THE EFFECT OF CREDIT POLICY ON THE FINANCIAL PERFORMANCE OF DEPOSIT TAKING MICROFINANCE INSTITUTIONS IN KENYA

BY
KIMONDO NICOLETTE NYAWERA

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OCTOBER, 2013
DECLARATION

I hereby certify this project is my original work and has not been presented for examination in any institution of higher learning.

Signature: ______________________        Date: ______________________

Kimondo Nicolette Nyawera

D63/75859/2012

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

Signature: ______________________        Date: ______________________

Mr. Herick Ondigo

Lecturer,

School of Business

University of Nairobi
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DEDICATION

I dedicate this work to the Lord Almighty, my parents (Mr. John Kimondo and Mrs. Bessie Ogada), sisters, brothers and my close friends for their support, encouragement and patience during the entire period of my study and also for their prayers towards the successful completion of this course.

I also dedicate this work to hardworking; goal oriented and determined scholars who are willing and wants to change financial performance of organizations.
ABSTRACT

This study was carried out with the purpose of establishing the effects of credit policies on the financial performance of Micro finance institutions. According to Hartarska (2005) microfinance is the provision of small scale financial services to low income or unbanked people while a credit policy is an institutional method for analyzing credit requests and its decision criteria for accepting or rejecting applications (Girm’ 1996). MFIs in Kenya are classified and registered into three different tiers: deposit-taking institutions such as banks, credit only non deposit taking institutions, and informal organizations supervised by an external agency other than the government. This study concentrated on the deposit taking micro finance organizations. The

Objective of the study was to find out the effects of credit policy on financial performance of deposit taking micro finance organizations. A lot of DTM’s business evolves around the credit part and this study is to help us understand the role played by the credit policy on financial performance. The researcher used a census approach for the six deposits taking micro finance organizations in Kenya to get the data required. The main way of getting information was through secondary data from the central bank of Kenya and the individual institutions. The findings indicated a positive significant relationship (r = 0.199) implying that credit policies affects the financial performance of deposit taking micro finance organization with a minimal effect since there other more factors that affect financial performance with a greater effect. The results of the regression analysis indicate that the dependent variables are both individually and jointly significant and have an effect on financial performance. From the values of the coefficients we discern that the independent variables are correlated to the dependent variable. The results indicated that credit standard policy significantly affects credit financial performance (β=47.9, p-value=0.48), credit terms by (β=-86.5, p-value=0.123) and collection effort by (β=-129.5, p-value=0.383). In conclusion, the study established that the three independent variables significantly affect financial performance. From the study, it is recommended that deposit taking micro finance organizations should not concentrate so much on the credit policy but also other factors since even though credit policies affect DTM’s financial performance.
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LIST OF ABBREVIATIONS

AMFI - Association of Microfinance Institutions
CBK- Central Bank of Kenya
CVI-Content Validity Index
DTM-Deposit Taking Micro Finance Institution
FSA -Financial Services Associations
MFI – Micro Finance Institutions
NRB-Nepal Rastra Bank
VAR- Value at Risk
CHAPTER ONE

INTRODUCTION

1.1 Background of Study.

Microfinance institutions belong to a wider group of financial institutions regarded as semi-formal financial institutions. These are institutions which are registered as non-government organizations performing financial functions of lending and taking deposits (Microfinance Act 2003).

A credit policy is the blue print used by microfinance or rather a lending institution in making its decision to extend credit to a customer. A credit policy helps to avoid extending credit to customers who are unable to pay their accounts. Credit policy for some larger businesses can be quite formal; involving specific documented guide lines, credit checks and customer credit applications, the policy for small businesses tends to be quite informal and lacks the items found in the formal credit policy of larger businesses. Many small business owners rely on their business instinct as their credit policy (Blair, 2002). Credit policy has direct effects on the cash flow of any business. Hence, a credit policy that is too strict will turn away potential customers, reduce sales and finally lead to a decrease in the amount of cash inflows to the business. On the other hand, a credit policy that is too liberal will attract slow paying (even non-paying) customers, increase in the business average collection period for accounts receivables, and eventually lead to cash inflow problems. A good credit policy should help management to attract and retain customers, without having negative impact on cash flow.
The importance of a credit policy is to maximize the value of a firm. (Puxty and Dodds, 1991). An optimum credit policy is achieved through proper adjustment of credit standards, credit terms and collection efforts. These are the controllable decision variables that should be considered in the extension of credit to optimize investment in accounts receivable. Credit policy is a guide to successful credit administration and benefits must be weighed against the cost to ensure the benefits are worth the effort of administering the credit. Benefits like increase in market share, retention of existing customers, acquisition of new ones, must be weighed against costs like selling and production costs, administration costs incurred during assessment, supervision and collection of credit and bad debts losses (Pandey, 2001).

1.1.1 Credit Policy

A credit policy is an institutional method for analyzing credit requests and its decision criteria for accepting or rejecting applications (Girm` 1996). A credit policy is important in the management of accounts receivables. A firm has time flexibility of shaping credit policy within the confines of its practices. It is therefore a means of reducing high default risk implying that the firm should be discretionary in granting loans (Pandey, 1995).

Policies save time by ensuring that the same issue is not discussed over and over again each time a decision is to be made. This ensures that decisions are consistent and fair and that people in the same circumstance get treated in the same manner (Khandkar and Khan, 1998). According to McNaughton (1996), credit policy provides a frame work for the entire management practices. Most financial institutions have written credit policies which are the cornerstone of sound credit management, they set objectives, standards and parameters to guide micro finance officers who
grant loans and manage loan portfolio. The main importance of policies is to ensure operation’s consistency and adherence to uniform sound practices. Policies should always be the same for all and is the general rule designed to guide each decision, simplifying and listening to each decision making process. A good credit policy involves effective initiation analysis, credit monitoring and evaluation.

Credit policies are set of objectives, standards and parameters to guide bank officers who grant loans and manage the loan portfolio. Thus, they are procedures, guidelines and rules designed to minimize costs associated with credit while maximizing the benefit from it (Ahimbishwe, 2002). The main objective of credit policy is to have an optimal investment in debtors that minimizes costs while maximizing benefits hence ensuring profitability and sustainability of microfinance institutions as commercial institutions. The credit policy of an organization may be stringent or lenient depending on the manager’s regulation of variables. There are three main variables namely credit terms, credit standards and credit procedures (Hulmes, 1992). Managers use these variables to evaluate clients credit worthiness, repayment period and interest on loan, collection methods and procedures to take in case of loan default. A stringent credit policy gives credit to customers on a highly selective basis. Only customers who have proven creditworthiness and strong financial base are given loans, the main target of a stringent credit policy is to minimize the cost of collection, bad debts and unnecessary legal costs (Pandey, 2001)
1.1.2 Financial Performance

Financial performance is company’s ability to generate new resources, from day-to-day operations, over a given period of time; performance is gauged by net income and cash from operations. A portfolio is a collection of investments held by an institution or a private individual (Apps, 1996). Financial performance can be measured using the following repayment rate, portfolio quality ratios, arrears ratio rate, portfolio rate and delinquent borrowers. Repayment rate measures the amount of payment received with respect to the amount due. Portfolio quality ratios; involves the arrears rate portfolio risk and the ratio delinquent borrowers. The arrears ratio rate shows how much of the loans have become due and has not been received. Portfolio rate refers to the outstanding balance of all loans that have an amount due. Delinquent borrowers determine the number of borrowers who are delinquent relative to the volume of delinquent loans.

Operating and financial ratios have long been used as tools for determining the condition and the performance of a firm. Modern early warning models for financial institutions gained popularity when Sinkey (1975) utilized discriminant analysis for identifying and distinguishing problem banks from sound banks and Altman (1977) examined the savings and loan industry. The CAMELS model (Gasbarro et al., 2002), which is a financial analysis tool, provides a framework for measuring financial performance of banks. In Kenya, the Central Bank also applies the CAMEL rating system to assess the soundness of financial institutions which is an acronym for Capital Adequacy, Asset Quality, Management Quality, Earnings and Liquidity (CBK, 2010).
1.1.3 Effects of Credit Policy on Financial Performance

A credit policy is to maximize the value of a firm. (Puxty and Dodds, 1991). An optimum credit policy is achieved through proper adjustment of credit standards, credit terms and collection efforts. These are the controllable decision variables that should be considered in the extension of credit to optimize investment in accounts receivable. Credit policy is a guide to successful credit administration and benefits must be weighed against the cost to ensure the benefits are worth the effort of administering the credit. Benefits like increase in market share, retention of existing customers, acquisition of new ones, must be weighed against costs like selling and production costs, administration costs incurred during assessment, supervision and collection of credit and bad debts losses (Pandey, 2001). According to (Gasbarro et al., 2002) a financial institutions credit policy affects the financial performance of that institution. The credit policy of an institution affects the capital adequacy, asset quality, management quality, earnings and liquidity of a financial institution either positively or negatively depending on how well the policy are made and implemented. Among other factors, weakness in credit risk management has all along been cited as the main cause for lending institutions financial performance. (Richard et al., 2008 and Chijoriga, 1997).

1.1.4 MFI’s in Kenya

The definition of a microfinance institutions proposed by different scholars and organizations are seemingly different from one another. However, the essence of the definitions is usually the same. According to Hartarska (2005) microfinance is the provision of small scale financial services to low income or unbanked people. It is about provision of “a broad range of financial
services such as deposits, loans, payment services, money transfers and insurance to the poor and low income households and their farm or non-farm micro-enterprises” (Mwenda and Muuka, 2004, p.145). The Asian Development Bank (ADB) on the other hand defines microfinance as the provision of a broad range of financial services such as deposits, loans, payment services, money transfers, and insurance to poor and low-income households and their micro-enterprises (ADB, 2000). Wood (1998) defined micro finance institutions as institutions that provide financial services to low income earners. These financial services may include savings, loans, insurance transfer and payment services to enhance growth of small scale enterprises.

In practice, apart from financial intermediation, some microfinance institutions provide social intermediation services such as group formation, development of self-confidence, and training in financial literacy and management capabilities among members of a group intended to benefit low-income women and men (Ledgerwood, 1999). This means that the skills and confidence of low-income people have to be developed in addition to giving them access to credit provision.

Therefore, the microfinance approach is not a minimalist approach offering only financial intermediation but an integrated approach offering both financial intermediation and the other services mentioned above (Ledgerwood, 1999). However, studies (e.g. Ahlin and Jiang, 2008) suggest that these benefits of microfinance can only be realized as long as the poor continue to be clients of microfinance institutions. Thus, it is suggested that microfinance institutions should
consider further enabling the average borrower to graduate from the continual dependence on them to enhance long run development.

Micro finance developed from banking systems dating back to the early 1700s, but it wasn’t until the 1970s that it began to branch into the three forms of micro finance institutions used today. According to the Microfinance Act (2006), MFIs in Kenya are classified and registered into three different tiers: deposit-taking institutions such as banks, credit only non deposit taking institutions, and informal organizations supervised by an external agency other than the government. The principal object of the Microfinance Act is to regulate the establishment, business and operations of microfinance institutions in Kenya through licensing and supervision. The Act enables Deposit Taking Microfinance Institutions licensed by the Central Bank of Kenya to mobilize savings from the general public, thus promoting competition, efficiency and access. There are nine deposit taking microfinance in Kenya namely Faulu Kenya DTM Limited, Kenya Women Finance Trust DTM Limited, SMEP Deposit Taking Microfinance Limited, Remu DTM Limited, Rafiki Deposit Taking Microfinance, UWEZO Deposit Taking Microfinance Limited, Century Deposit Taking Microfinance Limited, SUMAC DTM Limited and U&I Deposit Taking Microfinance Limited. (Source: Central Bank of Kenya, 2013)
1.2 Research Problem

Weak credit management is a primary cause of many business failures (McMenamin, 1999). Hempel et al., (1994) carried out a study of national banks that failed in the mid-1980s in the U.S.A and found out that the consistent element in their failures was the inadequacy of the bank’s management system for controlling credit quality. After the panic cause on 1907 a solution had to be found and that is when Benjamin Strong, a senior executive at Bankers Trust and later the first President of the Federal Reserve Bank of New York, played the prominent role for the bankers in the creation of the Fed and in its expansionary credit policy. According to Mugisa (1995) bad quality assets (loans) not only erode the institution’s ability to recycle its financial resources but also threaten their survival and deprive the economy of a continuous flow of capital. Rajan (1994) notes that expanding lending in the short-term boosts earnings, thus the banks have an incentive to ease their credit standards in times of rapid credit growth, and likewise to tighten standards when credit growth is slowing.

The concept of credit can be traced back in history and it was not appreciated until and after the Second World War when it was largely appreciated in Europe and later to Africa (Kiiru, 2004). Banks in USA gave credit to customers with high interest rates which sometimes discouraged borrowers hence the concept of credit didn’t become popular until the economic boom in USA in 1885 when the banks had excess liquidity and wanted to lend the excess cash (Ditcher, 2003). In Africa the concept of credit was largely appreciated in the 50’s when most banks started opening the credit sections and departments to give loans to white settlers. In Kenya credit was initially given to the rich people and big companies and was not popular to the poor. According to financial performance in the 1990s loans given to customers did not perform which called for an
intervention. Most suggestions were for the evaluation of customer’s ability to repay the loan, but this didn’t work as loan defaults continued (Modurch, 1999). The concept of credit management became widely appreciated by Microfinance Institutions (MFI’s) in the late 90s, but again this did not stop loan defaults to this date (Modurch, 1999) and this affects the financial performance of MFI’s in Kenya. It should be noted that the firm’s credit policy is greatly influenced by economic conditions (Pandey, 2008). As economic conditions change, the credit policy of the firm may also change.

In Kenya there are nine Deposit Taking Micro finances institutions which have different credit policies which affect their financial performance. There polices are different because of the different lending terms and conditions with their various products. Apart from their credit policies there are industry standards on what a good credit policy is and what is not and further MFI’s have different characteristics. MFI’s may be forced to adjust their credit policy in line with other Micro finances in the market where a certain behavior is practiced. In the Kenyan lending sector for instance, while market risk is a great business concern for all institutions, credit risk is cited as a major concern by 95 per cent of the lending institutions (CBK, 2011). Kitaka (2001) carried out a survey on the use of financial performance indicators by MFI’s in Kenya and realized a credit policy plays a role. The policies must have objectives of maximizing profits to the benefit of the shareholders as well. It may be difficult to establish an optimal credit policy as the best combination of the variables of credit policy is quite difficult to obtain. A firm will change one or two variables at a time and observe the effect. Microfinance Institutions and other finance institutions must develop a credit policy to govern their credit management operations (Pandey, 2008) and since microfinance institutions generate their
revenue from credit extended to low income individuals in the form of interest charged on the funds granted (Central Bank Annual Report, 2010) the loan repayments may be uncertain. This study is to find out how the various micro finance institutions credit policy used affect the financial performance of the organization. What are the effects of the credit policy to the financial performance of Deposit taking MFI’s?

1.3 Research Objective

To establish the effects of credit policy on financial performance of Deposit Taking Micro Finance Institutions in Kenya

1.4 Value of the Study

The research will be beneficial to various parties. For the MFI’s they will be able to know the importance of their credit policy, the impact it has on their financial performance and how they can be able to use their credit policy to their benefit.

The study will be also important to other researchers of finance and business since it will contribute to the literature on credit policy of micro finance institutions. It will also highlight further areas that scholars can tackle.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
This section draws on literature in the area of credit policy in micro finance institutions. Secondary materials such as books, journals and articles which carry precious research work on the study topic are analyzed.

2.2 Theoretical Models
A theoretical model is a theory designed to explain an entire situation or behavior, with the idea that it would eventually be able to predict that behavior. The following credit models show how credit policy of micro finance institutions are made in order to ensure the financial performance is positive.

2.2.1 Z-Score Model
Altman's Z score predicts whether or not a company is likely to enter into bankruptcy within one or two years. Edward Altman developed the "ALTMAN Z-SCORE" by examining 85 manufacturing Companies in the year 1968. Later, additional "Z-Scores" were developed for private manufacturing companies (Z-Score - Model A) and another for general/service firms (Z-Score - Model B). The Z-Score Bankruptcy-Predictor combines several of the most significant variables in a statistically derived combination. It was originally developed on a sampling of manufacturing firms. However, the algorithm has been consistently reported to have a 95 % accuracy of prediction of bankruptcy up to two years prior to failure on non-manufacturing firms
as well. There has been many other bankruptcy predictors developed and published. However, none has been so thoroughly tested and broadly accepted as the Altman Z-Score.

The Altman Z-Score variables influencing the financial strength of a firm are: current assets, total assets, net sales, interest, total liability, current liabilities, market value of equity, earnings before taxes and retained earnings. Value of Z is as follows

\[ Z = 0.012X1 + 0.014X2 + 0.033X3 + 0.006X4 + 0.999X5 \]

Where,

\[ X1 = \text{working capital/Total assets} \]
\[ X2 = \text{Retained earnings/Total assets} \]
\[ X3 = \text{Earnings before interest and taxes/Total assets} \]
\[ X4 = \text{Market value of equity/Book value of total liabilities} \]
\[ X5 = \text{Sales/Total assets} \]

In response to requests for a measure to predict the likelihood of bankruptcy for non-manufacturing firms, Altman developed the Z Model, (Altman & Hotchkiss 2006). This alternative model was designed for non-manufacturing industrials. This is model that was employed in the investigation reported in this study. The formula, which differs from the original formula presented above, is:

\[ Z = 6.56 X1 + 3.26 X2 + 6.72 X3 + 1.05 X4 \]

Where,

\[ X1 = (\text{current assets – current liabilities}) / \text{total assets} \]
\[ X2 = \text{retained earnings / total assets} \]
\( X_3 = \text{earnings before interest and taxes / total assets} \)

\( X_4 = \text{book value of equity / total liabilities} \)

When Z score of the firm is 3.0 or more: Most likely safe based on the financial data

Mismanagement, fraud, economic downturns and other factors may cause an unexpected reversal, 2.8 to 3.0: Probably safe to predict survival, but this is a portion of the gray area and is below the threshold of relative safety. 1.8 to 2.7: Likely to be bankrupt within two years. This is the lower portion of the gray area and dramatic action may be required. Below 1.8: Highly likely headed for bankruptcy. Rarely would a firm be expected to recover from a financial condition generating this or lower scores. Credit scoring procedures, assessment of negative events probabilities, and the consequent losses given these negative migrations or default events, are all important factors involved in credit risk management systems (Altman, Caouette, & Narayanan, 1998).

2.2.2 Credit Metrics Model

Credit Metrics is a statistical model developed by Morgan (1995), 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. According to Gupton (1997) 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 i.e determining the risk based credit limits across the portfolio, and rational risk based capital allocations.

Credit Metrics 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 down grades in credit quality, because the value of a particular credit varies with the corresponding credit quality according to Bhatia (1997). 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. The last categories are the "fallen angels" whose large exposures were created when their credit ratings were better, but who now have much higher percentage risk due to recent downgrades. Its other application is to limit setting of course, what types of risk measure to use for limits, as well as what type of policy to take with regard to the limits are management decisions.

Finger (1997), notes that a user might use the credit metrics for two different purposes namely what type of limit to set, which risk measure to use for the limits and what policy to employ with regard to the limits. These limits could be set in terms of percentage risk, exposure size and absolute risk. Identifying the correlations across the portfolio so that the potential concentration
may be reduced and the portfolio is adequately diversified across the uncorrelated constituents. This model helps the financial institution think about how the various credit policies should be modified to be able to issue good loans and minimize credit risk.

2.2.3 The 5 C’s Model of Client Appraisal

Microfinance Institutions use the 5Cs model of credit to evaluate a customer as a potential borrower (Abedi, 2000). The 5Cs help MFIs to increase credit performance, as they get to know their customers better. These 5Cs include character, capacity, collateral, capital and condition. Character basically is a tool that provides weighting values for various characteristics of a credit applicant and the total weighted score of the applicant is used to estimate his credit worthiness (Myers and Forgy, 2005). This is the personal impression the client makes on the potential lender. The factors that influence a client can be categorized into personal, cultural, social and economic factors (Ouma, 1996). The psychological factor is based on a man’s inner worth rather than on his tangible evidences of accomplishment.

MFI’s consider this factor by observing and learning about the individual. In most cases it is not considered on first application of credit by an applicant but from the second time. Under social factors, lifestyle is the way a person lives. This includes patterns of social relations (membership groups), consumption and entertainment. A lifestyle typically also reflects an individual's attitudes, values or worldview.

Reference groups in most cases have indirect influence on a person’s credibility. MFI’s try to identify the reference groups of their target as they influence a client’s credibility. Personal
factors include age, life cycle stage, occupation, income or economic situation, personality and self concept. Under life cycle stage for example older families with mature children are not likely to default since it’s easier to attach collateral on their assets since they are settled unlike the unsettled young couples. The MFI’s will consider the cash flow from the business, the timing of the repayment, and the successful repayment of the loan. Anthony (2006) defines cash flow as the cash a borrower has to pay his debt.

Cash flow helps the MFI’s to determine if the borrower has the ability to repay the debt. The analysis of cash flow can be very technical. It may include more than simply comparing income and expenses. MFI’s determines cash flow by examining existing cash flow statements (if available) and reasonable projections for the future (ratios Orlando (1990) posits that lenders review the borrower’s business plan and financial statements, they have a checklist of items to look at one of the being the number of financial ratios that the financial statements reveal. These ratios are guidelines to assist lenders determine whether the borrower will be able to service current expenses plus pay for the additional expense of a new loan.

Collateral is any asset that customers have to pledge against debt (Lawrence & Charles, 1995). Collateral represents assets that the company pledges as alternative repayment source of loan. Most collateral is in form of hard assets such as real estate and office or manufacturing equipment. Alternatively accounts receivable and inventory can be pledged as collateral. Lenders of short term funds prefer collateral that has duration closely matched to the short term loan. According to Weston and Eugene (1966), Capital is measured by the general financial position of the borrower as indicated by a financial ratio analysis, with special emphasis on tangible net
worth of the borrower’s business. Thus, capital is the money a borrower has personally invested in the business and is an indication of how much the borrower has at risk should the business fail. Condition refers to the borrower’s sensitivity to external forces such as interest rates, inflation rates, business cycles as well as competitive pressures. The conditions focus on the borrower’s vulnerability.

2.3 Variables of Credit Policy.

Pandey, (2000) observers that credit policy refers to a combination of three decision variables. These decision variables determine who qualifies for the loan. They include, credit standards, credit terms and collection efforts on which the financial manager has influence.

2.3.1 Credit Standards

Credit standards according to Mehta (1972), 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 (Van Horne, 1994). 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. In agreement with other scholars Van Horne, (1994), advocated for an optimum credit policy, which would help to cut through weaknesses of both tight and loose
credit standards so, the firm can make profits. This is a criteria used to decide the type of client to whom loans should be extended. Kakuru (1998) noted that it’s important that credit standards be basing on the individual credit application by considering character assessment, capacity condition collateral and security capital.

Character it refers to the willingness of a customer to settle his obligations (Kakuru, 2000) it 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 (Katende, 1998).

According to Campsey and Brigham (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. The 5Cs of lending are Capacity, Character, Collateral, Condition and Capital. Capacity refers to the customer’s ability to fulfill his/her 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. Collateral security, This 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 (Girma, 1996). According to Chan and Thakor (1987), security should be safe and easily marketable securities apart from land building keep on losing value as to globalization where new technology keeps on developing therefore lender should put more emphasis on it. 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. 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 (Kakuru, 2000)

### 2.3.2 Credit Terms

A Credit term is a contractual stipulation under which a firm grants credit to customers (Wamasembe, 2002); 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. Kakuru (1998) explains the significance of discounts in credit terms. 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.

Ringtho (1998) 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. The chartered institute of bankers and lending text (1993) advises lending institutions to consider amount given to borrowers. Robinson M.S (1994) pointed out that the maximum loan amount per cycle are determined basing on the purpose of the loan and the ability of the client to repay (including guarantee).

2.3.3 Collection Efforts

McNaughton (1996) 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 (Brighan, 1997). Collection efforts may include attaching mandatory savings forcing guarantors to pay, attaching collateral assets, courts litigation (Myers, 1998). 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. Dickerson et al., (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. According to Myers (1998) 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. Thus collection efforts aim at accelerating collections from slower payers to avoid bad debts. Prompt payments are aimed at increasing turnover while keeping low and bad debts within limits (Pandey, 1995). However, caution should be taken against stringent steps especially on permanent clients because harsh measures may cause them to shift to competitors (Van Horn 1995). Ssemukono, (1996) states that collection efforts are directed at accelerating recovery from slow payers and decreases bad debts losses. This therefore calls for vigorous collection efforts. The yardstick to measurement of the effectiveness of the collection policy is its slackness in arousing slow paying customers.
2.4 Empirical Review

Most micro finance institutions have credit policies according to the clients needs. A lot of studies have been done relating to credit risk and the various risks that affect the lending institutions. The study conducted by Macaulay (1988) in the United States and found credit risk management is best practice in bank and above 90% of the bank in country have adopted the best practice. Inadequate credit policies are still the main source of serious problem in the financial industry as result effective credit risk management has gained an increased focus in recent years. The main role of an effective credit policy must be to maximize a bank’s risk adjusted rate of return by maintaining credit exposure within acceptable limits. Moreover, banks need to manage credit risk in the entire portfolio as well as the risk in individual credits transactions.

Jappelli (1990), for example, investigates lenders’ and borrowers’ behaviors in consumer rationing activities for the United States’ credit market in 1983. He found that most of the applicants are rejected because of their credit history, their age or their income. Amount of collateral, which is a property, offered by borrowers to secure a loan in case of delinquency, is another important factor affecting credit-granting decision. Microfinance institutions should adopt stringent policy as a method of collecting loans as compared to lenient policy. This is because stringent policy yields high loan performance compared to lenient policy.

The banks very frequently suffer from poor lending practice (Koford&Tschoegl, 1999). Monitoring, and other appropriate steps, are necessary to control or mitigate the risk of
connected lending when it goes to companies or individuals (Basel, 1999). Therefore, the Nepal Rastra Bank (NRB) i.e. central bank, has issued guidelines which attention to general principles that are prepared for governing the implementation of more detailed lending procedures and practices within the banks. The NRB has issued some criteria, such as the credit assessment of borrowers (macro-economic factors and firm specific analysis), the purpose of credit, track records, repayment capacity, liquidity status of collateral for new credit, as well as the renewal and expansion of existing credit (NRB, 2010). It is mandatory for a bank to prepare Credit Policies Guidelines (CPG) for making investment and lending decisions and which reflect a bank tolerance for credit risk. Prior to consent to a credit facility, the bank should make an assessment of risk profile of its customers, such as of their business, and which can be done through the credit procedure (NRB, 2010).

According to Ssewagudde (2000) credit policy provides parameters, defines procedures and directives that have been carefully formulated, administered from top and well understood at all institution’s levels. Many micro finances undergoes a set of three procedures of evaluating credit applicants to establish whether or not loans should be granted, these are credit information, credit investigation and analysis in a bid to maintain proper credit standards, avoid excess risk and evaluate business opportunity (ies). Ngugi, (2001) postulates that in order to determine the needs of the financial institutions with regard to risk management and credit policy, the central bank of Kenya conducted a survey in September 2004 that provided a status position on the extent to which risk management and credit policy is practiced in the financial institutions operating in Kenya.
The survey revealed that there is a high level of awareness in financial institutions on the importance of employing systematic methods of identifying, analyzing and controlling or mitigating risks (Cuthbertson and Nitzsche, 2003). The studies on consumer credit applicants examining the lenders’ decision to grant the loan and the studies on consumer credit clients examining the borrowers’ ability to pay the loan. There are many studies on scrutinizing and improving the rejection and acceptance criteria of credit lenders’ decisions.

The bank of Jamaica (2003) conducted an empirical study on the implementation of credit risk management policies and the credit policies put in place by commercial banks in that country. The study which involved all the 73 banks in that country found out that only 46% had implemented them in full. This was partly attributed to the poor way in which the regulations had been communicated. Credit policies establish the framework for lending and reflect an institution’s credit culture and ethical standards. To be effective, policies must be communicated in a timely fashion, be implemented through all levels of the organization by appropriate procedures and revised periodically in light of changing circumstances.

2.5 Summary of Literature Review

Credit granting procedure and control systems are necessary for the assessment of credit, which then guarantees a financial institution total credit portfolio as per the institutions overall integrity (Boyd, 1993). It is necessary to establish a proper credit risk environment, sound credit granting processes, appropriate credit administration, measurement, monitoring and control over credit.
risk by use of an optimum credit policy (Basel, 1999). Most studies have been inclined to focus on the problems of developing an effective method for the disposal of bad debts, rather than for the provision of a good credit policy framework for their prevention and control of quality portfolio (Campbell, 2007). It’s therefore evident that the credit policy influences the financial performance of the organizations.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
This chapter presents the design of the research and procedure that would be taken. The target population under the study is given including the sample drawn, its design technique and size. The instruments for data collection and procedures for the data collection is presented and the data analysis methods.

3.2 Research Design
Research design refers to how data collection and analysis are structured in order to meet the research objectives through empirical evidence economically (Chandran, 2004; Cooper and Schindler, 2006). (Mugenda&Muganda, 2003) describes descriptive design as a process of collecting data in order to answer questions regarding the current status of the subjects in the study. The research design was therefore suitable in conducting the study.

3.3 Target Population
According to Mugenda and Mugenda (2003) a population refers to an entire group of individuals, events or objects having a common observable characteristic. The target population of the project will comprise of six licensed deposit takings micro finance institutions in Kenya as at 31st June 2013. There are nine deposits taking micro finance Institution but three of the institutions were licensed in the late 2012 therefore data wasn’t available. Census was used in
getting information. A census is an attempt to collect data from every member of the population being studied rather than choosing a sample. (See appendix 1)

3.4 Data Collection

The data that was collected from secondary sources. The secondary data on the financial performance of the institutions was obtained from the financial report of the institutions. This enabled the researcher to get quantified data that was helpful to draw conclusions and give recommendations on the effect of credit policy on the financial performance of deposit taking micro finance institutions. Data was collected from the period 2010-2012 because most DTM’s got their license from CBK during this period.

3.5 Data Analysis

The findings of the research were written down and worked out, edited and analyzed using comparison and percentage approaches with the help of SPSS computer program to draw conclusions and recommendations. Measures of dispersion were used in assessing the variability of the effect of credit policy on the financial performance of the deposit taking micro finance institutions. The significance of the coefficients range from 0.1 to 0.9 whereby the coefficients closer to 0.1 indicates less impact and those close to 0.9 indicate greater impact.

3.5.1 Analytical Model

The regression model that was used in analyzing the effects of credit policy on financial performance of the censured deposit taking micro finance organizations.
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

\( Y \) = Financial Performance

\( X_1 \) = Credit Standards

\( X_2 \) = Credit terms and conditions

\( X_3 \) = Collection efforts

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

Whereby \( Y \) is the dependant variable (financial performance), \( \beta_0 \) is the regression constant or \( Y \) intercept, \( \beta_1 \ldots \beta_3 \) are the coefficients of the regression model. The basis of the model is to help in measuring financial performance by exploring the contribution of various components. The test of significance will be the ANOVA test.
### Operationalization of use of variables

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>DEFINITION</th>
<th>FORMULAE</th>
<th>EXPLANATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>Financial Performance</td>
<td>Return on Assets</td>
<td>The return on Assets (ROA) is a ratio that measures company earnings before interest &amp; taxes (EBIT) against its total net assets. ROA = EBIT / Total Assets.</td>
</tr>
<tr>
<td>$X_1$</td>
<td>Credit Standards</td>
<td>Bad debts costs</td>
<td>Bad Debt Cost is created when a bank agrees to lend a sum of assets to a debtor and granted with expected repayment; in many cases, however the debtor is unable to repay the debt at the fixed period of time by a certain date. In addition, changes in the valuation of debt currency change the effective size of the debt due to inflation or deflation, even though the borrower and the lender are using the same currency. Consequently, this can lead to bad debt cost. I.E BDC Ratio= Bad debt cost/ Total cost.</td>
</tr>
<tr>
<td>$X_2$</td>
<td>Credit terms and conditions</td>
<td>Cost per credit asset</td>
<td>Cost per loan asset (CLA) is the average cost per loan advanced to customer in monetary term. Purpose of this is to indicate efficiency in distributing loans to customers. I.E CLA Ratio= Total Cost / Total amount of loans.</td>
</tr>
<tr>
<td>$X_3$</td>
<td>Collection efforts</td>
<td>Default rate</td>
<td>Default rate (DR) is the term for a practice in the financial services industry for a particular lender to change the terms of a loan from the normal terms to the default terms that is, the terms and rates given to those who have missed payments on loan I.E Dr Ratio= Non Performing Loans/ Total loan</td>
</tr>
<tr>
<td>ε</td>
<td>Error term</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents data analysis, presentation and findings, within the framework of the research questions and objectives of the study. The study has one objective which is to establish the impact of monetary policies on inflation. Secondary data was collected from the Central Bank website and individual DTM’s. Data was analyzed in relation to the study’s objective and the findings are presented in the various categories below.

4.2. Findings

The data presented below is data from the central bank of Kenya and some from the specific DTM’s since not all the data was in the CBK’s websites.

Table 4.1 Analysis of Bad Debt Cost and Total Cost for the Year 2010-2012

<table>
<thead>
<tr>
<th></th>
<th>Bad debt cost</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faulu Kenya DTM LTD</td>
<td>78,293</td>
<td>29,122</td>
</tr>
<tr>
<td>KWFT DTM LTD</td>
<td>649,980</td>
<td>224,488</td>
</tr>
<tr>
<td>SMEP DTM LTD</td>
<td>27,134</td>
<td>53,000</td>
</tr>
<tr>
<td>Remu DTM LTD</td>
<td>2</td>
<td>2,000</td>
</tr>
<tr>
<td>Rafiki DTM LTD</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>UWEZO DTM LTD</td>
<td>3</td>
<td>2,000</td>
</tr>
</tbody>
</table>

(Source: Central Bank of Kenya website)
The tables above represent data for 3 years (2010-2012) of the bad cost debt and total cost for the respective deposit taking micro finance in Kenya.

**4.2 Analysis of Total Cost and Total Amount of Loans for the Year 2010-2012**

<table>
<thead>
<tr>
<th></th>
<th>Total Cost</th>
<th></th>
<th>Total Amount of Loans</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Faulu Kenya DTM LTD</td>
<td>1,168,348</td>
<td>1,051,000</td>
<td>1,326,000</td>
<td>2,549,152</td>
</tr>
<tr>
<td>KWFT DTM LTD</td>
<td>2,588,808</td>
<td>3,830,000</td>
<td>3,730,000</td>
<td>11,627,407</td>
</tr>
<tr>
<td>SMEP DTM LTD</td>
<td>279,096</td>
<td>390,000</td>
<td>436,000</td>
<td>1,181,882</td>
</tr>
<tr>
<td>Remu DTM LTD</td>
<td>20</td>
<td>27,000</td>
<td>38,000</td>
<td>35</td>
</tr>
<tr>
<td>Rafiki DTM LTD</td>
<td>35</td>
<td>41,000</td>
<td>218,000</td>
<td>86</td>
</tr>
<tr>
<td>UWEZO DTM LTD</td>
<td>17</td>
<td>19,000</td>
<td>26,000</td>
<td>27</td>
</tr>
<tr>
<td>Century DTM LTD</td>
<td>0</td>
<td>0</td>
<td>3,000</td>
<td>0</td>
</tr>
<tr>
<td>SUMAC DTM LTD</td>
<td>0</td>
<td>0</td>
<td>3,500</td>
<td>0</td>
</tr>
<tr>
<td>U &amp; I DTM LTD</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

(Source: Central Bank of Kenya website)

The tables above represent data for 3 years (2010-2012) of total cost and total loans for the respective deposit taking micro finance in Kenya.
Table 4.3 Analysis of NPL and Total Loans for the Year 2010-2012

<table>
<thead>
<tr>
<th></th>
<th>Non-Performing Loans</th>
<th>Total loans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faulu Kenya DTM LTD</td>
<td>67,000</td>
<td>78,000</td>
</tr>
<tr>
<td>KWFT DTM LTD</td>
<td>941,761</td>
<td>445,000</td>
</tr>
<tr>
<td>SMEP DTM LTD</td>
<td>38,000</td>
<td>49,000</td>
</tr>
<tr>
<td>Remu DTM LTD</td>
<td>1</td>
<td>1,000</td>
</tr>
<tr>
<td>Rafiki DTM LTD</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>UWEZO DTM LTD</td>
<td>1</td>
<td>1,000</td>
</tr>
</tbody>
</table>

(Source: Central Bank of Kenya website)

The tables above represent data for 3 years (2010-2012) of the non-performing loans and total loans for the respective deposit taking micro finance in Kenya.

Table 4.4 Analysis of EBIT and Total Assets for the Year 2010-2012

<table>
<thead>
<tr>
<th>EBIT</th>
<th>TOTAL ASSETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faulu Kenya DTM LTD</td>
<td>162</td>
</tr>
<tr>
<td>KWFT DTM LTD</td>
<td>18,958,394</td>
</tr>
<tr>
<td>SMEP DTM LTD</td>
<td>1,789,565</td>
</tr>
<tr>
<td>Remu DTM LTD</td>
<td>(6)</td>
</tr>
<tr>
<td>Rafiki DTM LTD</td>
<td>(10)</td>
</tr>
<tr>
<td>UWEZO DTM LTD</td>
<td>(5)</td>
</tr>
</tbody>
</table>
The tables above represent data for 3 years (2010-2012) of the EBIT and Total assets for the respective deposit taking micro finance in Kenya.

Table 4.5 Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td></td>
<td>Statistic</td>
<td></td>
</tr>
<tr>
<td>Credit Standards</td>
<td>18</td>
<td>0.75</td>
<td>0.01</td>
<td>0.76</td>
<td>0.1283</td>
<td>0.04006</td>
<td>0.16996</td>
<td>0.029</td>
</tr>
<tr>
<td>Credit Terms &amp; Conditions</td>
<td>18</td>
<td>0.46</td>
<td>0.22</td>
<td>0.68</td>
<td>0.4172</td>
<td>0.03564</td>
<td>0.15122</td>
<td>0.023</td>
</tr>
<tr>
<td>Collection Effort</td>
<td>18</td>
<td>0.286</td>
<td>0.012</td>
<td>0.298</td>
<td>0.07772</td>
<td>0.01843</td>
<td>0.078223</td>
<td>0.006</td>
</tr>
<tr>
<td>Return on Asset</td>
<td>18</td>
<td>136.5</td>
<td>-0.17</td>
<td>136.33</td>
<td>10.0978</td>
<td>7.846</td>
<td>33.28775</td>
<td>1108.074</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research data

The table above presents the descriptive statistics computed using statistical package for social sciences (SPSS).
Table 4.6 Summary of the Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>95.0% Confidence Interval for B Lower Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>50.079</td>
<td>24.505</td>
<td>2.044</td>
<td>0.06</td>
<td>-2.479</td>
</tr>
<tr>
<td>Credit Standards</td>
<td>47.965</td>
<td>66.153</td>
<td>0.245</td>
<td>0.725</td>
<td>0.48</td>
</tr>
<tr>
<td>Credit Terms &amp; Conditions</td>
<td>-86.457</td>
<td>52.696</td>
<td>-0.393</td>
<td>1.641</td>
<td>0.123</td>
</tr>
<tr>
<td>Collection Effort</td>
<td>-129.505</td>
<td>143.669</td>
<td>-0.304</td>
<td>0.901</td>
<td>0.383</td>
</tr>
</tbody>
</table>

a. Dependent Variable: return on asset

Source: Research Data

Table above presents the coefficients of the variables, the significance of those coefficients and the standard error term. As per the SPSS generated table 4.2.4, the equation, \( Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \)

Becomes;

\( Y = 50.1 + 47.965X_1 - 86.457X_2 - 129.5X_3 + 24.505 \)

The results indicate that there is a negative relationship between credit terms and collection efforts with financial performance while a positive relation with credit standards. This indicates that the DTM’s can increase their financial performance by reducing their non-performing loans i.e. tightening their collection efforts, increasing the quality of their credit standards.
Table 4.7: Analysis of Variance Statistics for 2010-2012 Data

\textbf{ANOVA}^b

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|c|c|}
\hline
Model & Sum of Squares & df & Mean Square & F & Sig. \\
\hline
1 & Regression & 3742.982 & 3 & 1247.661 & 1.157 & .361^a \\
    & Residual & 15094.278 & 14 & 1078.163 & \\
    & Total & 18837.261 & 17 & & \\
\hline
\end{tabular}
\end{table}

Predictors :( Constant), collection effort, credit terms & conditions, credit standards

Dependent Variables: Return on Assets.

Source: Research data

The researcher used 36\% or 0.36 as the significant level and can be denoted by the Greek letter \( \alpha \). statistically, the significant data refers to the P-values. If an obtained P-value is less than the chosen \( \alpha \) level of 0.36, the P-value is significant.

Table 4.8: Model Summary

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|c|c|c|c|}
\hline
Model & R & R Square & Adjusted R Square & Std. Error of the Estimate & R Square Change & F Change & df1 & df2 & Sig. F Change \\
\hline
1 & 0.446^a & 0.199 & 0.027 & 32.83539 & 0.199 & 1.157 & 3 & 14 & 0.361 \\
\hline
\end{tabular}
\end{table}

Source: Research data

Predictors: (Constant), collection effort, credit terms & conditions, credit standards, According to the F statistics above the variables used in the model fits well in the model. The model shows
that the three credit policy variable combine have a significant relationship ($R= 0.446$, $P=0.361$) with performance. It is also shows that they can predict up to $19.9\%$ of the variance in performance.

Table 4.9: Correlation Table

<table>
<thead>
<tr>
<th></th>
<th>Return on Asset</th>
<th>Credit Standards</th>
<th>Credit Terms &amp; Conditions</th>
<th>Collection Effort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on Asset</td>
<td>1</td>
<td>0.017</td>
<td>-0.389</td>
<td>-0.137</td>
</tr>
<tr>
<td>Credit Standards</td>
<td>0.017</td>
<td>1</td>
<td>0.033</td>
<td>0.706</td>
</tr>
<tr>
<td>Credit Terms &amp; Conditions</td>
<td>-0.389</td>
<td>0.033</td>
<td>1</td>
<td>0.014</td>
</tr>
<tr>
<td>Collection Effort</td>
<td>-0.137</td>
<td>0.706</td>
<td>0.014</td>
<td>1</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th></th>
<th>Return on Asset</th>
<th>Credit Standards</th>
<th>Credit Terms &amp; Conditions</th>
<th>Collection Effort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on Asset</td>
<td>.</td>
<td>0.473</td>
<td>0.055</td>
<td>0.294</td>
</tr>
<tr>
<td>Credit Standards</td>
<td>0.473</td>
<td>.</td>
<td>0.448</td>
<td>0.001</td>
</tr>
<tr>
<td>Credit Terms &amp; Conditions</td>
<td>0.055</td>
<td>0.448</td>
<td>.</td>
<td>0.478</td>
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<tr>
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<td>0.001</td>
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<td>18</td>
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<tr>
<td>Credit Standards</td>
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<tr>
<td>Collection Effort</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
</tr>
</tbody>
</table>

Source: Research data

4.3. Interpretation of Findings

The purpose of this study was to examine the effects of credit policies on financial performance of DTM’s in Kenya. Specifically, the study established whether there is a relationship between the dependent variable and independent variable. Regression analysis was used in analyzing data to achieve the study objective.
Table 4.2.4 represents the summary statistics computed using the statistical package for social sciences (SPSS). From the output, the number of years for the study is three (3). The results show that the maximum, minimum, standard deviation, mean and variance of the variables return on assets, credit standards, credit terms and conditions and collection efforts of the deposit taking microfinance institution’s industry as a whole for the three years being studied.

Table 4.2.5 summarizes the coefficients of the variables. According to the regression equation established, taking all factors (credit standards, credit terms and conditions, collection efforts) constant, the financial performance of the deposit taking micro finance institutions as a result of the independent factors will be 50.079. This regression model shows that credit standards have a positive relation while collection effort and credit terms and condition have a negative relation in the financial performance of deposit taking micro finance institutions. The error term amounts to a positive figure of 24.5 which is the standard error accepted for the factor (independent factors) to be considered effective in controlling financial performance of deposit taking micro finance institutions.

The results from the coefficients summary indicate that significance of coefficients of credit standards, credit terms and conditions and collection efforts are 0.48, 0.12 and 0.38 respectively. The significance of coefficients range is 0.1 to 0.9, whereby the coefficients closer to 0.1 indicate less impact and those close to 0.9 indicate greater impact. It therefore implies that both the coefficients are significant though have an impact at different significance i.e. credit standards and collection efforts have a greater impact compared to credit terms and conditions on the financial performance of DTM’s. The deduction on the standard error covers a level of up to 24.5
whereby the credit standard has an error of 66.2, credit terms and conditions has an error of 52.7 and the collection effort has an error of 143.7.

The sum of squares column in table 4.2.6 represents the amount of the total sum of squares in the dependent variable that is not explained by the least squares regression line. SPSS refers to sum of squares error as sum of squares residual error. Thus of the total sum of squares that is explained by the regression line this regression model leave 15094 unexplained. The results show that the researchers used 36% or 0.36 as the significant level and can be denoted by the Greek letter α. This therefore means that other factors which have not been covered in this study contribute 36%.

The model summary in table 4.2.7 contains R square representing the proportion of the variability in one series that can be explained by the variability of one or more series in a regression model. The table illustrates the R value for the model. $R^2$ measures correlation between the dependent and the independent variables. $R^2$ is therefore a statistic measurement that provides information about fitness of a model. The higher the value of $R^2$ the better is the fitness of a model. The value of $R^2$ is between 0 and 100%. If $R^2$ is 1(100%), the regression line perfectly fits the data and vice-versa. $R^2$ is 19.9% implying that there is a low percentage that the line perfectly fits the data.

Coefficient of determination, R squared also explains the extent to which changes in the dependent variable can be explained by the change in the independent variable or the percentage of variation in the dependent variable (financial performance) that is explained by independent variables (credit standards, credit terms and conditions and collection efforts). The three independent variables that were studied explain only 19.9% of the relationship between
independent variables (credit standards, credit terms and conditions and collection efforts) and the dependent variable (financial performance). This therefore means that other factors not studied in this research contribute 81.1% of the financial performance of deposit taking micro finance institutions. Therefore further studies should be conducted to investigate the other factors that affect financial performance of deposit taking micro finance institution.

The adjusted R square also called the coefficient of multiple determinations is the percent of variance in the dependent explained uniquely or jointly by the dependent variable. The findings further indicate that adjusted overall R-squared was 0.027 meaning that the regression line explains 2.7% of financial performance (dependent variable). The changes are caused by the independent variable included in the regression line. Therefore error term or the residual account for the other factors is 97.3%. This means that there is no relationship between financial performance and credit standards, credit terms and conditions and collection efforts. ANOVA F2, 2 has a statistic of 1.157 is significant with a P-value > 0.05. This means the model does not establish a relationship between financial performance and credit policy. It was evident from the study that the three variables are individually significant but in a small proportion.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter gives the summary, conclusion and recommendation of the whole study. From the findings the researcher was able to come up with the summary, conclusion and recommendation.

5.2 Summary

The findings are in line with Yoron (1994) who argues that credit is so costly to financial institutions as they influence the profits of deposit taking micro finance institutions. She further stresses that losses have been the largest cost borne by financial intermediaries and the principal cause of insolvency, and increased reliance on state bailouts thus affecting the organizational profitability. The findings are in agreement with Van Horne et al, (1997) who contends that credit policies are the chief influences on the level of a firm’s financial performance. Policies save time by ensuring that the same issue is not discussed over and over again each time a decision is to be made. This ensures that decisions are consistent and fair and that people in the same circumstance get treated in the same manner (Khandkar and Khan, 1998). According to McNaughton (1996), credit policy provides a frame work for the entire management practices. Most financial institutions have written credit policies which are the cornerstone of sound credit management, they set objectives, standards and parameters to guide micro finance officers who grant loans and manage loan portfolio.

The objective of the study was to establish the effects of credit policy on the financial performance of deposit taking micro finance organization. This was a descriptive study that
adopted a time series of three (3) years. The population of interest in this study consists of the six licensed deposit taking micro finance organizations in Kenya. The study used data obtained from the financial statements of the deposit taking micro finance organizations in Kenya for the years 2010-2012. The variables of interest i.e. credit standard, credit terms and conditions and collection efforts were entered into statistical package for social sciences model and analyzed to examine their relationship and hence achieve the research objective.

The coefficients were put into a regression model to determine the relationship between independent and dependent variables in attaining the desired results on the study of interest. It is evident from our statistics that the coefficients of credit terms and conditions and collection efforts are negative while that of credit standards are positive. The findings reveal that the bulk of the financial performances of deposit taking micro finance organizations are not influenced by the variables of the credit policy. This suggests that other factors apart from the credit policy affect the financial performance of deposit taking micro finance organizations.

5.3 Conclusion

The objective was to establish the effect of credit policy on the financial performance of deposit taking micro finance in Kenya. The results indicate that there is a relationship between credit policy variables and financial performance under the study but the effect is very minimal. Empirical evidence from the study indicates that there is a negative relationship between credit terms and conditions and collection efforts, that is, a decrease in credit terms and condition which is calculated by total cost/ total amounts of loan will increase the financial performance of
the deposit taking micro finance organization and also a decrease in collection efforts which is decreasing default rate of the organization will increase the financial performance of the DTM. The study also shows that the other variable which is credit standards has a positive relationship would increase the financial performance of the deposit taking micro finance organization. Implementation of a good credit policy in an organization would increase its financial performance.

Regression results revealed that R-Square was 0.199 implying that 19.9% variation from the expected and actual output of dependent variable i.e. financial performance is explained by independent variables credit standards, credit terms and conditions and collection efforts. This shows that credit policy plays a smaller role in financial performance whereby other factors cover 81.1%. Credit terms and conditions and collection efforts have a significant effect on financial performance of DTM’s. This is evident by their negative relationship in the regression model illustrated. It means that when the credit terms and conditions and collection efforts reduce, the financial performance increases. However there is a positive relationship between the credit standard and the financial performance meaning good credit standards may lead to an increase in financial performance. Therefore DTM’s should work on good credit standards and reduce default rate by working on collection efforts and also work on the credit terms and conditions to increase financial performance.

The importance of a good credit policy is beyond no doubt even though it affects financial performance at a minimal level. All DTM’s realize that for the long-term profitability and success of their operations other factors affecting financial performance are required apart from the credit policy since it affects financial performance at a minimal level.
5.4 Recommendations For policy

The findings on the effects of a credit policy on financial performance can be used ensure that the variables set in the policy affect the organization positively in terms of increasing financial performance even though it will be affected minimally. It is important to note that a DTM’s credit policy has a relative influence on the financial performance of the organization however small it may be. There is therefore a need for the deposit taking micro finance organization to impose a proper policy that will help increase financial performance.

From the findings, the study recommends that in order for the deposit taking micro finance to have a high financial performance the organization will have to also concentrate on other factors affecting its operations. This is because according to the study done credit policy affects the organization with a small percentage therefore concentrating so much on it will not improve the financial performance of a deposit taking micro finance as expected.

The solution to bias is not abandoning any variable in the credit policy as misleading, but rather being aware of the biases finding a way of working on it by introduce a way forward and letting that knowledge guide in use of the credit policy. In analysis of data, the choice of period and methodology can influence the outcome. The problem of data bulkiness should thus not limit one from giving accurate results. Apart from the credit policy there are other factors that influence the financial performance of deposit taking microfinance in Kenya which are to be studied. These factor affect the performance either positively or negatively. The credit policy itself should also be studied in details to know exactly what factors affect the formation of an optimal credit policy.
5.5 Limitations of the Study

This study confined to the use of secondary data which raises reliability issues of the data used. Relying on the secondary data means that any error in the source will also be reflected in the research, that is, errors and assumptions not disclosed in the source documents will also reoccur in the research.

The research was also conducted over a short period of time. Data collection had to be limited and verification of the collected data being nearly impossible, since the reliability of the data depend on the source. Some of the DTM’s were licensed recently and therefore getting data was quite difficult from them since they are still coming up in business and for the years of study they were not there.

The researchers only assumed credit policy in coming up with the findings. Credit standards, credit terms and conditions and collection efforts are affected by other external factors which need to be looked into in details. Taking into consideration that credit policy is what affects financial performance of deposit taking micro finance organization minimally coming up with the findings might lead to a weak model.

5.6 Suggestions for Further Research

There is further research that needs to be done on this research to find out how the credit policies are implemented to the organizations. This will help to explain if the financial performance is affect with the implementation of the credit policy to the organizations.
There also a large percentage of other factors that affects financial performance of deposit taking micro finance which should be put into consideration since this research show that credit policy have a minimal impact on financial performance. Therefore the other factors should be researched on.

This study suggest further research on deposit taking microfinance institutions to strategically place themselves in the market so as to be able to increase their financial performance and be able to be highly operation since even if they have a good credit policy there are other many factors affecting them. The researchers should find out how DTM’s can strategically position themselves in the market.
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APPENDICES

DEPOSIT TAKING MICRO FINANCE INSTITUTIONS IN KENYA AS AT 31\textsuperscript{ST} JUNE 2013

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) UWEZO Deposit Taking Microfinance Limited

APPENDIX II: INTRODUCTION

Tel no. 0727733658/0775284811
Email: nicolkims@gmail.com
Date 20th September, 2013.

TO THE COMMISSIONER,
CENTRAL BANK OF KENYA,
NAIROBI.

Dear Sir/Madam,

REF: REQUEST FOR DATA FOR MY RESEARCH

My name is Nicolette Kimondo from the University of Nairobi. I am currently doing my degree in MSC. Finance and was requesting for information about financial performance of Deposit Taking Micro Finance Organizations in Kenya for completion of my study.

Your assistance will be highly appreciated.

Thanks.

Yours Faithfully,

Kimondo Nicolette.
## APPENDIX III: BUDGET ESTIMATES

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<thead>
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<th>ITEM</th>
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<td>Travelling &amp; Lunch</td>
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<tr>
<td>Internet Costs</td>
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</tr>
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<tr>
<td>Typing</td>
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<tr>
<td><strong>TOTAL COST</strong></td>
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