

**THE EFFECTS OF CREDIT MANAGEMENT PRACTICES ON  
LOAN PERFORMANCE IN DEPOSIT TAKING MICROFINANCE  
INSTITUTIONS IN KENYA**

**BY  
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## DECLARATION

I declare that this project is my original work and has not been submitted for examination in any other university.

Signed .....

Date.....

**BEATRICE NJENGA**

**D61/64349/2011**

This project has been submitted for examination with my approval as the university supervisor

Signed .....

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## **DEDICATION**

I wish to dedicate this project to my family and friends who gave me moral support during my study period.

## ABSTRACT

This study was set to determine the effect of credit management practices on loan performance in Deposit Taking Microfinance institutions in Kenya. The study used a descriptive research design. This study, focused on nine (9) MFIs licensed under the central bank of Kenya (CBK, 2013). The study used a census study whereby the entire population was studied as opposed to selecting a sample. The DTMs that were studied include Kenya Women Finance Trust (KWFT) DTM Limited, Faulu Kenya DTM Limited, Small and Micro Enterprise Programme (SMEP) and Remu DTM Limited. The study used both primary and secondary data. Primary data was collected by use a structured questionnaire. The data was collected from secondary sources since the nature of the data is quantitative. The secondary data was obtained from financial reports of micro finance institutions. Secondary data from the Central Bank of Kenya (CBK) reports and library was reviewed for completeness and consistency in order to statistical analysis. The study focused on four key variables namely the dependent variable (Loan performance which was measured using debts. The results of the regression equation revealed that the predictors that were significant contributors to the 68.9% of explained variance in loan performance were ( $R^2=0.689$ ). The predictors that were significant were profitability since an increase in profitability by 0.224 resulted into a corresponding increase in loan performance of deposit taking microfinance institutions. This means that there was positive relationship between the variables. The study concluded that it was important for deposit taking microfinance institutions in Kenya to maintain an appropriate balance between provision of credit and collections as a key factor, critical to the survival and ultimate success of DTM's in Kenya. The findings also revealed that although most deposit taking microfinance institutions implemented credit management practices, the gross loan portfolio increase steadily over the years. Also, it was observed that the amount of non-performing loans increased progressively. This rate of default could be as a result of poor investment decisions by the borrowers due to lack of professional advice by deposit taking microfinance institutions on how to choose and select viable investments that can yield profitability. The study further concluded that some microfinance institutions were a bit lenient while giving out credit facilities to their customers. Some of the credit officer had too much trust on their customers and thus failed to observe all the credit management practices while giving out credit. This however, led to an increase in the amount of nonperforming loans leading to poor loan repayment and thus poor financial performance. The limitation of this study was time constraints, limited financial resources and geographic distance between Deposit Taking Microfinance Institutions in Kenya. Time and geographical constraints were overcome by the utilization of professionally trained research assistants without compromising the validity and reliability of the research findings, while the limited financial resources available were spent on research activities that could not be undertaken solely by the researcher.

# TABLE OF CONTENTS

<b>DECLARATION.....</b>	<b>ii</b>
<b>ACKNOWLEDGEMENTS .....</b>	<b>iii</b>
<b>DEDICATION.....</b>	<b>iv</b>
<b>ABSTRACT.....</b>	<b>v</b>
<b>LIST OF TABLES .....</b>	<b>ix</b>
<b>LIST OF ABBREVIATIONS .....</b>	<b>x</b>
<b>CHAPTER ONE .....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1.1 Background of the Study .....	1
1.1.1 Credit Management Practices .....	2
1.1.2 Loan Performance .....	3
1.1.3 Credit Management Practices and Loan Performance.....	4
1.1.4 Deposit Taking Microfinance Institutions in Kenya.....	6
1.2 Research Problem .....	7
1.3 Objective of the Study .....	9
1.4 Value of the Study .....	9
<b>CHAPTER TWO .....</b>	<b>11</b>
<b>LITERATURE REVIEW .....</b>	<b>11</b>
2.1 Introduction.....	11
2.2 Theoretical Framework.....	11
2.2.1 Information Sharing Theory .....	11
2.2.2 Credit Metrics Model.....	13
2.2.3 There five Cs of Credit Management.....	14
2.3 Determinants of Loan Performance .....	16
2.3.1 Credit Policy .....	16
2.3.2 Credit Standards.....	16
2.3.3 5C's of Lending .....	17
2.3.4 Collateral Security .....	17

2.3.5 Credit Term .....	18
2.3.6 Collection Effort .....	19
2.4 Empirical Studies .....	20
2.5 Summary of the Literature Review .....	25
<b>CHAPTER THREE .....</b>	<b>27</b>
<b>RESEARCH METHODOLOGY .....</b>	<b>27</b>
3.1 Introduction.....	27
3.2 Research Design.....	27
3.3 Target Population.....	27
3.4 Data Collection .....	28
3.5 Data Analysis .....	28
3.5.1 Analytical Model .....	29
<b>CHAPTER FOUR.....</b>	<b>31</b>
<b>DATA ANALYSIS, INTERPRETATION OF FINDINGS AND DISCUSSIONS ...</b>	<b>31</b>
4.1 Introduction.....	31
4.2 Response Rate .....	31
4.2.1 Category of the Deposit Taking Microfinance Institutions .....	32
4.2.2 Number of years in Operation of Deposit Taking Microfinance .....	32
4.3 Credit Management Practices: Credit Standards .....	33
4.3.1 Policy Implementation .....	33
4.3.2 Evaluating Borrowers .....	34
4.3.3 Evaluating Borrowers .....	34
4.3.4 Terms and Conditions Considered Before Issuing of Loans .....	35
4.3.5 Debt Collection Effort.....	36
4.4 Regression Analysis.....	37
4.4.1 Model Summary.....	37
4.4.2 Analysis of Variance.....	38
4.4.3 Test for Coefficients .....	39
4.5 Summary and Interpretation of Findings .....	41

<b>CHAPTER FIVE .....</b>	<b>43</b>
<b>SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>43</b>
5.1 Introduction.....	43
5.2 Summary of Findings.....	43
5.3 Conclusions.....	44
5.4 Policy Recommendation .....	45
5.5 Limitations of the Study.....	46
5.6 Suggested Areas for Further Research.....	48
<b>REFERENCES.....</b>	<b>49</b>
<b>APPENDICES .....</b>	<b>55</b>
<b>Appendix I: Questionnaire.....</b>	<b>55</b>

## **LIST OF TABLES**

Table 4.1	Category of the Deposit Taking Microfinance Institutions .....	32
Table 4.2	Credit Policy Implementation .....	33
Table 4.3	Evaluating Borrowers .....	34
Table 4.4	Terms and Conditions .....	35
Table 4.5	Debt Collection Effort .....	36
Table 4.6	Model Summary .....	38
Table 4.7	ANOVA .....	39
Table 4.8	Test for Coefficients .....	40

## **LIST OF ABBREVIATIONS**

ANOVA	Analysis of Variance
CBK	Central Bank of Kenya
DTM's	Deposit Taking Microfinance Institutions in Kenya
MFI's	Microfinance Institutions
SME'S	Small and Medium Enterprises
VAR	Value at Risk

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

The process of lending is guided by credit management practices which are achieved through proper policies that define the guidelines and procedures put in place to ensure smooth lending processes in microfinance institutions. If proper risk management practices are not implemented the firm risks if the borrower is not able or willing to honor their financial obligations. In order to lend, financial institutions accept deposits from the public against which they provide loans and other form of advances since they bear the cost for carrying these deposits, banks undertake lending activities in order to generate revenue. The major sources of revenue comprise margins, interests, fees and commissions (Fiordelisi, Marques-Ibanez & Molyneux, 2010).

Beyond the urge to extend credit and generate revenue, most financial institutions have to recover the principal amount in order to ensure safety of depositors' fund and avoid capital erosion. When lending the financial institution has to consider a number of factors namely interest income, cost of funds, statutory requirements, depositor's needs and risks associated with loan proposals (Harrison, 1996). As a result financial institutions have overtime developed credit management practices that are observed during lending. These practices include among others the credit appraisals, documentations, disbursement, monitoring and recovery processes lending. Bank lending is also based on established international standards (Day & Taylor, 1996).

Credit risk assessment models often consider the impact of changes to borrower and loan-related variables such as the probability of default, loss given default, exposure amounts, collateral values, rating migration probabilities and internal borrower ratings. As credit risk assessment models involve extensive judgment, effective model validation procedures are crucial. Financial institutions should periodically employ stress testing and back testing in evaluating the quality of their credit risk assessment models and establish internal tolerance limits for differences between expected and actual outcomes and processes for updating limits as conditions warrant (Nsereko, 1995)

### **1.1.1 Credit Management Practices**

The process of managing credit is significant in improving the current credit scoring practices by the lenders. Credit management ensures inclusion of primary predictive factors that cover the full spectrum of relevant qualification criteria and both determines and reveals how they combine to produce outcomes. Credit scoring, which relies on historical data, does not have this capability, nor does it possess a feedback mechanism to adjust factor weightings over time as experience accumulates. The process of managing credit determines which risk factors that pertain to the lending decision within the context of each borrower's situation and the loan product parameters, and then appropriately adjusts the factor weightings to produce the right outcome (Matovu & Okumu, 1996).

Credit management practices integrate judgmental components and proper context into the modeling process in a complete and transparent manner. Some credit management systems lack context because they rely purely on the available data to determine what

factors are considered. Credit scoring systems lack transparency because two individuals with identical credit scores can be vastly different in their overall qualifications, the credit score itself is not readily interpretable, and industry credit scoring models are maintained as proprietary, as are their development processes (Gardner, 1996). The strategies include transferring to another party, avoiding the risk, reducing the negative effects of the risk, and accepting some or all of the consequences of a particular risk. The process of risk management is a two step process. The first is to identify the source of the risk, which is to identify the leading variables causing the risk. The second is to devise methods to quantify the risk using mathematical models, in order to understand the risk profile of the instrument (Ddumba & Sentamu, 1993),

### **1.1.2 Loan Performance**

Loan performance refers to the financial soundness of a financial institution on the performance of their disbursed loan to various sectors. It also means how the loans are scheduled to act and how they are actually performing in terms of the schedule payment compared to the actual payments. It is closely associated with timely and steady repayment of interest and principal of a loan. Default on borrowed funds could arise from unfavorable circumstances that may affect the ability of the borrower to repay as pointed out by (Stigliz and Weiss, 1981).

The most common reasons for the existence of defaults are the following: if the financial institution is not serious on loan repayment, the borrowers are not willing to repay their loan; the financial institutions staffs are not responsible to shareholders to make a profit; clients lives are often full of unpredictable crises, such as illness or death in the family; if

loans are too large for the cash needs of the business, extra funds may go toward personal use; and if loans are given without the proper evaluation of the business Norell (2001).Wakuloba (2005) in her study on the causes of default in Government micro credit programs identified the main causes of default as poor business performance, diversion of funds and domestic problems.

Breth (1999) argued that there are many socio-economic and institutional factors influencing loan repayment rates. The main factors from the lender side are high-frequency of collections, tight controls, a good management of information system, loan officer incentives and good follow ups. In addition, the size and maturity of loan, interest rate charged by the lender and timing of loan disbursement have also an impact on the repayment rates (Okorie al., 2007). The main factors from the borrower side include socio economic characteristics such as, gender, educational level, marital status and household income level and peer pressure in group based schemes.

### **1.1.3 Credit Management Practices and Loan Performance**

Effective credit management practices and loan accounting practices should be performed in a systematic way and in accordance with established policies and procedures. To be able to prudently value loans and to determine appropriate loan provisions, it is particularly important that banks have a system in place to reliably classify loans on the basis of credit risk to facilitate repayment of loans by customers (Kagwa, 2003).Larger loans should be classified on the basis of a credit risk grading system. Other, smaller loans may be classified on the basis of either a credit risk grading system or payment delinquency status. Both accounting frameworks and Basel II recognize loan

classification systems as tools in accurately assessing the full range of credit risk (Hanson & Rocha, 1986).

A well structured loan grading management system is an important tool in differentiating the degree of credit risk in the various credit exposures of a bank. This allows a more accurate determination of the overall characteristics of the loan portfolio, probability of default and ultimately the adequacy of provisions for loan losses. In describing a loan grading system, a bank should address the definitions of each loan grade and the delineation of responsibilities for the design, implementation, operation and performance of a loan grading system (Glen, 1996).

Glen (1996), credit risk grading management processes typically take into account a borrower's current financial condition and paying capacity, the current value and reliability of collateral and other borrower and facility specific characteristics that affect the prospects for collection of principal and interest. Financial institutions should put in place policies that require remedial actions be taken when policy tolerances are exceeded. These institutions should also document their validation process and results with regular reporting of the results to the appropriate levels of management. Additionally, the validation of internal credit risk assessment models should be subject to periodic review by qualified, independent individuals for example internal and external auditors (Kagwa, 2003).

### **1.1.4 Deposit Taking Microfinance Institutions in Kenya**

Following the establishment of the microfinance Act on 2nd May 2008, a number of existing micro-finance institutions applied for licenses to allow them to take deposits from members and the general public. The main objective of the Microfinance Act is to regulate the establishment, business and operations of microfinance institutions in Kenya through licensing and supervision. In a report by CBK (2013), there are currently nine Deposit-taking MFIs operating in Kenya. The nation-wide DTMs are; Kenya Women Finance Trust DTM Limited, Faulu Kenya DTM Limited, Small and Micro Enterprise Programme (SMEP), Rafiki DTM Limited and Remu DTM Limited, Remu DTM Limited, Rafiki DTM Limited and UWEZO Deposit Taking Microfinance Limited.

Microfinance refers to all types of financial intermediation services; savings, credit funds transfer, insurance, pension remittances, provided to low-income households and enterprises in both urban and rural areas, including employees in the public and private sectors and the self-employed. In micro-finance, growth can be considered at several levels of institutional, group, and individual and can relate to organizational, managerial, and financial aspects. In Kenya, DTMs face an apparent tension between achieving financial growth and contribution to poverty reduction (CBK, 2013).

All credit management practices are practiced by credit officers in all the DTM's institutions who are charged with the responsibility of lending finances to credit work customers and groups within a specified time frame. Credit officers also make follow ups to ensure that money borrowed is return as agreed with the borrowers to ensure the firm does not suffer financial losses from defaulters. Credit management practices play a fundamental role in maintaining a sound financial balance between lending and

depositing and thus mitigate the risks of losing money through lending by DTM's institutions (Robinson, 2001).

## **1.2 Research Problem**

Income from lending constitutes on average 75-80% of the total bank income. Credit policies and procedures are designed to guide lending and ensure prudent lending operations. Recently, receiving loans has become an issue of concern for small businesses. In reference to Eurenus (2011) in her article in SvD (The Swedish Daily Newspaper) explains that it is difficult for small businesses to fulfill the banks requirements to receive loan, this is because small and growing firms often operates in new unexplored business areas, which is related to higher risk (Bruns, 2004). It is further argued that SMEs have difficulties to obtain debt because of asymmetric information, which exists in a higher extent than for larger and public firms. It is difficult for the banks to receive valuable information about small businesses, due to limited and uncertain information (Binks, Ennew & Reed, 1992).

In Kenya, DTM's institutions are popular in providing credit to borrowers however; some of them fail to conduct credit assessment procedures while giving out credit. The tremendous growth of DTM's in Kenya has been attributed by proper credit management practices that ensure only credit worthy customers are qualified for loans. This has highly contributed to the reduction of nonperforming loans among most DTMs leading to financial performance of firms. This has necessitated a need for DTM's institutions in Kenya to implement credit management practices in order to ensure that only credit worthy customers access finances in order to mitigate risks of default. This is important

in maintaining a sound financial balance between lending and borrowing through ensuring that the firm does not suffer from financial losses that might negatively affect the financial performance of the DTM's (Robinson, 2001).

A number of studies have been done locally and internationally in relation to credit management and loan performance. Binks et al. (1992) found that asymmetric information led to two problems when providing debt finance. First, adverse selection, explained as the situation where the borrower has more information about its actual abilities and qualities of the project, than the lender. The second problem is moral hazard, where the degree of the riskiness of the project or business will not perform in a manner consistent with the contract. The effects of these problems is higher interest rates to compensate for the risk, and this may lead to low-risk borrower drop of and only the high-risk customers are left and willing to pay for the credit. Walsh (2010) carried out an assessment of the credit management process of credit unions. The study found that credit unions appear to be deficient in the credit control department; namely in the areas of experience, personnel levels and the consistency of interventions used. Lack of technology operated in the loan decision process is apparent and thus more complex and sophisticated models are a prerequisite if credit unions are to maintain financially stable.

A study was conducted by Ahlberg & Anderson (2012) on Credit risk, Credit Assessment, Basel III, Small Business Finance in 95 small and large banks in Sweden, data was collected using a questionnaire and data analysis was done using mean and standard deviation. The study found out that most banks had a well-developed credit process where building a mutual trust relationship with the customer is crucial.

Mwithi (2012) found that there was a positive correlation between credit risk assessment and management of microfinance institutions in Nyeri County. In his study, Simiyu (2008), established that majority of the institutions used Credit Metrix to measure the credit migration and default risk. The results show that the microfinance institutions are faced with the challenge of strict operational regulations from the Central Bank of Kenya. Chege (2010), from the findings of the study concluded that credit risk management practices enhance profitability of the MFI.

Although studies have been done in relation to credit management practices and loan performance, no studies focuses on credit management practices and loan performance in deposit taking microfinance institutions in Kenya. This study seeks to answer the research question: what is the effect of credit management practices on loan performance in Deposit Taking Microfinance institutions in Kenya?

### **1.3 Objective of the Study**

The objective of this study is was to determine the effect of credit management practices on loan performance in Deposit Taking Microfinance institutions in Kenya.

### **1.4 Value of the Study**

This study will provide empirical data for policy makers in formulating appropriate policy environment for the operations of microfinance institutions in Kenya. The findings of the study might also be useful to other financial institutions on the best credit management practices in order to effectively manage credit.

The findings of this study will provide recommendations on how to assess and recover the loans given to customers.

The study will also be of significance to future researchers as literature review, and further provoked research in the area of lending and portfolio management.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This section summarizes the literature that is available regarding credit management practices and loan performance that is most used by credit officers in most microfinance institutions to determine whether their customers are credit worthy or not.

#### **2.2 Theoretical Framework**

This study is informed by three theories namely information sharing, credit metrics models and 5C's model of Credit appraisal. These theories provide theoretical evidence on the relationship between credit management practices and loan performance of financial institutions.

##### **2.2.1 Information Sharing Theory**

According to Brown, Jappelli & Pagano (2007), information sharing theory, the effect of information sharing in a market with asymmetric information, either moral hazard or adverse selection. In moral hazard setups, information sharing may provide borrowers with higher incentives to perform: because information becomes available to competitor banks, borrowers are happy to perform better because they no longer fear being held-up by the lender-monopolist.

Jappelli & Pagano (2002), borrowers do not want to default, because this will be publicly known: when default information is shared, borrowers will face an increase interest rates and a decrease in access to finance not only by the current bank, but by the rest of

banks in the market - the so called disciplinary effect hazard or adverse selection (Hunt, 2005). In moral hazard setups, information sharing may provide borrowers with higher incentives to perform: because information becomes available to competitor banks, borrowers are happy to perform better because they no longer fear being held-up by the lender-monopolist. Second, borrowers do not want to (strategically) default, because this will be publicly known: when default information is shared, borrowers will face an increase in interest rates and a decrease in access to finance not only by the current bank, but by the rest of banks in the market - the so called disciplinary effect (Djankov, McLiesh & Shleifer, 2007).

Information theories of credit refer to the amount of credit to firms and individuals would be larger if financial institutions could better predict the probability of repayment by their potential customers. Therefore, more banks know about the credit history of prospective borrowers, the deeper credit markets would be. Public or private credit registries that collect and provide broad information to financial institutions on the repayment history of potential clients are crucial for deepening credit markets (Fischbacher, 2007).

Private credit bureaus rely on voluntary information exchange between lenders, which typically involves a trade off. On the one hand, lenders benefit from information sharing since it helps them to select good from bad loan applicants. Moreover, information sharing can overcome moral hazard on the part of borrowers, motivating them to exert greater effort in projects and repay loans (Pagano & Jappelli, 1993). On the other hand; sharing information may expose lenders to increased competition because they release private information about their existing clients. Banks may therefore be wary of sharing

information in competitive credit markets, and may be particularly reluctant to share information with close competitors (Kallberg & Udell, 2003).

### **2.2.2 Credit Metrics Model**

This model was propounded by Cantor & Frank (1996), credit Metrics is the first readily available portfolio model for evaluating credit risk. The Credit Metrics approach enables a company to consolidate credit risk across its entire organization, and provides a statement of value-at-risk (VaR) due to credit caused by upgrades, downgrades, and defaults. Credit Metrics will be useful to all companies worldwide that carry credit risk in the course of their business. It provides a methodology to quantify credit risk across a broad range of instruments, including traditional loans, commitments and letters of credit; fixed income instruments; commercial contracts such as trade credits and receivables; and market-driven instruments such as swaps, forwards and other derivatives.

Credit Metrics is a statistical model developed by Bernstein & Peter (1996), the investment bank for internal use, but now it's being used all around the world by hundreds of banks. This model works on the statistical concepts like probability, means, and standard deviation, correlation, and concentrations. Barclay, Michael & Clifford (1995) the model was developed with three objectives which include to develop a Value at Risk (VAR) framework applicable to all the institutions worldwide those carry the credit risks in the course of their businesses, develop a portfolio view showing the credit event correlation which can identify the costs of concentrations and the benefits of diversification in a mark to market framework and to apply it in making investment decisions and risk mitigating actions that is determining the risk based credit limits across the portfolio, and rational risk based capital allocations (Asarnow, 1996).

The proponents of credit metrics model argue that it is a tool for assessing portfolio risk due to changes in debt value caused by changes in obligor credit quality. This model includes the changes in value caused not only by possible default events, but also by upgrades and downgrades in credit quality, because the value of a particular credit varies with the corresponding credit quality (Altman & Edward, 1992). In the case of default a recovery rate is taken as the portfolio value. This distribution gives us two measures of credit risk which are standard deviation and percentile level. Credit Metrics has various applications which are to reduce the portfolio risk by reevaluate obligors having the largest absolute size arguing that a single default among these would have the greatest impact, reevaluate obligors having the highest percentage level of risk arguing that these are the most likely to contribute to portfolio losses, reevaluate obligors contributing the largest absolute amount of risk arguing that these are the single largest contributors to portfolio risk (Alici & Yurt, 1995).

### **2.2.3 There five Cs of Credit Management**

Selten (1975) postulated five credit management practices are character, capacity commitment and collateral. Microfinance institutions should observe when giving out credit to customers to in order to maintain financial soundness of the firm (Vercammen, 1995). Financial institutions consider customer's character in making a decision on the level of credit worthiness of a borrower. Most financial institutions value the borrower's reputation, honesty and integrity and account history as a sign of willingness to repay the borrowed funds. The financial institution might also consider knowledge and experience in your area of business, your grasp of financial principles and the soundness of your plans for the future of your business (Powell & Mylenko, 2004).

In addition to the borrower's willingness to repay the loan, lenders are interested in your capacity for repaying it. The lender will examine your business to determine whether you have sufficient liquidity to make your scheduled payments and continue to operate the business. The level of liquidity or working capital of the customers is the cash in hand or the ability to generate. A borrower can demonstrate capacity through demonstrating that he is able to control costs and operate the business at a profit (Powell, Mylenko, Miller & Majnoni, 2004).

The borrower should show a potential lender that you are personally and financially committed to your business. Any financial institution is interested to know the personal choices that one has made that demonstrate commitment to the business; including lifestyle choices like where you live and how many hours you work (Selten, 1975). The lender will assess the borrower's financial commitment by comparing the amount that he or she is risking on the business to the amount that the borrower intends the lender to risk. Lenders protect themselves against potential losses ensuring that borrower secure loan with collateral. When a borrower borrows money he or she is required to give the lender the right to take specific business assets in the event of a default. Lenders prefer assets, like buildings and land, which retain their value even when business conditions are poor, but they also consider how quickly they can sell the assets to recover their investment (San Jose & Riestra, 2002).

## **2.3 Determinants of Loan Performance**

The determinants of loan performance are as indicated below:

### **2.3.1 Credit Policy**

Credit policy refers to a combination of three decision variables namely; collection efforts, credit standards and credit terms. They include, credit standards, credit terms and collection efforts on which the financial manager has influence. Credit standards in advancing loans, credit standard must be emphasized such that the credit supplier gains an acceptable level of confidence to attain the maximum amount of credit at the lowest as possible cost. Credit standards can be tight or loose (Anderson, Williams and Sweeney, 2009).

### **2.3.2 Credit Standards**

Tight credit standards make a firm lose a big number of customers and when credit are loose the firm gets an increased number of clients but at a risk of loss through bad debts. A loose credit policy may not necessarily mean an increase in profitability because the increased number of customers may lead to increased costs in terms of loan administration and bad debts recovery. Character it refers to the willingness of a customer to settle his obligations this mainly involves assessment of the moral factors. Social collateral group members can guarantee the loan members known the character of each client; if they doubt the character then the client is likely to default. Saving habit involves analyzing how consistent the client is in realizing own funds, saving promotes loan sustainability of the enterprise once the loan is paid. Other source should be identified so as to enable him serve the loan in time. This helps micro finance institutions not to only

limit loans to short term projects such qualities have an impact on the repayment commitment of the borrowers it should be noted that there should be a firm evidence of this information that point to the borrowers character (Vercammen,1995).

The evaluation of an individual should involve gathering of relevant information on the applicant, analyzing the information to determine credit worthiness and making the decision to extend credit and to what tune. They suggested the use of the 5Cs of lending.

### **2.3.3 5C's of Lending**

The 5Cs of lending are Capacity, Character, Collateral, Condition and Capital. Capacity refers to the customer's ability to fulfill his financial obligations. Capacity, this is subjective judgment of a customer's ability to pay. It may be assessed using a customer's ability to pay. It may be assessed using the customer's past records, which may be supplemented by physical or observation. Collateral is the property, fixed assets, chattels, pledged as security by clients (Riach, 2010).

### **2.3.4 Collateral Security**

Collateral security is what customers offer as saving so that failure to honor his obligation the creditor can sell it to recover the loan. It is also a form of security which the client offers as form of guarantee to acquire loans and surrender in case of failure to pay; if borrowers do not fulfill their obligations the creditor may seize their asset. Capital portends the financial strength, more so in respect of net worth and working capital, evaluation of capital may be by way of analyzing the balance sheet using the financial ratios (San Jose & Riestra, 2002).Condition relates to the general economic climate and its influence on the client's ability to pay. Condition, this is the impact of the present

economic trends on the business conditions which affects the firm's ability to recover its money. It includes the assessment of prevailing economic and other factors which may affect the client ability to pay (Rajedom, 2010).

### **2.3.5 Credit Term**

A Credit term is a contractual stipulation under which a firm grants credit to customers furthermore these terms give the credit period and the credit limit. The firm should make terms more attractive to act as an incentive to clients without incurring unnecessary high levels of bad debts and increasing organizations risk. Credit terms normally stipulate the credit period, interest rate, method of calculating interest and frequency of loan installments. Discounts are offered to induce clients to pay up within the stipulated period or before the end of the credit period .This discount is normally expressed as a percentage of the loan. Discounts are meant to accelerate timely collection to cut back on the amount of doubtful debts and associated costs (Stiglitz & Weiss, 1981).

Riach (2010), observes that credit terms are normally looked at as the credit period terms of discount and the amount of credit and choice of instrument used to evidence credit. Credit terms may include; Length of time to approve loans, this is the time taken from applicants to the loan disbursement or receipt. It is evaluated by the position of the client as indicated by the ratio analysis, trends in cash flow and looking at capital position. Maturity of a loan, this is the time period it takes loan to mature with the interest there on. Cost of loan. This is interest charged on loans, different micro finance institutions charge differently basing on what their competitors are charging (Padilla & Pagano, 2000).

### **2.3.6 Collection Effort**

Rajedom (2010), defines a collection effort as the procedure an institution follows to collect past due account. Collection policy refers to the procedures micro finance institutions use to collect due accounts. The collection process can be rather expensive in terms of both product expenditure and lost good will. Methods used by Micro finance institutions could include letters, demand letters, telephone calls, visits by the firm's officials for face to face reminders to pay and legal enforcements (Anderson, Williams & Sweeney, 2009).

Rajan (1995), asserts that collection policy is a guide that ensures prompt payment and regular collections. The rationale is that not all clients meet their obligations, some just take it for granted, others simply forget while others just don't have a culture of paying until persuaded to do so. Many micro finance institutions may send a letter to such individuals (borrowers) when say ten days elapse or phone calls and if payment is not received within thirty days, it may turn over the account to a collection agency. Collection procedure is required because some clients do not pay the loan in time some are slower while others never pay (Stiglitz & Weiss, 1981).

Thus collection efforts aim at accelerating collections from slower payers to avoid bad debts. Prompt payments are aimed at increasing turn over while keeping low and bad debts within limits. However, caution should be taken against stringent steps especially on permanent clients because harsh measures may cause them to shift to competitors. States that collection effort are directed at accelerating recovery from slow payers and decreases bad debts losses (Padilla & Pagano, 2000).

## 2.4 Empirical Studies

Another study was carried out in Kampala on credit policies and loan recovery by Kwizera (2001), A case of B.blue Microfinance Institution Kisoro was done and both secondary and primary data was used data analysis was done using a multiple regression model, the results of the study showed that credit policies exist in B.Blue microfinance institutions although the management was reluctant to effectively implement credit policies and this has negatively impacted on B.Blue's loan recovery between the periods "2008-2010" where the default rate was steadily increasing.

Most micro finance institutions have credit policies according to the client's needs. A lot of studies have been done relating to credit risk and the various risks that affect the lending institutions. In a study conducted by Prakash & Poudel (2002) in the United States, a survey of 50 financial institutions was conducted, primary and secondary data was used, and data analysis was done using a regression model. The results of this study found credit risk management practices is the best practice in financial institutions and above 90% of the private financial institutions in country have adopted the best practices. Inadequate credit policies are still the main source of serious problem in the financial industry as result; effective credit risk management had gained an increased focus in recent years. The study concluded on the need to manage credit risk in the entire portfolio as well as the risk in individual credits transactions.

A study was conducted in Uganda by Omara (2007) to investigate on the credit Assessment process and repayment of bank loans in Kampala, a case study of Barclays was done. A sample of 73 respondents were interviewed and the results of the study showed that there was delay by Barclays bank in scoring loans, the bank charged

commitment fee to both new and existing customers. Data was analysed using frequencies and tables it was found out that Barclays bank required collateral for loans above UGX 20 Million.

There is also a review of empirical studies for instance, Djankov, McLiesh, & Shleifer, (2007), carried out a study on the effects of credit management on loan repayment in private credit in 129 countries in Eastern Europe, financial managers of the finance institutions were interviewed and data analysis was carried out using mean and standard deviation. The findings of the study concluded that credit management practices were significant in facilitating loan repayment.

In his study, Simiyu (2008) investigated on the techniques used by micro finance institutions in the management of credit risk in Kenya, and to examine the main challenges facing the micro finance institutions operating in Kenya in the management of credit risk. To satisfy the research objectives, the study used a descriptive research design comprising a sample of thirty (30) micro finance institutions. The sampling frame included the Central bank of Kenya Directory of micro finance institutions. Purposive sampling was used to select one credit officer and one loan officer from each of the sampled institutions. Primary data was collected using semi-structured questionnaires. The questionnaires were dropped and picked up later and others sent and received via email. The target respondents were the institutions' loans and credit officers. Once the pertinent data were collected the researcher carried out analysis of the same using mean scores, percentages and standard deviations. The study established that most microfinance institutions use 6C techniques of credit risk management, the study also revealed that understanding the organizations exposure to the customers is treated as

critical by the micro finance institutions..The study established that majority of the institutions used Credit Metrix to measure the credit migration and default risk. The results show that the microfinance institutions are faced with the challenge of strict operational regulations from the Central Bank of Kenya.

Chege (2010) investigated on the relationship between credit risk management practices and performance of Micro Finance Institutions in Kenya. This research study employed a survey research method as well as causal research design to show the relationship between financial performance and risk management practices. The study population consisted of all 43 MFIs registered and is members of Association of Microfinance Institutions of Kenya (AMFI). This study comprised of data collected through both, primary as well as secondary sources. Primary data was collected through the use of a questionnaire. As for inferential statistic, regression analysis will be used to establish the relationship between credit risk management practices and the financial performance of MFIs. From the findings the study concluded that credit risk management practices enhance profitability of the MFI, improve profitability, that diversification across MFIs lead to improving shareholders values and improved saving, loan policy procedure adopted by MFIs improve investment and that human-based expert systems payment capacity help in reduction of defaults improving the performance on MFIs.

Walsh (2010) carried out an assessment of the credit management process of credit unions. The objective of this study was to examine what tools, interventions and standards are exercised in Irish credit unions. A survey of 35 Irish credit unions was done and data was analyzed using a multiple regression model. It was found that credit unions appear to be deficient in the credit control department; namely in the areas of experience,

personnel levels and the consistency of interventions used. Lack of technology operated in the loan decision process is apparent and thus more complex and sophisticated models are a prerequisite if credit unions are to maintain financially stable.

Eurenius (2011) in her article in The Swedish Daily Newspaper carried out an investigation about the challenges facing 65 small businesses in fulfilling the banks requirements to receive loan. A semi structured questionnaire was administered then data analysis was done by use of percentages , the study found that small and growing firms often operated in new unexplored business areas, which is related to higher risk. It is further argued that SMEs have difficulties to obtain debt because of asymmetric information, which exists in a higher extent than for larger and public firms. It is difficult for the banks to receive valuable information about small businesses, due to limited and uncertain information.

In determining relationship between credit risk management practices and the level of non-performing loans for commercial banks in Kenya, Mutangili (2011) used causal research design, the population of the study consisted of all the 44 commercial banks in Kenya. The study involved the collection of primary and analysis of secondary data for the purpose of meeting its objective. Self-administered questionnaires were used to collect the data. The study intended to establish the relationship between credit risk management and the level of non-performing loans and therefore linear regression analysis model was used to determine the nature of this relationship. The study revealed that commercial banks review their credit policy yearly and half yearly, and that employees are made aware of credit policies through credit manual, regular training, regular meeting and supervision. The study further revealed that methods mostly used in

credit risk assessment among commercial banks in Kenya are; risk adjusted return on capital and linear probability model. The study established that there is a negative relationship between the level of non-performing loans and credit risk management practices in banks with a correlation coefficient of 0.918, implying that the level of non-performing loans is inversely affected by credit risk management practices.

Ahlberg & Anderson (2012), conducted Credit risk, Credit Assessment, Basel III, Small Business Finance in 95 small and large banks in Sweden, data was collected using a questionnaire and data analysis was done using mean and standard deviation. The study found out that most banks had a well-developed credit process where building a mutual trust relationship with the customer is crucial. If the lender has a good relationship with the customer, it will ease the collection of credible information and thus enhance the process of making right decision. The research examined minor differences between smaller and larger banks in their credit assessment. The study also found that most banks were liberal with adjusting to the new regulation and thus did not limit small businesses from accessing loans.

Mwithi (2012), set to establish the relationship between credit risk management approaches employed by MFIs in Nyeri County and the level of NPLs. To achieve the objective of the assessment, primary data of the research was collected through administering questionnaires to 44 respondents of selected MFIs from their various levels of employment, that is, the top, middle and low level management. The data was then analyzed using Spearman's correlation coefficient statistical method. The study found that the level of credit risk assessment and management was high in the MFIs.

Gladys (2012) in her study to establish the effect of credit risk management techniques used to evaluate SMEs on the level of Nonperforming loans by Commercial banks in Kenya. A descriptive study of credit risk management techniques was used by commercial banks in Kenya was carried out on all the banks. A regression analysis was developed in order to examine the relationship credit risk management and SME Nonperforming loans in Banks in Kenya. The study established that there is a negative relationship between Credit Risk Management and nonperforming loans.

## **2.5 Summary of the Literature Review**

Credit management practices play a fundamental role in minimizing the rate of loan default in microfinance institutions in Kenya. Financial institutions should practice credit management practices due to the following reasons for example as a selection tool, to quantify risk, to aid in decision making processes, and to ensure that only credit worthy customers qualify for credit. This makes the process of credit assessment an important activity to most lending institutions. Nonperforming loans may be brought about by poor credit risk management practices, improper supervision by credit officers when assessing borrowers, very long litigation processes and lack of credit assessment especially the five Cs of credit appraisal model. Failure to observe and implement credit management practices is one of the causes of loan default and non performing loans in most microfinance institutions. Studies have been done in relation to credit management practices and loan performance: Chege (2010) and Simiyu (2008), however none of these studies have investigated on credit management practices on loan performance of deposit taking microfinance institutions in Kenya. This study therefore seeks to determine the

effects of credit management practices on loan performance of deposit taking microfinance institutions in Kenya.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the research methodology that was used in achieving the objective of this study. It presents the research design, target population, data collection, data analysis procedures and the analytical model that will be used in data analysis.

#### **3.2 Research Design**

The study used a descriptive research design. A descriptive survey is usually concerned with describing a population with respect to important variables with the major emphasis being establishing the relationship between the variables (Kothari, 2004).

#### **3.3 Target Population**

According to Mugenda & Mugenda (2003) a population refers to an entire group of individuals, events or objects having a common observable characteristic. To achieve the objective of this study, the study focused on nine (9) MFIs licensed under the central bank of Kenya (CBK, 2013). The study used a census study whereby the entire population was studied as opposed to selecting a sample. The DTMs that were studied include Kenya Women Finance Trust (KWFT) DTM Limited, Faulu Kenya DTM Limited, Small and Micro Enterprise Programme (SMEP) and Remu DTM Limited.

### **3.4 Data Collection**

The study used both primary and secondary data. Primary data was collected by use a structured questionnaire. Primary data was collected from credit officers of DTM's using a structured questionnaire which was administered through a drop and pick later method. The researcher used systematic random sampling technique in selecting the four respondents in each of the nine DTMs. The target location for this study was Nairobi, Kenya since all the DTM's are headquartered here.

The data was collected from secondary sources since the nature of the data is quantitative. The secondary data was obtained from financial reports of micro finance institutions. This enabled the researcher to get quantified data that was helpful in drawing conclusions and giving recommendations on credit management practices and loan performance of deposit taking micro finance institutions in Kenya. The study used secondary data sources of a five year period from 2009-2013 based on the availability and accessibility of data.

### **3.5 Data Analysis**

Secondary data from the Central Bank of Kenya (CBK) reports and library was reviewed for completeness and consistency in order to statistical analysis. According to Mugenda (2003), data must be cleaned, coded and properly analyzed in order to obtain a meaningful report. The data collected was sorted and organized before capturing the same in Statistical Packages for Social Sciences (SPSS) for analysis .The study focused on four key variables namely the dependent variable (Loan performance which was measured using debts. The three independent variables are: credit standards, credit terms

and conditions and collection efforts were evaluated using a questionnaire and the average obtained was the independent variable. The second independent variable was the size of the microfinance institution which was measured using the gross loan portfolio of the firm. The third independent variable will be profitability which was measured using return on equity of DTM's in Kenya

### **3.5.1 Analytical Model**

Below is the regression model that was used in analyzing the effects of credit management practices on loan performance of DTM's institutions in Kenya. The model of this study is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

$\alpha$  = Constant Term

$Y$  = Repayment of Loans is the dependent variable which was measured using non performing loans divided by the total number of loans by DTM's in Kenya

$X_1$  = is the average of the three variables (Credit standards, credit terms and conditions and collection efforts) that was evaluated using a questionnaire.

$X_2$  = Size of the DTM's was evaluated using the gross loan portfolio of the DTM's

$X_3$  = Profitability was measured using return on equity of the DTM's which will be measured using net income divided by shareholders equity.

$\beta$  = is a regression constant

$\varepsilon$  = Error term normally distributed about the mean of zero

Whereby Y is the dependant variable loan performance,  $\beta_0$  is the regression constant or Y intercept  $\beta_1 \dots \beta_3$  are the coefficients of the regression model. The basis of the model is to help in determining the number of repaid loans. This was measured using Performing asset ratio and Nonperforming asset ratio. The test of significance will be the ANOVA test.

## **CHAPTER FOUR**

### **DATA ANALYSIS, INTERPRETATION OF FINDINGS AND DISCUSSIONS**

#### **4.1 Introduction**

This section will be a presentation of the analyzed data and the findings obtained from the primary data that was gathered from the set of respondents. In order to check for consistency and completeness, all questions that had been responded were cross-checked to ensure that they were done well. The data analysis was done by the use of Statistical Package for Social Sciences (SPSS) version 20.0. In this chapter, data for analysis, regression analysis, and interpretation were evaluated.

This chapter presents the data analysis, interpretation and presentation there-to on the study to investigate the effect of credit management practices on loan performance in Deposit Taking Microfinance institutions in Kenya.

#### **4.2 Response Rate**

The study had targeted 36 respondents out of which 30 respondents filled and returned their questionnaire constituting 83 % response rate. Data analysis was done through Statistical Package for Social Scientists (SPSS) version 17. Frequencies, percentages and mean were used to display the results which were presented in tables and graphs.

#### 4.2.1 Category of the Deposit Taking Microfinance Institutions

The respondents were requested to state the category of the deposit taking microfinance institution in order to determine the category of the institution and establish the extent to which these institutions implemented credit management practices. The findings are presented in the table 4.1 below:

**Table 4.1 Category of the Deposit Taking Microfinance Institutions**

	Frequency	Percent	Cumulative Percent
Bank	2	6.67	6.67
Deposit Taking	27	90.00	96.67
Valid Credit Only	1	3.33	100.0
Total	30	100.0	

The study sought to find the category of Deposit Taking Microfinance. From the study findings 90% of the respondents indicated that most DTM's were Deposit Taking, 6.67% of the respondents indicated that their institutions were under the category of a bank and only 3% of the population of DTMFi's were under the category of credit only. This is an indication that most microfinance institutions operating in Kenya were deposit taking.

#### 4.2.2 Number of years in Operation of Deposit Taking Microfinance

The researcher requested the respondents to state the period in which the Deposit Taking MFIS had been in existence. The results of this analysis showed that 85% of the deposit taking microfinance institutions had been in operation for more than years 5 years, only 15% had been in operation for less than 5 years. This is a clear indication that most of the microfinance institutions have served for a considerable amount of time.

### 4.3 Credit Management Practices: Credit Standards

The respondents were asked to indicate the extent to which their institutions implemented the following credit management practices:

#### 4.3.1 Policy Implementation

The respondents were asked to indicate whether their institutions had a credit policy in order to determine whether the institution's policy had an effect on loan performance of Deposit Taking Microfinance institutions in Kenya.

**Table 4.2 Credit Policy Implementation**

Category	Frequency	Percent
To a very Great Extent	4	13.33
To Great Extent	10	33.33
To a moderate Extent valid	6	20.00
To a less extent	8	26.67
To no Extent at all	2	6,67
Total	30	100

From the findings of the study, it was established that credit management policy was implemented to a large extent, of the respondents stated that credit management policy was implemented to great extent of the respondents indicated that credit policy was implemented to a moderate extent. There was a tie of respondents, some indicated that credit policy was implemented to a less extent while the other noted that it there was no extent in implementation at all. This is an indication that credit policy was highly implemented to most deposit taking microfinance institutions in Kenya.

### 4.3.2 Evaluating Borrowers

The respondents were asked to indicate whether their institutions evaluated their borrowers before giving out credit to determine the extent to which this practice impacted on loan performance of deposit taking microfinance institutions in Kenya.

### 4.3.3 Evaluating Borrowers

The employees were asked to indicate the extent to which their institutions evaluated borrowers when giving out loans.

**Table 4.3 Evaluating Borrowers**

Evaluating Borrowers	Percentage Score						Average score	
	5	4	3	2	1	N	Mean	s.d
Obtain credit history report of the borrower from other financial institutions	12	6	10	2	0	30	4.55	0.78
Ability of the borrower to generate sufficient funds to repay you and other creditors	9	15	4	1	1	30	3.84	1.47
Borrower's collateral base; Does the firm offer secured loans by asking for collateral	7	16	5	2	0	30	3.94	0.94
Borrower's integrity and confidence in his willingness to repay	6	14	8	2	0	30	3.90	1.04
Reference with other business partners of the borrower	5	10	7	6	2	30	3.65	0.95
Borrowers financial net worth	4	6	12	5	3	30	3.41	0.87

Key 5: To a very large extent 4.Large extent 3.moderate extent 2.Limited extent 1. No extent T .Total, S.d - standard deviation

From the above findings in table 4.3 above, when asked about the extent of obtaining credit history from customers the results showed (M=4.55, S.D=0.78), in response to the

ability of borrower to generate sufficient funds, the results were as follows: (M=3.84,S.D=1.47), In respect to collateral, the results showed (M=3.94.S.D=0.94).

When asked about their integrity and confidence in their willingness to repay the results showed the following (M=3.90, S.D=1.04).About the reference with other business partners of the borrower it was revealed (M=3.65, S.D=0.95).When asked about their borrowers financial net worth, the results showed (M=3.41, S.D=0.87).The above findings are an indication that most deposit taking microfinance institutions evaluated their borrowers before giving out credit.

#### 4.3.4 Terms and Conditions Considered Before Issuing of Loans

The respondents were asked to comment on the terms and conditions considered by their institutions before giving out loans in order to establish whether the organizations implemented the set out terms and conditions.

**Table 4.4 Terms and Conditions**

Terms and Conditions	Percentage Score						Average score	
	10	18	3	2	1	N	Mean	s.d
The terms and conditions are clear and in writing	10	18	3	2	1	N	Mean	s.d
The borrower signs for the terms and conditions before each issue of loan is released	12	8	6	3	1	30	4.55	0.77
Interest rates and calculations are clear to the borrower before any issue	14	6	7	2	1	30	4.54	0.82
Repayments dates and deadlines are clear and known to the borrower	16	9	5	0	0	30	3.86	1.48
Repayments amounts are clear, segregated as principal, interest and share amounts	18	10	2	0	0	30	3.93	1.03

Key 5: To a very large extent 4.Large extent 3.moderate extent 2.Limited extent 1. No

extent T .Total, S.d - standard deviation.

From the findings in the table 4.4, the results were as follows: the terms and conditions (M=4.55, S.D=0.77), about signing on the terms and conditions (M=4.54, S.D=0.82).With regard to interest rates and calculations the results were as follows (M=3.86, S.D=1.48) while the repayment dates and deadlines (M=3.93, S.D=1.04).

When asked whether the repayment amounts were clear, the results confirmed that this practice was implemented to a great extent (M=3.90, SD=1.03).This is a clear indicator that most deposits taking microfinance institutions followed all the terms and conditions stipulated by their institutions to a very great extent.

#### 4.3.5 Debt Collection Effort

The respondents were asked to provide information in relation to the extent to which their institutions implemented debt collection efforts practices to ensure that debt was collected on good time. This was intended to examine whether the debt collection practices implemented by DTM's was sufficient in minimizing outstanding debt.

**Table 4.5 Debt Collection Effort**

Debt Collection Effort	Percentage Score						Average score	
	4	7	5	14	0	T	Mean	s.d
Consistent and continuous review of active borrowers files	4	7	5	14	0	T		
Strict debts collection deadlines clear to the borrower	7	5	15	3	0	30	2.55	0.78
Effective penalties on default and late repayment well know to the borrower	10	6	11	3	0	30	2.59	1.48
How often does the firm charge penalties in case of delayed payments	15	4	11	0	0	30	2.65	0.87
Prompt notification to the lonee in event of late payments or default	7	10	12	1	0	30	3.45	0.55
Prompt notification of guarantors if any where the lo nee delays payments or default	5	10	3	12		30	2.75	0.64

Key 5: To a very large extent 4.Large extent 3.moderate extent 2.Limited extent 1. No extent T .Total, S.d - standard deviation

From the above findings in table 4.4, the results were found as follows: (M=2.55, S.D=0.78) for strict debt collection deadlines, (M=2.59, S.D=1.48) for effective penalties on default and late repayment by the borrower. (M=2.65,S.D=0.87) for the frequency the firm charges penalties in case of delayed payments.

With regard to Prompt notification to the lonee in the event of late payments of defaults the results were as follows (M=3.45, S.D=0.55).For prompt notification or guarantors if any (M=2.75,S.D=0.64).This is a clear indication that most deposit taking institutions implemented debt collection efforts to a moderate extent.

#### **4.4 Regression Analysis**

Regression is a complex statistical technique that tries to predict the value of an outcome or dependent variable. In order to establish the relationship between independent variables and dependent variable, a multiple regression was conducted. The analysis applied the statistical package for social sciences (SPSS) to compute the measurements of the multiple regression for the study. The findings were as shown in the table 4.6 below.

##### **4.4.1 Model Summary**

Model summary provides information about the regression line's ability to account for the total variation in the dependent variable. This section shows you the correlation between the two variables (R).The findings are presented in the table 4.6 below:

**Table 4.6: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.830(a)	.689	.757	.241

Source: Research Findings

In order to explain the percentage of variation in the dependent variable (loan performance of DTMFi's) that is explained by the independent variables. Coefficient of determination was obtained from the model summary in table 4.6 explains the extent to which changes in the dependent variable is explained by the change in the independent variable. This variation is explained by  $R=.830$  which shows that there is strong relationship between the two variables. The coefficient of determination  $R^2=68.9\%$ , it enables us to determine the explained variation in loan performance from the two predictor variables namely: the size and profitability on a range from 0-100. This variation is accounted for through the combined effects of the predictor variables.

#### **4.4.2 Analysis of Variance**

Analysis of variance shows the relationship between the two variables. This section shows you the p-value ("sig" for "significance") of the predictor's effect on the criterion variable. P-values less than .05 are generally considered "statistically significant. In this case the researcher will observe the relationship between credit practices and loan performance.

**Table 4.7: ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.017	2	1.009	24.012	.000(a)
	Residual	1.130	27	0.042		
	Total	7.677	29			

Source: Research Findings

From the ANOVAs results, the probability value of 0.000(a) was obtained through implying that the regression model was significant in predicting the relationship between credit management practices and loan performance. The independent variables used to explain this relationship .The F-ratio is used to test whether or not R<sup>2</sup> could have occurred by chance alone. In short, the F-ratio found in the ANOVA table measures the probability of chance departure from a straight line. Credit management practices and loan performance as the dependent variable explained that this relationship was more than  $\alpha=0.05$ . By use of the F-table, the F (5%, 2, 27) tabulated was which was less than F= 24.012 which as well indicated that the model was significant.

#### **4.4.3 Test for Coefficients**

This section shows the beta coefficients for the actual regression equation. The focus is mainly the “unstandardized coefficients,” because this section includes a y-intercept term (beta zero) as well as a slope term (beta one). The “standardized coefficients” are based on a re-scaling of the variables so that the y-intercept is equal to zero

**Table 4.8 Test for Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	0.234	1.063		5.710	.000
	Size of the DTM	-1.219	.335		-3.010	.006
	Profitability	.224	.0103		.725	.002

a. Dependent Variable: Loan Performance

Source: Research Findings

The following regression model was obtained:

$$LP=0.234-1.219X_1+.224X_2$$

From the above findings in the table 4.3 above, the predictors that are significant contributors to the 68.9% of explained variance in loan performance that is (R<sup>2</sup>=.689).The predictor that is significant is profitability since an increase in profitability by 0.224 results leads to a corresponding increase in loan performance of deposit taking microfinance institutions. Conversely, an increase in gross portfolio by 1.219 results into a corresponding decrease in loans performance.

The analysis was undertaken at 5% significance level. The criteria for comparing whether the predictor variables were significant in the model was through comparing the corresponding probability value obtained and  $\alpha=0.05$ . If the probability value was less than  $\alpha$ , then the predictor variable was significant but from the above analysis, profitability was significant in the model as its corresponding p-value=0.02.However, the size of the size measured using gross loan portfolio was insignificant p-value=0.06.

## 4.5 Summary and Interpretation of Findings

According to the findings, it was revealed that predictors were significant contributors to the 68.9% of explained variance in loan performance that is ( $R^2=0.689$ ). The predictor that was significant is profitability since an increase in profitability by 0.224 results leads to a corresponding increase in loan performance of deposit taking microfinance institutions. Conversely, an increase in gross portfolio by 1.219 results into a corresponding decrease in loans performance. The analysis was undertaken at 5% significance level. If the probability value was less than  $\alpha$ , then the predictor variable was significant but from the above analysis, profitability was significant in the model as its corresponding p-value=0.02. However, the size of the size measured using gross loan portfolio was insignificant p-value=0.06. These findings are supported by a number of studies as provided below: Prakash & Poudel (2002) in the United States, a survey of 50 financial institutions was conducted, primary and secondary data was used, and data analysis was done using a regression model. The results of this study found credit risk management practices is the best practice in financial institutions and above 90% of the private financial institutions in country have adopted the best practices. Inadequate credit policies are still the main source of serious problem in the financial industry as result; effective credit risk management had gained an increased focus in recent years. The study concluded on the need to manage credit risk in the entire portfolio as well as the risk in individual credits transactions. A study was conducted in Uganda by Omara (2007) to investigate on the credit Assessment process and repayment of bank loans in Kampala, a case study of Barclays was done. A sample of 73 respondents were interviewed and the results of the study showed that there was delay by Barclays bank in scoring loans, the

bank charged commitment fee to both new and existing customers. Data was analysed using frequencies and tables it was found out that Barclays bank required collateral for loans above UGX 20 Million. There is also a review of empirical studies for instance, Djankov, McLiesh, & Shleifer, (2007), carried out a study on the effects of credit management on loan repayment in private credit in 129 countries in Eastern Europe, financial managers of the finance institutions were interviewed and data analysis was carried out using mean and standard deviation. The findings of the study concluded that credit management practices were significant in facilitating loan repayment.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

The main objective of this study was to establish the effect of credit risks management practices and loan performance of Deposit Taking Microfinance institutions in Kenya. This chapter presents a summary of the findings in 5.2 conclusions in 5.3 recommendations, 5.4 limitations of the study and suggestions for further research.

#### **5.2 Summary of Findings**

The study revealed that all the deposit taking microfinance institutions that participated in the study have a loan risk management policy in their operation. This implies that all Deposit taking microfinance institutions observed clear guidelines on how to approach and manage the loan risks that they may face from time to time. The study further revealed that most deposit taking microfinance institutions involved their stakeholders in credit policy formulation and implementation.

The stakeholders who are involved in credit policy formulation to a great extent are the members of these organizations and the regulator while the employees and the directors are involved in the credit formulation process only to a moderate extent.

The study confirmed that the existing credit policy of the organization forms the basis for developing a new credit policy that is used by the organization. The other factors that are considered as revealed from the findings include trends of creditors and overhead costs.

The general state of the economy was found to be of moderate significance when developing a credit policy.

### **5.3 Conclusions**

The findings of the study conclude that it is important for deposit taking microfinance institutions in Kenya to maintain an appropriate balance between provision of credit and collections as a key factor, critical to the survival and ultimate success of DTM's in Kenya. The findings also revealed that although most deposit taking microfinance institutions implemented credit management practices, the gross loan portfolio increase steadily over the years. Also, it was observed that the amount of non-performing loans increased progressively. This rate of default could be as a result of poor investment decisions by the borrowers due to lack of professional advice by deposit taking microfinance institutions on how to choose and select viable investments that can yield profitability.

The study further concluded that some microfinance institutions were a bit lenient while giving out credit facilities to their customers. Some of the credit officer had too much trust on their customers and thus failed to observe all the credit management practices while giving out credit. This however, led to an increase in the amount of nonperforming loans leading to poor loan repayment and thus poor financial performance.

## **5.4 Policy Recommendation**

In line with the findings and conclusions of the study the following were recommended:

On the effect of policy and decision making of management of Deposit Taking Microfinance Institutions in Kenya, it is advisable that sound credit risk management practices are adopted and implemented especially through credit risks management information systems.

The study further recommend that deposit taking microfinance institution should actively participate in the legislation of credit risk management practices by the government through the association of microfinance institutions in Kenya in the implementation of the credit sharing information Act.

The Association of Microfinance Institutions should consider provisions for specific credit risk management practices to be adopted and implemented uniformly by all microfinance institutions to reduce the amount of nonperforming loans of microfinance Institutions in Kenya. Further the two should establish policies and guidelines of determining NPLs and loans write offs to avert excessive loan losses by commercial banks in Kenya.

It is clear that most deposit taking microfinance institutions had high amount of outstanding debts, this study therefore recommends that deposit taking microfinance institutions should implement better debt recovery strategies to reduce costs, increase efficiency and maximize their debt recovery efforts through putting in place powerful

debt management and recovery product that can help in developing more focused collection strategies by profitably segmenting, prioritizing and locating debt accounts.

Although credit management practices were implemented by most deposit taking microfinance institutions however, the amount of debt was a major problem. The study further recommends that DTM's should put in place collection prioritization strategies through developing a more focused collection strategy by determining which accounts have the highest payment potential. Implementation of advanced scoring and segmentation tools will be helpful in providing

It is also clear that the most deposit taking microfinance institutions use the existing credit policy as the primary document for formulating a new credit policy. It will also be important if deposit taking microfinance institutions consider using credit policy documents from other successful similar organizations as a benchmark for the best credit management practices.

## **5.5 Limitations of the Study**

The limitation of this study was time constraints, limited financial resources and geographic distance between Deposit Taking Microfinance Institutions in Kenya. Time and geographical constraints were overcome by the utilization of professionally trained research assistants without compromising the validity and reliability of the research findings, while the limited financial resources available were spent on research activities that could not be undertaken solely by the researcher. In addition, the researcher did not overlook the major limitation of descriptive research design which is that the design

makes it difficult to explain phenomena that occur over time, hence the study's findings are only applicable to the study's time frame.

It was difficult to access secondary data due to strict confidentiality exhibited by most deposit taking microfinance institutions. The annual financial statements are also prepared under the fundamental assumptions and concepts which are subjective and therefore not be uniformly applied especially in terms of provisions and estimates.

This study was carried out within a limited time frame and resources which constrained the scope and depth of the study. This necessitated the adoption of a sample design hence these findings cannot be used to make generalizations on the effects of the level of diversification on corporate liquidity of Deposit Taking Microfinance Institutions.

The study utilized secondary data, which had already been obtained and in the public domain. Unlike the primary data which is first hand information, despite that the secondary data was tested for precision and remained relevant since it reflected current macroeconomic conditions and financial soundness in the republic of Kenya.

Lastly, most of the financial statements are reaffirmed in the preceding years meaning that material misstatements of firms' performance can create a window of opportunity for prior year's adjustments and this may not be brought to the attention of the public. This means the pattern depicted may affect the relationship established.

## **5.6 Suggested Areas for Further Research**

Due to the turbulent nature of the business environment for example technology, risks and uncertainties, it will be appropriate to replicate this study after duration of ten years and establish the relationship between credit management practices and loan performance as at that time then determine whether there are areas of commonalities or unique factors.

The fact that this study limited itself to deposit taking microfinance institutions in Kenya, I suggest that comparative study should be conducted in commercial banks or SACCOS in order to assess whether there are any similarities or differences from the results of this study. These results will be useful in to the DTM's in benchmarking themselves with other organizations in the finance sector.

## REFERENCES

- Aron, M. (2011). *CBK licenses the sixth deposit-taking micro-finance institution*. Nairobi: The Standard Group Limited.
- Ahlberg, H. & Andersson, L. (2012). *How do banks manage the credit assessment to small businesses and what is the effect of Basel III. An implementation of smaller and larger banks in Sweden*, Jonkoping International Business School
- Alici & urt. (1995). Neural Networks in Corporate Failure Prediction: The UK Experience, *Working Paper*, University of Exeter
- Altman & Edward, I. (1992). Revisiting the High Yield Bond Market, *Working Paper Series*, New York University Salomon Center
- Anderson D.R., Williams T.A., and Sweeney D.J., (2009). *Essentials of Contemporary Business Statistics (International Edition)*. Mason, South-Western Cengage Learning
- Asarnow, E. (1996). Best Practices in Loan Portfolio Management, *Journal of Lending and Credit Risk Management*, 14-24
- Barclay, Michael, J. & Clifford, S. (1995). The Priority Structure of Corporate Liabilities, *Journal of Finance*,:3,:899-917.
- Bernstein & Peter, L. (1996). *Against the Gods: The Remarkable Story of Risk*. New York: John Wiley & Sons, Inc.
- Binks, M. R., Ennew, C. T., & Reed, G. V. (1992). Information Asymmetries and the Provision of Finance to Small Firms. *International Small Business Journal*, 11, 35-47, doi: 10.1177/026624269201100103
- Breth, S.A., (1999). *Microfinance in Africa, Mexico City*: Sasakawa Africa Association

- Brown, M. Jappelli, T. & Pagano, M. (2007). Information Sharing and Credit: Firm-Level Evidence from Transition Countries, *CEPR Discussion Paper No. 6313*.
- Bruns, V. (2001). *A dual perspective on the credit process between banks and growing privately held firms JIBS Research Reports*, Printed by Parajett AB
- Cantor, R.& Frank, P.(1996).Determinants and Impact of Sovereign Credit Ratings *Economic Policy Review*,2,(2), Federal Reserve Bank of New York, 37-53
- Cantor, R.& Frank, P.(1996).Determinants and Impact of Sovereign Credit Ratings *Economic Policy Review*,2,(2), Federal Reserve Bank of New York, 37-53
- CBK (2013).Central Bank of Kenya: <https://www.centralbank.go.ke/>
- CBK.(2013).Kenya:<https://www.centralbank.go.ke/index.php/microfinance-institutions/14-bank-supervision/83-list-of-licensed-deposit-taking>
- Chege, W.(2010). The relationship between credit risk management practices and financial performance among microfinance institutions in Kenya, *Unpublished MBA Project*, University of Nairobi
- Chege, W.(2010). The relationship between credit risk management practices and financial performance among microfinance institutions in Kenya, *Unpublished MBA Project*, University of Nairobi
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Los Angeles: Sage.
- Day, J & Taylor, P (1996).How lazy drafting can lead to losses, *The Chartered Banker*,.2,7
- Ddumba, K. & Sentamu, T. (1993), The Role of Barclays bank in deposit mobilization in Uganda, *A PHD dissertation*, Makerere University, Kampala, Uganda
- Djankov, S. McLiesh, C. & Shleifer, A. (2007). Private Credit in 129 Countries, *Journal of Financial Economics*, 84, 299-329.

- Eurenius, K. (2011). Hoga Sakerheter Plagar Smabolag. Retrieved February 7, 2012, from [www.svd.se/naringsliv/hoga-sakerheter-plagar-smabolag\\_6092923.svd](http://www.svd.se/naringsliv/hoga-sakerheter-plagar-smabolag_6092923.svd)
- Fiordelisi, F., Marques-Ibanez, D. and Molyneux, P. (2010), Efficiency and risk in European banking in Working Paper Series, *European Central Bank*, June. 37
- Fischbacher, U. (2007): Z-Tree: Zurich Toolbox for Readymade Economic Experiments, *Experimental Economics*, 10, 171-178.
- Gardner, C. (1996). *Corporate Credit Risk*, Fairplace Financial publishing place, London.
- Gladys, K. (2012). The effect of credit risk management practices on the level of non-performing loans. A case study of commercial banks lending to SMES in Kenya, *Unpublished MBA Project*, University of Nairobi
- Glen, LD (1996) How Firms in Developing Countries Manage risk, the World Bank & *International Finance Corporation*, Discussion paper 17, Washington D.C
- Hanson & Rocha, (1986). High interest rates, Spreads and the cost of intermediation, *World Bank, industry and Finance series*, 18
- Harrison, D (1996); Art or Science. The Importance of Understanding Credit Risk, the *Chartered Banker*, 1 :( 1)
- Hunt, R. (2005): A Century of Consumer Credit Reporting in America, *Federal Reserve Bank of Philadelphia Working Paper* :05-13.
- Jappelli, T. & Pagano, M. (2002): Information Sharing, Lending and Defaults: Cross-Country Evidence, *Journal of Banking & Finance*, 26, 2017-2045.
- Kagwa, P (2003); Financial Institutions loan portfolio performance in Uganda. A comparative study of Barclays bank and microfinance Institutions. An MBA research dissertation to Makerere University, Kampala, Uganda

- Kallberg, G., & Udell, G. (2003). The Value of Private Sector Credit Information, *Journal of Banking & Finance*, 27, 449-469
- Kwizera, A. (2001). Credit Policy and Loan recovery in Microfinance Institutions: A case of B.blue Microfinance Institution Kisoro, *Published Thesis*, Makerere University, Kampala Uganda
- Matovu, J & Okumu, L. (1996), Credit Accessibility to the Rural Poor in Uganda; *Economic Policy Research Bulletin*, 2 :(1)1-22
- Mugenda, O. and Mugenda, A. (2003). Research methods: *Quantitative and qualitative approaches*. 2nd. Rev. Ed. Nairobi: Act press.
- Mutangili, M. (2011). The relationship between credit risk management practices and the level of nonperforming loans for commercial banks in Kenya, *Unpublished MBA Project*, University of Nairobi
- Mwithi, S. (2012). Relationship between credit risk management practices and the level of non-performing loans of microfinance institutions in Nyeri County, *Unpublished MBA Project*, University of Nairobi
- Norell, D., (2001). How to Reduce Arrears In Microfinance Institutions, *Journal of Microfinance*, (3):1
- Nsereko, J. (1995); Problems of Non-Performing advances III the Uganda Banker, 3(1):26-35
- Okorie A., Andrew C. I. (1992), Agricultural Loan Recovery Strategies in a Developing Economy: A Case Study of Imo State, Nigeria, *African Review of Money, Finance and Banking*, 2
- Omara, M. (2007). credit assessment process and repayment of bank loans in Barclays bank Uganda ltd, *Published MBA Project*, Makerere University

- Padilla, J. & M. Pagano (2000). Sharing default information as a borrower discipline device, *European Economic Review*, 44 (10):1951-1980.
- Pagano, M. & Jappelli, T. (1993). Information Sharing in Credit Markets, *The Journal of Finance*, 43(5), 1693-1718
- Powell, N. Mylenko, M. Miller & Majnoni, G. (2004). Improving Credit Information, Bank Regulation and Supervision: On the Role and Design of Public Credit Registries, *World Bank Policy Research Working Paper*:3443
- Prakash, P. & Poudel, S. (2012). The impact of credit risk management on financial performance of commercial banks in Nepal, *Published PhD Thesis*, University of New England Australia Business School
- Rajan R. (1995). The Effect of Credit Market Competition on Lending Relationships, *The Quarterly Journal of Economics*
- Rajedom, R. (2010). The lending policy and customer defection in finance organization *Journal of finance and marketing*, 1(15) 11.
- Rao, P.K. (2001). *Sustainable Development: Economics and policy*. Malden, Massachusetts, USA: Blackwell Publishers Inc.
- Riach, M.(2010), Credit risk management and policy implications for microfinance Institutions, *Research Pape*:1-4
- Robinson, M. (2001). *The Microfinance Revolution; Sustainable Finance for the Poor*. Washington: World Bank.
- San Jose & Riestra, A. (2002). Credit Bureaus in Today's Credit Markets, *ECRI Research Report*: 4/2002
- Selten, R. (1975). A Reexamination of the Perfectness Concept for Equilibrium Points in Extensive Games, *International Journal of Game Theory*, 4, 25-55
- Simiyu, S. (2008). A Survey Of Techniques Of Credit Risk Management In Micro-Finance Institutions In Kenya, *Unpublished MBA Project*, University of Nairobi

- Stiglitz J.E., Weiss A. (1981) Credit Rationing in Markets with Imperfect Information, *The American Economic Review*, 71 :( 3)
- The Swedish Financial Supervisory Authority.(2012).AboutFinansinspektionen.Retrieved March 14, 2014, from [www.fi.se/Om-FI](http://www.fi.se/Om-FI)
- Vercammen, A. (1995).Credit Bureau Policy and Sustainable Reputation effects in Credit Markets, *Economica*, 62, 461-478
- Wakuloba R.A.B (2005).Causes of Default in Government Micro-Credit Programme: A Case Study of Uasin Gishu District Trade Development Joint Loan Board, Nairobi
- Walsh, L. (2010).An assessment of the credit management process of credit unions: An examination of three Chapters, *Published Masters in Business Studies*, Waterford Institute of Technology, Waterford

## APPENDICES

### Appendix I: Questionnaire

Please respond to the following questions. The responses will be used for academic purposes only, and will be treated with utmost confidence.

#### SECTION A: BACKGROUND INFORMATION

1. Name of your institution (optional)

.....

2. What category does you MFI fall?

Bank ( )

Deposit taking ( )

Credit only ( )

3. How many years have the firm operated in the business?

Less than 1 year ( )

1– 2 years ( )

3 – 5 years ( )

Over 5 years ( )

#### CREDIT MANAGEMENT PRACTICES

##### SECTION A: CREDIT STANDARDS

1. Does your institution have a credit policy?

Yes ( )

No ( )

2. To what extent is the policy implemented?

To a very great extent ( )

To great extent ( )

To a moderate extent ( )

To a less extent ( )

To no extent ( )

3. To what extent does your institution consider the following in evaluating borrowers?  
 Use a scale of 1-5 where 1= No extent, 2= Less extent 3=Moderate extent, 4= Great extent, 5=Very great extent.

	1	2	3	4	5
Obtain credit history report of the borrower from other financial institutions					
Ability of the borrower to generate sufficient funds to repay you and other creditors					
Borrower's collateral base; Does the firm offer secured loans – by asking for collateral					
Borrower's integrity and confidence in his willingness to repay					
Reference with other business partners of the borrower					
Borrowers financial net worth					

4. What challenges are you faced with in establishing and implementing credit standards in you MFI?

.....  
 .....

**SECTION B: CREDIT TERMS AND CONDITIONS**

5. Does the institution have laid down terms and conditions for loans issued?

Yes ( )

No ( )

6. To what extent are the following terms and conditions considered before issuing of any loans? Use a scale of 1-5 where 1= To no extent, 2= To a less extent, 3= To a moderate extent,4= To great extent, 5=To a very great extent.

	1	2	3	4	5
The terms and conditions are clear and in writing					
The borrower signs for the terms and conditions before each issue of loan is released					
Interest rates and calculations are clear to the borrower before any issue					
Repayments dates and deadlines are clear and known to the borrower					
Repayments amounts are clear, segregated as principal, interest and share amounts					

**SECTION D: CREDIT COLLECTION EFFORTS**

7. Does your institution have a debt collect department?

Yes ( )

No ( )

8. To what extent does your institution apply the following that relate to debt collection effort? Use a scale of 1-5 where 1= To no extent, 2= To a less extent, 3= To a moderate extent,4= To great extent, 5=To a very great extent.

	1	2	3	4	5
Consistent and continuous review of active borrowers files					
Strict debts collection deadlines clear to the borrower					
Effective penalties on default and late repayment well know to the borrower					
How often does the firm charge penalties in case of delayed payments					
Auctioning of defaulting clients properties					
How often does the firm use legal means in loan collection					
Prompt notification to the lonee in event of late payments or default					
Prompt notification of grantors if any where the lo nee delays payments or default					

## **FINANCIAL STETAMENTS INFORMATION**

1. Kindly fill the table below with details of the values of the Gross loan portfolio held by your unit by close of the years highlighted.

Year	2009	2010	2011	2012	2013
Gross Loan Portfolio					
Active Borrowers					

2. Kindly fill in the table below with the details of the values of the profitability held by your firm.

Year	2009	2010	2011	2012	2013
Equity					
Total Assets					
Net Profit					

**THANK YOU FOR YOUR PARTICIPATION**

## APPENDIX I: LIST OF DTM's

	LIST OF DEPOSIT TAKING MICROFINANCE IN KENYA
1	Faulu Kenya DTM Limited
2	Kenya Women Finance Trust DTM Limited
3	SMEP Deposit Taking Microfinance Limited
4	Remu DTM Limited
5	Rafiki Deposit Taking Microfinance
6	Century Deposit Taking Microfinance Limited
7	Uwezo Deposit Taking Microfinance Limited
8	SUMAC DTM Limited
9	U&I Deposit Taking Microfinance Limited

Source :( CBK, 2013)