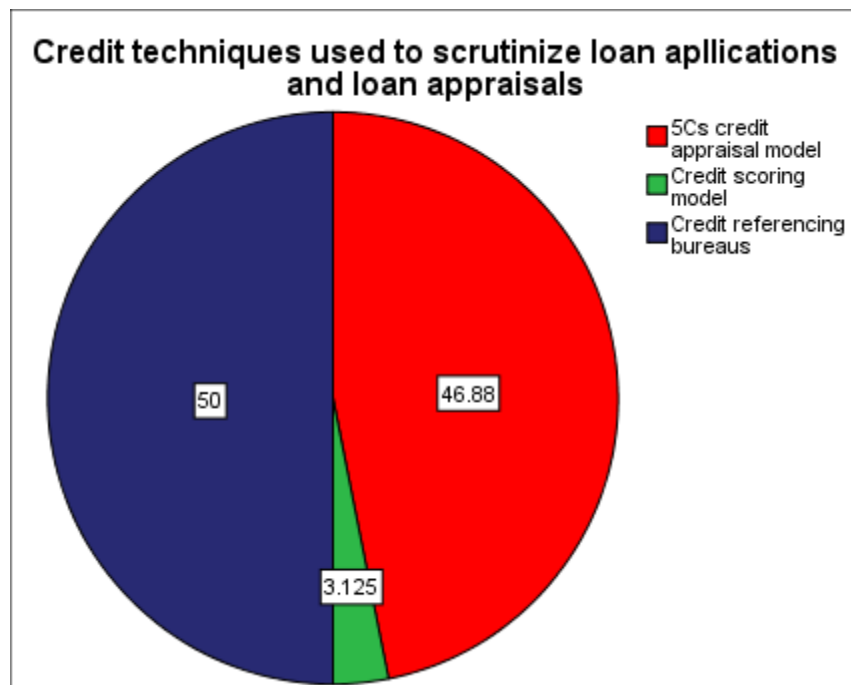
**Table 4.1 Demographic information**

		<b>Frequency</b>	<b>Percentage</b>
<b>Gender</b>	Male	18	56.3
	Female	14	43.8
	<b>Total</b>	<b>32</b>	<b>100.0</b>
<b>Age bracket</b>	20-30 years	9	28.1
	30-40 years	16	50.0
	40-50 years	7	21.9
	50 and above years	0	0
	<b>Total</b>	<b>32</b>	<b>100.0</b>
<b>Level of education</b>	PHD	1	3.1
	Masters	10	31.3
	Degree	13	40.6
	Diploma	8	25.0
	<b>Total</b>	<b>32</b>	<b>100.0</b>
<b>No. of years of work experience of the respondents</b>	Less than 1 year	2	6.3
	1-2 years	17	53.1
	2-4 years	12	37.5
	Above 4 years	1	3.1
	<b>Total</b>	<b>32</b>	<b>100.0</b>

*Source: Research Data, 2015*

### 4.3 Credit techniques used in client appraisal

Figure 4.1 shows research findings on information about credit techniques used in scrutinizing loan applications and loan appraisal, it reveals that forty six point nine percent (46.9%) of the respondents uses 5C's credit appraisal model. Three point one percent (3.1%) of the respondents uses credit scoring model and fifty percent (50%) of the respondents' uses credit referencing bureaus. This information implies that most microfinance institutions mainly use 5Cs credit appraisal model and credit referencing bureaus to scrutinize loan applications and loan appraisal. However, results of this study coincide with Radhamani, (2014) who found out that enhancement of credit techniques is better classification than use of traditional techniques and would be suitable for MFIs who would deal with customers who deal with customers from weaker sections. It also agrees with Abedi (2005) who reported that 5Cs client appraisal model is used to scrutinize creditworthiness of loan applicant.



**Figure 4.1: Credit techniques used in client appraisal**

Table 4.2 below shows extent of credit assessment being used to ascertain information given by client is reliable. Thirty one point three (31.3%) of the respondents responded that credit assessment techniques is being used to very great extent, fifty nine point four (59.4%) of the respondents responded that they use to great extent and nine point four (9.4%) of the

respondents use moderately credit assessment techniques to ascertain reliability of client information. This illustrates that most MFIs uses credit assessment techniques to ascertain information given by client as reliable.

**Table 4.2: Frequency distribution table of extent to which credit assessment techniques are used to ascertain information given by clients as reliable**

	Frequency	Percent	Cumulative Percent
Very great extent	10	31.3	31.3
Greater extent	19	59.4	90.6
Moderate	3	9.4	100.0
Total	32	100.0	

*Source: Research Data, 2015*

#### **4.3.1 Client Appraisal**

Table 4.3 depicts client appraisal factors. The identified client appraisal factors results in table 4.3 reveals that poor test of accuracy and credit worthy of a client has greatest contribution to non-loan repayment ( $p = 0.001$ ) which is less than significance level of 0.05. Use of false information to acquire loans also does contribute to non-loan repayment ( $p = 0.016$ ) which is less than 0.05. In addition, falsified past business financial performance contributes to non-loan repayment ( $p = 0.000$ ). Also, accepting collaterals whose values are overstated or impaired the respondents ( $p = 0.000$ ) which is less than 0.05 significance level. This implies that client appraisal is crucial variable in ascertaining creditworthiness of a client. Results of this study concur with Kurui and Kalio (2012) who found out that client appraisal helps in enhancing loan performance by properly screening information given by loan applicants as noted also in Bandura (1995). It also concur with Nawai and Shariff (2013) who found out that factors affecting the ability of the borrowers to repay loans are business factors, borrowers' attitude towards their loans, amount of loan received, other debt burden, business experience, family background and business formality. The variables in table 4.3 were rated on a 5 point likert scale ranging from 1 Greatest contribution to 5 No Contribution.

**Table 4.3 Frequency distribution table of Client appraisal factors**

<b>Statements</b>	<b>N</b>	<b>GTC</b>	<b>GRC</b>	<b>GC</b>	<b>LC</b>	<b>NC</b>	<b>Chi-sq.</b>	<b>Sig.</b>
Poor test of accuracy and creditworthy of applicant	32	18(56.3%)	13(40.6%)	1(3.1%)	0	0	14.313	0.001
Use of false information to acquire loans	32	14(43.8%)	15(46.9%)	3(9.4%)	0	0	8.313	0.016
Falsified past business financial performance	32	9(28.1%)	18(56.3%)	4(12.5%)	1(3.1%)	0	20.750	0.000
Accepting collaterals whose values are overstated or impaired	32	25(78.5%)	5(15.6%)	0	1(3.1%)	0	49.50	0.000

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**Source: Research Data, 2015**

**Key:** GTC= Greatest contribution; GRC=Greater Contribution; GC=Great Contribution; LC=Least Contribution; NC=No Contribution

#### 4.4 Repayment of the Loan installment

Table 4.4 indicates that twenty five percent (25%) of the respondents reveal that repayment of the loan installment is being repaid weekly by the customers. Forty six point nine percent (46.9%) of the respondents reveal that repayment of loan installment is on monthly basis and twenty eight point one percent (28.1%) of the respondents reveal that it is being repaid on annual basis. This research finding illustrates that repayment in microfinance institutions of the loan installment by customers is on monthly basis.

**Table 4.4 Frequency distribution table of repayment of the loan installment**

	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
<b>Weekly</b>	8	25.0	25.0
<b>Monthly</b>	15	46.9	71.9
<b>Annually</b>	9	28.1	100.0
<b>Total</b>	32	100.0	

*Source: Research Data, 2015*

##### 4.4.1 Credit Period

Table 4.5 illustrates information on credit period. Sixty two point five percent (62.5%) of the respondents strongly agree that credit period affects loan repayment. Twenty eight point one percent (28.1%) of the respondents agree that it affects loan repayment and nine point four percent (9.4%) of the respondents disagree that credit period does not contribute to loan repayment. It reveals that credit period most influenced loan repayment.

**Table 4.5 Frequency Distribution table of Credit period**

	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Strongly agree	20	62.5	62.5
Agree	9	28.1	90.6
Disagree	3	9.4	100.0
Total	32	100.0	

*Source: Research Data, 2015*

#### 4.4.2 Interest rates

Table 4.6 shows that fifty nine point four percent (59.4%) of the respondents strongly agree that interest rates affect loan repayment. Twenty eight point one percent (28.1%) of the respondents agree that it affects loan repayment. Nine point four percent (9.4%) of the respondents disagree and three point one percent of the respondents (3.1%) of the respondents strongly disagree that interest rates does not contribute to loan repayment as shown in table 4.6. Results of this study concur with Stiglitz and Weizz (1981) who pointed out that interest rates may not raise enough to guarantee that all loan applicants to secure credit when loanable funds are limited and thus affect loan repayment.

**Table 4.6 Frequency Distribution table of Interest rates**

	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Strongly agree	19	59.4	59.4
Agree	9	28.1	87.5
Disagree	3	9.4	96.9
Strongly disagree	1	3.1	100.0
Total	32	100.0	

**Source: Research Data, 2015**

#### 4.4.3 Effects of indicators of credit terms on loan repayment

The researcher sought to establish effects of the credit terms on loan repayment. Research findings on table 4.6 revealed that poorly formulated loan policies affects loan repayment ( $p=0.000$ ). In addition, both stringent repayment policies ( $p=0.000$ ) and flexible repayment policies ( $p=0.005$ ) affects loan repayment. However, poor record keeping policies ( $p=0.000$ ) and insufficient collateral provided by borrower ( $p=0.149>0.05$ ) affects loan repayment. Most of the p values of the credit terms variables are less than 0.05 level of significance. The study findings is similar with Ahiable (2012) who investigated an assessment of credit management practices at Agricultural Development Bank and made a conclusion that flexible policy of access should be adopted so that customers can easily access credit. Researcher pointed out that customers who want to access credit must meet certain conditions in terms of cash flows, purpose of the loans, amount, age of client and the provision of security in order to access loan. The variables on table 4.7 were rated using 5 likert scale ranging from 1 Very great extent to 5 No extent.



**Table 4.7 Frequency Distribution and Chi Square table of Indicators of credit terms**

<b>Variables</b>	<b>N</b>	<b>VGE</b>	<b>GE</b>	<b>M</b>	<b>LE</b>	<b>NE</b>	<b>Chi-sq.</b>	<b>Sig.</b>
Poorly formulated loan policies	32	9(23.7%)	9(23.7%)	1(2.6%)	1(2.6%)	0	33.500	0.000
Stringent repayment policies	32	20(52.6%)	10(26.3%)	1(2.6%)	0	0	30.750	0.000
Flexible repayment policies	32	16(42.1%)	14(36.8%)	2(5.3%)	0	0	10.750	0.005
Poor record keeping policies	32	7(18.4%)	23(60.5%)	2(5.3%)	0	0	22.563	0.000
Insufficient collateral provided by borrower	32	15(39.5%)	11(28.9%)	6(15.8%)	0	0	3.813	0.149

**Source: Research Data, 2015**

**Key:** VG= Very Great extent; GE=Great extent; M= Moderate; LE=Least extent; NE=No extent

#### 4.5 Information systems

Table 4.8 shows information on information systems employed in disbursing, tracking and monitoring loan repayment. Seventy eight point one percent (78.1%) of the respondents strongly agree that use of management information system affects loan repayment. Twenty one point nine percent (21.9%) agree that use of management information systems affects loan repayment. However, forty point six percent (40.6%) of the respondents strongly agree that decision support system affects loan repayment. Fifty six point three percent (56.3%) agree and three point one percent (3.1%) of the respondents are not sure about effects of decision support system on loan repayment. Finally, forty six point nine percent (46.9%) of the respondents strongly agree that transaction support system affect loan repayment while forty three point eight percent (43.8%) of the respondents agree and nine point four percent (9.4%) are not sure whether transaction support system affects loan repayment. This information shows that employing information systems greatly affects loan repayment in disbursing, tracking and monitoring loans in MFIs. In addition, it is depicted that use of information systems significantly affects loan repayment since p values are less than 5% significance level. The variables on table 4.8 were rated on a 5 point likert scale ranging from 1 Strongly agree to 5 Strongly disagree.

**Table 4.8 Frequency Distribution and Chi Square table of Information systems**

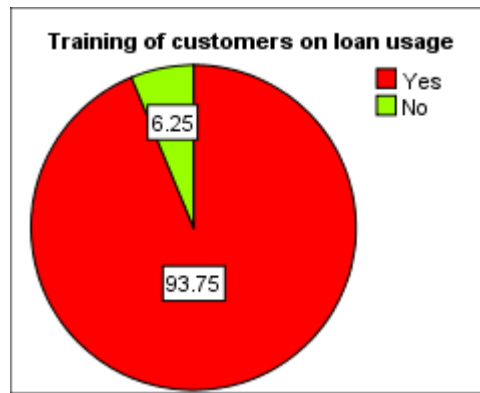
<b>Types of information systems</b>	<b>N</b>	<b>SA</b>	<b>A</b>	<b>NS</b>	<b>D</b>	<b>SD</b>	<b>Chi-sq.</b>	<b>Sig.</b>
Management information system	32	25(78.1%)	7(21.9%)	0	0	0	10.125	0.001
Decision support system	32	13(40.6%)	18(56.3%)	1(3.1%)	0	0	14.313	0.001
Transaction support system	32	15(46.9%)	14(43.8%)	3(9.4%)	0	0	8.313	0.016

**Source: Research Data, 2015**

**Key:** SA= Strongly Agree; A = Agree; NS= Not Sure; D= Disagree; SD =Strongly disagree

#### 4.5.1 Training of customers on loan usage

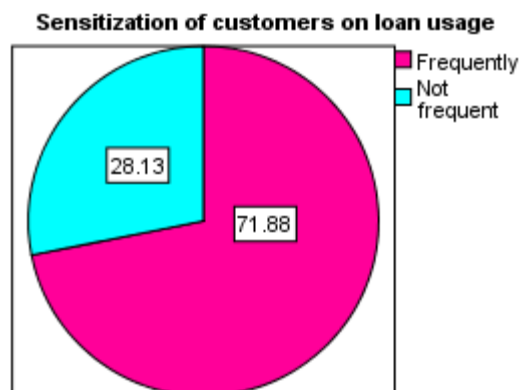
Research findings on figure 4.2 depicts that ninety three point seven five percent (93.75%) of the respondents train customers on loan usage while six point two five percent (6.25%) of the respondents does not train customers on loan usage. This information shows that most MFIs train customers on loan usage.



**Figure 4.2 Training of customers on loan usage**

#### 4.5.2 Sensitization of customers on loan usage

Figure 4.3 shows information on sensitization of customers on loan usage. Seventy one point eight percent (71.88%) of the respondents sensitize customers on loan usage frequently while twenty eight point one three percent (28.13%) of the respondents does not undertakes sensitization of customers on loan usage frequently. This information illustrates that most MFIs undertake sensitization of customers on loan usage frequently



**Figure 4.3 showing sensitization of customers on loan usage**

### 4.5.3 Government Policy

Research findings on table 4.9 reveals fifty six point three percent (56.3%) of the respondents are agrees to very great extent that government policy affects loan repayment. Thirty one point three percent (31.3%) of the respondents agrees to great extent. Twelve point five percent (12.5%) of the respondents moderately agrees that government policy affect loan repayment. This implies that government policy does not affect so much loan repayment in MFIs.

**Table 4.9 Frequency Distribution table of government Policy**

	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Very great extent	18	56.3	56.3
Great extent	10	31.3	87.5
Moderate	4	12.5	100.0
Total	32	100.0	

*Source: Research Data, 2015*

### 4.5.4 Loan recovery procedures

Research finding on table 4.10 shows loan recovery procedures considered to collect information regarding perception of respondents on how loan recovery procedures affect loan repayment. Listening to defaulters excuses to extend repayment affects loan repayment  $p=0.000 < 0.05$ . In addition, uncommitted debt collectors  $p=0.000 < 0.05$  and aggressive debt collectors ( $p=0.0005 < 0.05$ ) affects loan repayment. However, presence of corrupt credit officers  $p=0.000 < 0.05$  affects loan repayment while long repossessing period through court of law, peer group mechanisms does not affect loan repayment since  $p=0.149$  is greater than  $p=0.05$  significance level ( $p=0.149 > 0.05$ ). Research findings concur with Kariuki, (2010) who noted that collection effort should, therefore aim at accelerating collections from slow payers and reducing bad debt losses.

**Table 4.10: Frequency Distribution and Chi Square table of Loan recovery procedures**

<b>Variables</b>	<b>N</b>	<b>VG</b>	<b>GE</b>	<b>M</b>	<b>LE</b>	<b>NE</b>	<b>Chi-sq.</b>	<b>Sig.</b>
Listening to defaulters excuses to extend repayment	32	20(52.6%)	9(23.75%)	2(5.3%)	1(2.6%)	0	33.500	0.000
Uncommitted debt collectors	32	20(52.6%)	8(21.1%)	2(5.3%)	0	2(5.3%)	30.750	0.000
Aggressive debt collectors	32	13(34.3%)	17(44.7%)	2(5.3%)	0	0	10.750	0.005
Presence of corrupt credit officers	32	22(57.9%)	7(18.4%)	1(2.6%)	0	2(5.3%)	22.563	0.000
Long repossession period through court of law, peer group mechanisms	32	15(39.5%)	25(39.5%)	0	0	2(5.3%)	3.813	0.149

**Source: Research Data, 2015**

Key: VG= Very Great extent; GE=Great extent; M= Moderate; LE=Least extent; NE=No extent

#### 4.6 Multiple Linear Regression Analysis

Table 4.11 shows the results on the multiple linear regression analysis the relationship between credit appraisals, credit terms, collection policies and loan repayment in MFIs in Nakuru CBD.

**Table 4.11 Multiple linear regression Model Summary**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.740 <sup>a</sup>	.548	.500	.42068

a. Predictors: (Constant), Collection policies, Credit terms, Client Appraisal

Adjusted R squared is the coefficient of determination which reveals that the variation in dependent variable is due to changes in independent variables. Research findings on table 4.11 shows adjusted R squared was 0.500 and it shows that the total variation of 50 % in loan repayment in MFIs in Nakuru CBD can be explained by variation in client appraisal, credit terms and collection policies. This means that other factors not included in the study accounted for 50%. R is the relationship between the research study variables which is indicated from the table 4.11 there were strong relationship between research study variables as shown by above (R=0.740)

**Table 4.12 Summary of ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.014	3	2.005	11.327	.000 <sup>b</sup>
	Residual	4.955	28	.177		
	Total	10.969	31			

a. Dependent Variable: Loan Repayment

b. Predictors: (Constant), Collection policies, Credit terms, Client Appraisal

Table 4.12 shows a summary of ANOVA table where 6.014 are explained variations while 4.955 are unexplained variation. It also reveals that total variation of client appraisal, credit terms and loan repayment are statistically significant. Overall p value is less than 0.05 significance

level although credit terms and collection policies are not statistically significant as shown in table 4.13.

**Table 4.13 Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.726	.488		5.585	.000
Client Appraisal	1.197	.209	.737	5.717	.000
Credit terms	-.404	.201	-.258	-2.008	.054
Collection policies	.048	.128	.048	.376	.710

a. Dependent Variable: Loan repayment

Holding client appraisal, credit terms and collection recovery policies constant MFIs loan repayment would be 2.726. Independent variables from the regression equation reveals that a unit increases in client appraisal led to an increase in loan repayment of MFIs in Nakuru CBD by 1.197 units. This means that good test of accuracy and creditworthy of applicants, use of right information given by applicant to acquire loans, using true past business financial performance and accepting collaterals whose values are not overstated or impaired increases loan repayment. In addition, a unit increase in credit terms led to a decrease in loan repayment of MFIs in Nakuru CBD by 0.404 units. This implies that poorly formulated credit terms policies, stringent repayment policies, poor record keeping policies and insufficient collateral provided by a borrower decreases loan repayment. Also, a unit increase in collection recovery policies led to an increase in loan repayment of MFIs in Nakuru CBD by 0.048 units. This means that listening to defaulters' excuses to extend repayment, absence of corrupt credit officers and having aggressive debt collectors' increases loan repayment. Hence, credit assessment reduces value of portfolio which would have been held at risk in MFIs in Nakuru CBD.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

Having analyzed, presented and discussed data collected in chapter four this chapter entails summary, conclusions and recommendations.

#### 5.2 Summary

This study examined the effects of credit assessment on loan repayment in MFI's in Nakuru CBD. The specific objectives were to: determine the effects of client appraisal on loan repayment; examine the effects of credit terms on loan repayment; evaluate the effects of credit collection policies on loan repayment.

The identified client appraisal factors results in table 4.3 reveals that poor test of accuracy and credit worthy of a client has greatest contribution to non-loan repayment ( $p = 0.001$ ) which is less than significance level of 0.05. Use of false information to acquire loans also does contributes to non-loan repayment ( $p = 0.016$ ) which is less than 0.05. In addition, falsified past business financial performance contributes to non- loan repayment ( $p=0.000$ ). Also, accepting collaterals whose values are overstated or impaired the respondents ( $p=0.000$ ) which is less than 0.05 significance level. This implies that client appraisal is crucial variable in ascertaining creditworthiness of a client.

Table 4.6 shows that fifty nine point four percent (59.4%) of the respondents strongly agree that interest rates affect loan repayment. Twenty eight point one percent (28.1%) of the respondents agree that it affects loan repayment. Nine point four percent (9.4%) of the respondents disagree and three point one percent of the respondents (3.1%) of the respondents strongly disagree that interest rates does not contribute to loan repayment as shown in table 4.6. Results of this study shows that most credit staffs agreed that interest rate affects interest rate.

Research finding on table 4.10 shows loan recovery procedures considered to collect information regarding perception of respondents on how loan recovery procedures affect loan repayment. Listening to defaulters excuses to extend repayment affects loan repayment  $p=0.000 < 0.05$ . In addition, uncommitted debt collectors  $p=0.000 < 0.05$  and aggressive debt collectors ( $p=0.0005 < 0.05$ ) affects loan repayment. However, presence of corrupt credit officers  $p=0.000 < 0.05$  affects loan repayment while long repossessing period through court of law, peer group



mechanisms does not affect loan repayment since  $p=0.149$  is greater than  $p=0.05$  significance level ( $p=0.149 > 0.05$ ).

Credit assessment had a strong relationship with loan repayment ( $r=0.74$ ). More findings of this study indicated that client appraisal was positively affecting loan repayment with 1.197 units, credit terms was reported to affect loan repayment negatively by 0.404 units while collection policies revealed positive relationship with 0.048 units. This implied that client appraisal, credit terms and collection policies reduces portfolio at risk in MFIs in Nakuru CBD and thus increases loan repayment. Finally, credit assessment statistically significant influenced loan repayment as revealed by total  $p$  value in ANOVA table which is less than 0.05 level of significance.

### **5.3 Conclusions**

The research study concluded that credit assessment had effect on loan repayment in MFIs in Nakuru CBD. The research study depicted that a unit increase in client appraisal led to an increase in loan repayment indicating that there was a positive association between client appraisal, collection policies and loan repayment in MFIs in Nakuru CBD. Furthermore, the study found that a unit increase in credit terms led to a decrease in loan repayment in MFIs in Nakuru CBD. This revealed a negative association between credit terms and loan repayment. Hence, client appraisal, credit terms and collection recovery procedures significantly influenced value of portfolio at risk, financial sustainability, collection performance, client poverty level and the number of clients being served in MFIs in Nakuru CBD.

The study concluded that MFIs institutions should measure the number of clients or accounts that are active at a given point in time. This indicator is helpful and useful than using cumulative number of loans or clients served during a period. This implies that cumulative numbers make MFIs offering short-term loans look effective or better-off than MFIs providing long-term loans. Hence, to reflect actual service delivery counting active members should be emphasized.

The study concluded that client poverty level should be ascertained by examining average outstanding loan balance this is for the reason that better-off clients tend to be uninterested in smaller loans. However, donors and funders normally support well MFIs who reach lower tier population in the society and that are usually already committed to low-end clientele. Credit assessment techniques aid MFI to know only amount of loans that clients have not yet repaid, or as savings that the clients have not withdrawn.

Microfinance institutions should consider credit Appraisal critical since it is a basic stage in the lending process. It involves gathering, processing and analyzing of quality information as a way of discerning the client's creditworthiness and reducing the incentive problems between the lenders as principals and the borrowers as agents. To make this basic stage successful the study conclude that they should employ various formal credit assessment techniques to ascertain credit worthiness of borrowers like the 5C's model of client appraisal, 5P's method of evaluating credit applications, LAPP method, CAMPARI model and FAPE. These formal tools enable MFIs to screen potential client's income level and ascertain creditworthiness.

Finally, the study concluded that portfolio at risk play a significant role since it outline whether the collection reporting is regarded as reliable. Poor collection of microloans is traceable to MFIs management and system weakness. Moreover, repayment of an MFI's loans is a crucial indicator of loan performance. Finally, simultaneous high repayment rates are strong signal that loans are of real value to clients.

#### **5.4 Recommendations**

From research findings of this study, it is recommended that MFIs should ensure that they enhance use of credit assessment techniques in ascertaining reliability of information given by loan applicant so as to reduce value of portfolio which would have be held at risk. There is need also MFIs to have flexible credit terms. They should also enhance use of information systems so as to improve MFIs portfolio management through employing information systems in disbursing, tracking and monitoring loans on repayments. Finally, they should train and sensitize customers on loan usage on regular basis.

#### **5.5 Suggestions for further research**

This study examined the effects of credit assessment on loan repayment in Nakuru CBD. Since the research was conducted in Nakuru Town a comprehensive research need to be carried out in other towns to determine whether the findings of the concluded study can be relied on. In addition, the following research areas are recommended for further research; effect of credit referencing of clients on loan performance and further research should be done on effect of credit assessment on loan repayment on client's perspective. This will enable more generalized conclusion on loan repayment.

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**APPENDIX I: Introductory letter to the respondent**

LUCY J. KIPCHUMBA,

P.O BOX 90,

ELDAMA RAVINE

Telephone No. 0701428921

E-mail Address: jeroplucy594@gmail.com

Dear Sir / Madam,

**RE: REQUEST FOR DATA COLLECTION**

I am a postgraduate student in the Faculty of Commerce, Kabarak University pursuing Master of Business Administration Degree. Following my research proposal I am carrying out a research on the effects of credit assessment on loan repayment in microfinance institutions.

I hereby kindly request you to fill the questionnaire attached to this introductory letter to aid my study as well as to fulfill the requirement of Master of Business Administration, Finance option.

I have selected your institution as the main target population. Details of each section in the paper are specified therein.

All information that you provide will be treated with utmost confidentiality for purely academic purposes.

Yours Faithfully,

Lucy J. Kipchumba

(Researcher)



**APPENDIX II: Questionnaire**

**Tick or fill where appropriate.**

**SECTION A: GENERAL INFORMATION**

1. Name of the Microfinance Institution.....

2. Department. ....

3. Gender: Male

Female

4. Age bracket: 20-30 years

30-40 years

40-50 years

50 and above

5. Level of education: PHD

Masters

Degree

Diploma

Certificate

6. How long have you worked in this microfinance institution?

Less than 1 year

1 to 2 years

2 to 4 years

Above 4 years

**SECTION B: EFFECTS OF CLIENT APPRAISAL ON LOAN REPAYMENT**

1. Which credit technique(s) does your organization use to scrutinize loan applications and loan appraisals?

5C’s Credit appraisal model

( )

Credit scoring model

( )

Credit referencing bureaus

( )

Specify if any other.....

2. To what extent do your institution use credit assessment technique(s) chosen above to ascertain information given by the client as reliable?

Very great extent	Great extent	Moderate	Least extent	No extent

1. Below are statements related to client appraisal, tick appropriately the extent of contribution non- loan repayment in your organization: Key 1- Strongly Agree, 2-Agree, 3- Not sure, 4- Disagree & 5-Strongly Disagree

Statements	Greatest contribution 1	Greater contribution 2	Great contribution 3	Least contribution 4	No contribution 5
Poor test of accuracy and creditworthy of applicants					
Use of false information to acquire loans					

Falsified past business financial performance					
Accepting collaterals whose values are overstated/ impaired					

**SECTION C: EFFECTS OF CREDIT TERMS ON LOAN REPAYMENTS**

1. How often do customers repay the loan installments?

- Weekly
- Bi-weekly
- Monthly
- Annually

2. Please respond to the following statements by indicating the extent to which you agree or disagree as per the given choices below.

Variables	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
Credit period					
Interest rates					

3. To what extent do the following factors of credit terms affect loan repayment?

Statements	Very great	Great	Moderate	Least	No extent
Poorly formulated loan policies					
Stringent repayment policies					
Flexible repayment policies					
Poor record keeping policies					
Insufficient collateral provided by borrower					

**SECTION D: EFFECTS OF COLLECTION POLICIES ON LOAN REPAYMENT**

1. Please respond to the extent to which you agree or disagree on the impact of the information systems below employed in disbursing, tracking and monitoring on loan repayments.

<b>Type of information system</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Not sure</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
Management information system					
Decision support system					
Transaction processing system					

2. Does your organization train loan borrowers on loan usage?

Yes

No

3. If yes, how often do sensitization of customers on loan usage take place

Frequently

Not frequent

4. To what extent does the government policy affect loan repayment operations in your organization

	<b>Very great extent</b>	<b>Great extent</b>	<b>Moderate</b>	<b>Least extent</b>	<b>No extent</b>
Government policy					

5. Please respond to the following statements by indicating the extent to which the following loan recovery procedures affect loan repayment in your organization.

<b>Statements</b>	<b>Very great extent</b>	<b>Great extent</b>	<b>Moderate</b>	<b>Least extent</b>	<b>No extent</b>
Listening to defaulters excuses to extend repayment period					
Uncommitted debt collectors					
Aggressive debt collectors					
Presence of corrupt credit officers					
Long repossessing period through court of law, peer group mechanisms					

## SECTION E: LOAN REPAYMENT

Below are statements related to loan repayment, tick appropriately: Key 1- Strongly Agree, 2- Agree, 3- Not sure, 4- Disagree & 5-Strongly Disagree

	<b>Statements</b>	<b>Strongly agree 1</b>	<b>Agree 2</b>	<b>Not sure 3</b>	<b>Disagree 4</b>	<b>Strongly Disagree 5</b>
1.	The value of the portfolio at risk in your organization is high					
2.	Financial sustainability of MFIs is profitable enough to maintain and expand its services without continued injections of subsidized donor funds					
3.	Collection performance of loans in MFI is not well					
4.	Client poverty level is high					
5.	MFIs outreach is high					

**Thank you for taking time to fill the questionnaire.**

**APPENDIX III: Licensed Microfinance Institutions in Nakuru CBD by CBK AS AT 12<sup>TH</sup>  
January 2015**

1. KENYA WOMEN FINANCE TRUST
2. FAULU KENYA
3. SMEP(SMALL AND MICRO ENTERPRISE PROGRAMME)
4. RAFIKI MICROFINANCE BANK LTD

**Source: Central Bank of Kenya Report 2015**





