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# EFFECT OF CREDIT MANAGEMENT PRACTICES ON LOAN PERFORMANCE IN DEPOSIT TAKING MICROFINANCE BANKS IN KENYA

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### **Abstract**

Credit management function facilitates efficient management and administration of the loan portfolio in order to ensure equitable distribution of funds and to encourage liquidity planning. This study is set to determine the effect of credit management practices on loan repayment. The study adopted descriptive research design. The research study targeted employees of the deposit taking Microfinance Institutions sampled. The employees were classified into the following sectors which include top level, middle level and lower level. The target population consisted of 10 Deposit Taking MFIs. Primary data was collected by use a structured questionnaire. Secondary data was obtained from financial reports of micro finance institutions, Central Bank of Kenya (CBK) reports and library was reviewed for completeness and consistency in order to statistical analysis. The primary data was analyzed using statistical measures of mean and standard deviation. Further inferential statistics using multiple linear regression models were used. The models were used to determine the relative effect of credit risk management practices on loan repayment. From the findings, the study established that credit standards, credit policy, credit terms and collection policy affect the organizational performance. The study concluded that credit management is one of the most important activities in any company and cannot be overlooked by any economic enterprise engaged in credit irrespective of its business nature. Sound credit management is a prerequisite for a financial institution s stability and continuing profitability. From the finding and conclusions deposit taking microfinance institutions should ensure to a very great extent on the adoption of credit standards, credit policy, credit terms and collection polices.

Key Words: Credit Risk Management, credit standards, credit policy, credit terms and collection policy, Loan Performance

# INTRODUCTION

Risk management is an important function of financial institutions in creating value for shareholders and customers (Pagano, 2001). By recognizing, understanding and managing risks, more risks can be assumed and performance increased. Enterprise risk management applies organizational knowledge to make better decisions about risk and reward through market pricing and capital charges (Ciborra, 2006). The concept of credit risk emerged as a risk category that describes residual risk not captured in market and credit risk management practices (Basel Committee, 2001). Credit management practices is important as MFI's reduce their exposure to non-repayment of loans and enhance their ability to compete in the market with other well established financial institutions like banks. Therefore it's important for micro finance institutions to adopt credit management practices such as credit standards, credit policies, credit terms and collection efforts (Ciborra, 2006).

Currently banks have witnessed rising non-performing credit portfolios and these significantly contributed to financial distress in the banking sector. As with any financial institution, the biggest risk in microfinance is lending money and failing to recover it. Credit risk is a particular concern for Microfinance Institutions (MFIs) because most micro lending is unsecured (Christen, Lyman and Rosenberg, 2003). The clients concerned are majorly those who cannot avail credit from banks and such other financial institutions due to the lack of ability to provide guarantee or security against the money borrowed. Many credit unions do not extend credit to these kinds of clients due to the high default risk for repayment of interest and in some cases the principal amount itself. Deposit Taking Microfinance Institutions are required to design sound credit management practices that entail the identification of existing and potential risks inherent in lending activities to improve on financial performance.

Credit management practices influence identification of potential credit default which is critical as high default rates lead to decreased cash flows, lower liquidity levels, financial distress and lower loan provision rates. In contrast, lower credit exposure means an optimal debtors' level with reduced chances of bad debts and high profitability (Gitman, 1997). In today's business environment, risk management and improvement of cash flows are very challenging. With the rise in bankruptcy rates, the probability of incurring losses has risen. Scheufler (2002) indicated that credits policies, standards and appraisal procedures enable the firm to earn financial returns. Credit management provides a leading indicator of the quality of deposit MFIs credit portfolio. In the United States, the Circuit Court has found considerable actuarial evidence that credit scores are a good predictor of risk of loss (Johnson-Speck, 2005). Credit scoring has many benefits that accrue not only to the lenders but also to the borrowers. For example, credit scores help to reduce discrimination because credit scoring models provide an objective analysis of a consumer's creditworthiness. Soke Fun, Ho and Yusoff (2009), in their study on credit risk management strategies of selected financial institutions in Malaysia, observed that the majority of financial institutions and banks losses stem from outright default due to inability of customers to meet obligations in relation to lending, trading, settlement and other financial transactions.

In Africa among other developing economies, microfinance institutions are the main source of funding for microenterprises and thus credit policies play an important role in risks management of most financial institutions. Omara (2007) in Uganda to investigate on the credit assessment process and repayment of bank loans; 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. This negatively impacted on loan repayment. Vincent Byusa & David Nkusi (2012) investigated effects of credit policy on bank performance in selected Rwandan commercial banks and revealed that credit policies, credit responsibility, collection policy and credit evaluation policies ranging from car loans, personal loans, overdraft and mortgage at interest led to increase in customer base and existence of bad debts. In Ghana, Ntiamoah, Egyiri, Diana Fiaklou, Kwamega, (2014) asserted that there existed a significant relationship between credit management practices and loan performance using some selected microfinance in the Greater Accra region of Ghana as a case study. Results of the study indicated that there was high positive correlation between the credit terms and policy, lending, credit analysis and appraisal, and credit risk control and loan performance.

A key requirement for effective credit management is the ability to intelligently and efficiently manage customer credit lines. In order to minimize exposure to bad debt, over-reserving and bankruptcies, companies must have greater insight into customer financial strength, credit score history and changing payment patterns (Migiri, 2002). In Kenya, microfinance banks have faced increasing default rates in the last decade that have triggered the need to develop and implement credit policies in an attempt to mitigate the risks of default by microfinance banks in Kenya. A report by CBK, (2012) indicated that a large portion of Kenyan financial institutions' revenue is generated from credit extended to various individuals and organizations. This revenue is in the form of interest earned and charges on the preparation and management of the credit process. Simiyu, (2008) studied the techniques used by micro finance institutions in the management of credit risk in Kenya. The findings of this study concluded that microfinance institutions that implemented credit management practices reported the highest amount of revenue in form of interest from extended credit to customers and firms.

## **Statement of the Problem**

The rise of Deposit taking Microfinance Institutions opens a wide range of credit risks resulting into adoption of credit policies such as credit risk control, credit standards, credit analysis and appraisal in an effort to achieve effective credit management. However, loan delinquency has continue to be experienced by Deposit Taking MFIs even after adoption of credit policy and guidelines, prudent lending (Mathara, 2007). Deposit taking MFI's have experience high levels of non-performing loans and a default rate of 21%. Loan repayment rates in micro finance institutions is influenced by factors as 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 (Okeet al., 2007). Credit managers need to boost their managerial skills to reduce the risk of loan default because the institutions financial viability is weakened by the loss of principal and interest, yet on the other hand MFI's operate under objectives of maximizing benefits to members which include the social role of providing loans to help members achieve their standard of living goals. These social roles conflict with financial viability of MFI's if credit managers become less stringent in the lending practices to assess and monitor the credit risk of member borrowers.

The successes of Micro Finance Institutions largely depend on the effectiveness of their credit management practices which implicates high levels of loan repayment and improvement in profitability level. Deposit Taking MFIs in Kenya adopt different credit risk management practices, credit policies of banks, credit scoring systems, banks regulatory environment and the caliber of management of the banks. However, Deposit Taking MFIs continue to experience increase in high default rate and high level of nonperforming loans. The quarterly financial report on banking institutions development indicate the sector's gross loans and advances increased from Sh1.40 trillion in March 2010 to Sh1.45 trillion in June 20, 2015 which translated to a growth of 3.6 per cent (CBK,2015). However the MFIs also faced higher loan default rate as non-performing rate rose by 15 per cent from Sh70.3 billion in March 2013 to Sh77.3 billion in 2015 attributed partially to credit risks in the market. This trend not only threatens the viability and sustainability of the microfinance's but also hinders the achievement of the goals for which they were intended which are to provide credit and bridge the financing gap in the mainstream financial sector. Despite the use of credit management practices in Deposit Taking MFIs, there has been scanty empirical studies focusing on effects of credit management practices on loan performance. This study seeks to fill the existing knowledge gap by establishing effects of credit management practices on loan performance in Deposit Taking MFIs in Kenya.

# The objectives of the study were:

- i. To assess the effect of credit standards on loan performance of microfinance institutions in Kenya.
- ii. To determine the effect of implementation of credit policy on loan performance of Deposit taking Microfinance Institutions in Kenya.
- iii. To analyze how credit term affects loan performance of Deposit taking Microfinance Institutions in Kenya.
- iv. To establish the effect of collection methods on loan performance of Deposit taking Microfinance Institutions in Kenya.

### **Research Questions**

- i. To what extent do credit standards affect loan performance of Deposit taking Microfinance Institutions in Kenya?
- ii. To what extent does credit policy affects loan performance of Deposit taking Microfinance Institutions in Kenya?
- iii. How do credit terms influence loan performance of Deposit taking Microfinance Institutions in Kenya?
- iv. To what extent does collection efforts affects loan performance of Deposit taking Microfinance Institutions in Kenya?

#### LITERATURE REVIEW

### **Theoretical Framework**

The asymmetric information theory was first introduced by Akerlof's 1970 which shows that there exists information asymmetry in assessing bank lending applications (Binks and Ennew, 1997). Information asymmetry theory describes the condition in which relevant information is not known to all parties involved in an undertaking (Ekumah & Essel, 2003). Eppy (2005) describes a condition in which all parties involved in an undertaking do not know relevant information. The theory point out that perceived information asymmetry poses two problems for the financial institution, moral hazard, monitoring entrepreneurial behavior and adverse selection that is making errors in lending decisions. The theory informs the study in that if credit unions exchange information about their clients' credit worth, they can assess also the quality of foreign credit applicants and lend to them as carefully as they lend to local customers (Denis, 2010). By reducing information asymmetry between lenders and borrowers, credit registries allow loans to be extended to safe borrowers who had previously been priced out of the market, resulting in higher aggregate lending and low default rates. Transaction cost theory has proven to be an essential framework for decisions on the vertical boundaries of a firm. Williamson (2000), indicated that transaction occurs when a good or service is transferred across a technologically separable interfaces. One stage of activity terminates and another one begins. First developed by Schwartz (1974), this theory conjectures that suppliers may have an advantage over traditional lenders in checking the real financial situation or the credit worthiness of their clients. Suppliers also have a better ability to monitor and force repayment of the credit. All these superiorities may give suppliers a cost advantage when compared with financial institutions.

A threat to breach the contract can be seen as untrustworthy, since there is no alternative. A lock-in of one transaction party leads to a hold up. Low specificity exists, if there is a range of homogeneous services or goods and supply is secured. This theory informs the study in that financial institutions develop credit policies such as credit terms and credit standard procedures to evaluate their customer credit-worthiness and ability to repay credit facilities. Brown, Jappelli and Pagano (2007) posit that this theory brings out the relevance of information sharing in a market with asymmetric information, either moral hazard or adverse selection. Microfinance Institutions use the 5Cs theoretical model of credit to evaluate a customer as a potential borrower (Abedi, 2000). The 5Cs help MFIs to increase loan performance, as they get to know their customers better. These 5Cs are: 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 (Psillaki, Tsolas & Margaritis, 2010). 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.

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 are based on the individual credit application by considering character assessment, capacity, condition, and collateral and

security capital. Tight credit standards make a firm lose a big number of customers and when credit standards are loose, firms gets an increased number of clients but at a risk of loss through bad debts, hence lack of credit standards and credit policy increases bad debts recovery. Credit standards are often created after careful analysis of past borrowers and market conditions, and are designed to limit the risk of a borrower not making credit payments or defaulting on loaned money. The set of standards that a company or bank uses to determine whether to extend a loan or line of credit to an applicant. Credit standards may include having a recent good credit history, and a certain income.

There are various policies that lenders put in place to ensure that credit administration is done effectively. One of these policies is collection policy which is needed because all customers do not pay the firms bills in time. The collection effort should, therefore aim at accelerating collections from slow payers and hence reducing bad debt losses. A collection policy ensures prompt and regular collection for fast turnover of working capital keeping collection costs and bad debts within limits and hence maintaining collection efficiency. The collection policy specifies clear-cut collection procedures and hence dissuades conflicts arising from loan repayment periods, amounts and loan structure (Pandey, 2004). The policy analyses business viability position and business Management by appraising the financial strength of the applicant, the firm's quality of management and nature of the customers businesses. The lender also conducts management audit to identify weakness of the customer's business management.

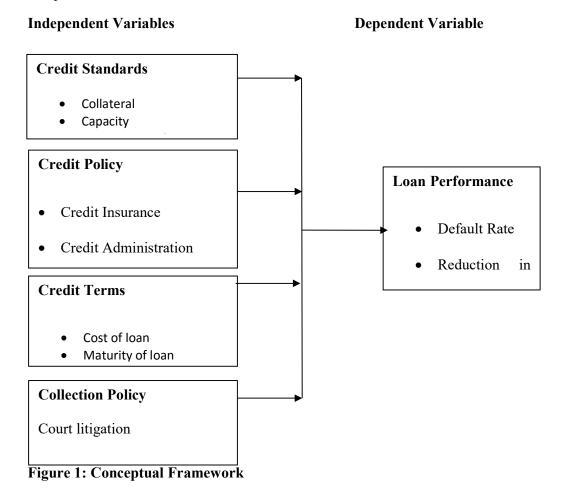
A Credit term is a contractual stipulation under which a firm grants credit to customers furthermore these terms give the credit period and the credit limit. The firm should make terms more attractive to act as an incentive to clients without incurring unnecessary high levels of bad debts and increasing 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 and Weiss, 1981). It is evaluated by the position of the client as indicated by the ratio analysis, trends in cash flow and looking at capital position (Christen & Rosenberg, 2000). Maturity of a loan, this is the time period it takes a loan to mature with the interest there on. Cost of loan, by understanding the borrower, the risk premium can be ascertained and the profit erosion from bad debts can be decreased hence increasing bank performance. 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).

The collection process can be rather expensive in terms of both product expenditure and lost good will (Tandelilin, Kaaro, & Supriyatna, 2007). Collection efforts may include attaching mandatory savings forcing guarantors to pay, attaching collateral assets, courts litigation. Methods used by Deposit Taking MFIs could include letters, demand letters, telephone calls,

visits by the firm's officials for face to face reminders to pay and legal enforcements. Zimmer (2003) asserts that collection policy is a guide that ensures prompt payment and regular collections. Collection procedure is required because some clients do not pay the loan in time hence collection efforts aim at accelerating collections to avoid bad debts. According to Dawkin (2010) posited that prompt payments aimed at increasing turn over keeping low bad debts. Collection efforts are directed at accelerating recovery from slow payers and decreases bad debts losses increase profitability of the banking institution 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). Rajedom (2010) asserts that collection policy is a guide that ensures prompt payment and regular collections.

# **Conceptual Framework**

The figure below shows the study's conceptual framework which illustrates the relationship between the variables of the study. The independent variables relate to Loan Repayment DT microfinance bank which is the dependent variable in this study and the independent variables are Credit Standards, Credit Policy, Credit Term and Collection Efforts. A conceptual framework has been drawn to show the link between the dependent and the independent variables.



# **Empirical Review**

Studies have been done in relation to credit management practices and loan repayment in the banking industry in the local setting and globally. Gizaw, Kebede and Selvaraj, (2015) examined the impact of credit risk on profitability of commercial banks in Ethiopia. The objective of the study was to empirically examine the impact of credit risk on profitability of commercial banks in Ethiopia. Data was collected from 8 sample commercial banks for a 12 year period (2003-2004) from annual reports of respective banks and National Bank of Ethiopia. The data were analyzed using a descriptive statics and panel data regression model and the result showed that credit risk measures, non-performing loan, loan loss provisions and capital adequacy have a significant impact on the profitability of commercial banks in Ethiopia. Ntiamoah, Diana and Kwamega (2014) carried out a study on assessment of the relationship between credit management practices and loan performance using some selected microfinance institutions in the Greater Accra region of Ghana as a case study. Results of the study indicated that there was high positive correlation between the credit terms and policy, lending, credit analysis and appraisal, and credit risk control and loan performance. Ayodele, Thomas, Raphael & Ajayi (2014) carried out a study on impact of credit policy on the performance of Nigerian Commercial Banks using Zenith Bank Plc as case study. Primary data was collected through questionnaires served on sixty (60) respondents of the bank. The findings from the study showed that having a good credit policy in place goes a long way in minimizing the incidence of bad debts.

Owizy (2013) evaluated the impact of credit management on financial performance of Nigerian banks, with particular reference to UBA Plc. Financial ratios as measures of bank performance and credit indicators were the data collected from secondary sources mainly the annual reports and accounts of sampled banks from 2004 - 2008. Descriptive, correlation and regression techniques were used in the analysis. The findings revealed that credit management has a significant impact on the profitability of Nigeria banks. Byusa and Nkusi (2012) investigated effects of credit policy on bank performance in selected Rwandan Commercial banks. The aim of this study was to investigate the effects of credit policy on bank performance using data on selected Commercial Banks. The results obtained indicated that the Rwanda's commercial banks increased their accounts, increased customer base and improved their financial indices, thereby maximizing their profits. However, inadequate competition in the banking system led to high spreads. Banks have unusually high and increasing average interest rate spreads and interest rate margins showing both highly poor competition and inefficiency. Djankov, McLiesh and Shleifer (2007) studied the effects of credit management on loan repayment in private credit in 129 countries in Eastern Europe, financial managers of the finance institutions were interview and data analysis was conducted using descriptive methods. The findings of the study concluded that credit management practices facilitated payment of loan. 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 matrix 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.

### RESEARCH METHODOLOGY

# Research Design

This research adopted a descriptive survey research design. The major purpose of descriptive survey research design is to describe the state of affairs as it is at present. According to Cooper and Schindler (2003) a descriptive survey research design help in collecting data in order to test hypotheses or answer questions concerning the current status of the subjects in the study. The descriptive design refers to a set of methods and procedures that describe variables. This research design involves gathering quantitative data that describe events and then organizes, tabulates, depicts, and describes the data. According to Kothari (2004), a descriptive design involves planning, organizing, collection and analysis of data so as to provide information being sought. This design also helps in collecting qualitative data to provide a great depth of responses resulting in a better and elaborate understanding of the phenomenon under study

Descriptive survey research design involves methods such as the survey which describes the status quo, the correlation study which investigates the relationship between variables and developmental studies which seek to determine changes over time. Descriptive research design was chosen because it enables the researcher to generalize the findings to the larger population. The target population of this study was all the 10 Deposit Taking MFIs. The study population comprised of General Managers, financial managers, credit analysts, operation managers, internal auditors making a total of 50 officers. The study considered 100% of the population. The primary data for this study was collected using the questionnaires. Questionnaire ensure that details and relevant information on the subject of study was collected. Questionnaires was used in collecting data and consisted of a mixture of open ended and close ended questions. The questionnaires was administered using drop and pick method. The questionnaires will be used to allow the respondents who were the General Managers, financial managers, credit analysts, and operation managers, internal auditors to give their responses in a free environment and help the researcher gather information on credit management practices. The study also collected secondary data from commercial banks financial reports and CBK supervisory reports. From the financial reports, non-performing loans over gross loans was extracted from the financial statements of the Deposit Taking MFIs to determine loan portfolio performance.

# **Data Analysis and Presentation**

The collected data was analyzed through descriptive analysis that is means and standard deviation to determine the extent to which credit management practices influence the loan performance of Deposit Taking MFIs. Inferential statistics correlation and regression analysis

were used to establish the relationship between credit management practices and the loan performance of Deposit Taking MFIs. The inferential analysis sought to establish the relationship between the independent variables and the dependent variable. Credit management practice was quantified from 1-5 Likert scale questions. Correlation analysis was used to establish the strength of the relationship between credit management practices and the loan portfolio performance of Deposit Taking MFIs. A linear regression model was applied to examine the relationship between the variables. The model treats loan portfolio performance of in Deposit Taking MFIs as the dependent variable while the independent variables were the credit management practices which include credit standards, credit policy, credit terms and collection policy. The relationship model was represented in the linear equation below:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where, Y= Loan Portfolio Performance

 $\alpha$ = Constant Term:

X<sub>1</sub>= Credit Standards

X<sub>2</sub>= Credit Policy

X<sub>3</sub>= Credit Terms

X<sub>4</sub>= Collection Policy

e= Error Term

### DATA ANALYSIS AND DISCUSSION

# **Credit management practices**

Table 1: Extent to which credit standard issues affects loan performance

Statement	Mean	Standard deviation
There are set of standards that a bank uses to determine whether to extend a loan or line of credit to an applicant	4.66	0.65
Analysis of past borrowers and market conditions limit the risk of a borrower not making credit payments or defaulting on loaned money	4.59	0.55
Assess market conditions risk of a borrower to limit loan	4.71	0.64
Provision of credit history and a certain income	4.84	0.75
Assessing client characters	4.86	0.75
Determination of client creditworthiness	4.90	0.88

Table 1 shows the respondents response on the extent to which credit standard issues affects loan performance. From the findings, majority of the respondents indicated that determination of client creditworthiness, assessing client characters, provision of credit history and a certain income and assessing market conditions risk of a borrower to limit loan affects loan performance to a very great extent as indicated by a mean of 4.90, 4.86, 4.84 and 4.71 supported by 0.88, 0.75, 0.75 and 0.64. Most of the respondents indicated that there are set of standards that a bank uses to determine whether to extend a loan or line of credit to an applicant and that analysis of past borrowers and market conditions limit the risk of a borrower not making credit payments or defaulting on loaned money to a very great extent as indicated by mean of 4.66 and 4.59 with standard deviation of 0.65 and 0.55. This implies that Banks must ensure that the credit-granting function is being properly managed and that credit exposures are within levels consistent with prudential credit standards. This is in line with Kakuru (1998), who noted that it's important that credit standards are based on the individual credit application by considering character assessment, capacity, condition, and collateral and security capital.

# **Credit Policy**

Table 2: Effects of credit control policy on loan repayment

	Mean	Standard deviaton
Existing Credit Policy Overhead cost policy	4.73 4.57	0.64 0.50
General trend of credit worthiness State of the economy	4.88 4.70	0.69 0.53

Table 4.8 shows respondents' response on the extent they agreed on the given effect of credit control policy on loan repayment. Majority of the respondents indicated that general trend of credit worthiness, existing credit policy, state of the economy and overhead cost policy loan repayment in the DTMFIs as indicated by a mean of 4.88, 4.73, 4.70 and 4.57 with standard deviation of 0.69, 0.64, 0.53 and 0.50. This clearly shows that credit control is a critical system of control as it prevents the institution from becoming illiquid due to improper issuance of credit to customers and therefore appropriate controls and responses must be put in place. This concurred with Weston (1982), who stated that credit policies considers credit limit which the firm will extend at a point in time. He further stated that banks should have keen awareness of the need to identify, measure monitor and control credit risks as well as have adequate capital against these risks.

# Credit policy effect on loan repayment

Table 3: Credit policy effect on loan repayment

Statement	Mean	Standard deviation
Comprehensive credit policy communicates a consistent standard to	4.78	0.61
bank customers		
Assessing the risk of losses associated with credit extended to	4.62	0.57
customers, financial investments and counterparty risks		
Enhances cross-functional cooperation especially between the credit	4.44	0.50
and sales departments		
To mitigate risks to prevent financial losses	4.80	0.73

From the findings in Table 3, majority of the respondents strongly agreed that to mitigate risks to prevent financial losses, comprehensive credit policy communicates a consistent standard to bank customers and assessing the risk of losses associated with credit extended to customers, financial investments and counterparty risks effects on loan repayment as indicated by a mean of 4.80, 4.78 and 4.62 with standard deviation of 0.73, 0.61 and 0.57. Most of the respondents agreed that enhancing cross-functional cooperation especially between the credit and sales departments' effects on loan repayment as indicated by a mean of 4.44 and standard deviation of 0.52. This implies that DTMFIs developing appropriate credit policies to ensure that credit administration is done effectively and increasing the affect loan repayments and bad debts. This is in line with Batar et al (2008), who stated that credit policy provides the basis of all the credit management, it establishes objective standards and parameters to be followed by bank employees responsible for the provision and processing of loans and management.

### **Credit Terms**

Table 4: Credit terms effects on loan repayment

Statement	Mean	Standard deviation
The bank has more attractive credit terms to act as an incentive to	177	0.64
clients	7.//	0.04
Lack of credit terms lead to unnecessary high levels of bad debts and	4.60	0.58
increasing organizations risk	1.25	0.42
Clear method of calculating interest and loan repayment installments	4.35	0.42
Credit period is determine	4.19	0.44
The interest rate for loan repayment	4.72	0.60
Credit worthiness accelerate timely collection to cut back on the amount of doubtful debts and associated costs	4.66	0.54

Table 4 shows findings where majority of the respondents strongly agreed that the bank having more attractive credit terms to act as an incentive to clients, the interest rate for loan repayment and credit worthiness accelerate timely collection to cut back on the amount of doubtful debts and associated costs effects loan repayment as indicated by a mean of 4.77, 4.72 and 4.66 with standard deviation of 0.64, 0.54 and 0.58. Most of the respondents strongly agreed that lack of credit terms lead to unnecessary high levels of bad debts and increasing organizations risk effects loan repayment as indicated by a mean of 4.65 with standard deviation of 0.58. Most of the respondents agreed that clear method of calculating interest and loan repayment installments and determining the credit period effects loan repayment as indicated by a mean of 4.35 and 4.19 with standard deviation of 0.42 and 0.44. This shows that document relating to services offered to clients effects loan repayment. This is in line with Riach (2010), who observed 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.

# Collection Policy Effects of loan collection efforts on loan repayment at your institution

Table 5; Effects of loan collection efforts on loan repayment at your institution

Statement	Mean	Standard deviation
Use auctioneers to recover loans	4.69	0.79
Sale of the property to recover loans	4.79	0.75
Leave the defaulters to pay at their own free will	3.70	0.25
Write the debt off and account it as Bad debts	4.63	0.56
Write off interest and allow them to Pay the principle	4.24	0.40

Table 5 shows respondents' response on the extent to which respondents agreed with the given statements on effects of loan collection efforts on loan repayment at the institution. From the finding, majority of the respondents strongly agreed that sale of the property to recover loans, use auctioneers to recover loans and writing off interest and allow them to pay the principle affect loan repayment as indicated by a mean of 4.79, 4.69 and 4.63 with standard deviation of 0.75, 0.79 and 0.56. Most of the respondents agreed that write off interest and allow them to pay the principle affect loan repayment as indicated by a mean of 4.24 with standard deviation of 0.40. Most of the respondents indicated that leave the defaulters to pay at their own free will affect loan repayment as indicated by a mean of 3.70 with standard deviation of 0.25. This implies that credit collection efforts were an important practice in facilitating loan repayment. This is in line with Padilla and Pagano (2000), who stated that collection efforts are directed at accelerating recovery from slow payers and decreases bad debts losses increase profitability of the banking institutions.

# Loan Performance

# Credit management practices influence loan repayment performance

Table 6: Credit management practices influence loan repayment performance

Statement	Mean	Standard deviation
Loan income ratio	4.45	0.56
Informal credit	4.67	0.77
Credit risk diversification	4.82	0.70
Credit Risk monitoring	4.61	0.60
Credit identification	4.38	4.32
Credit analysis and appraisal	4.60	4.52

The study sought on the extent to which respondents agreed with the given credit management practices influence on loan repayment performance. from the findings, majority of the respondents strongly agreed that Credit risk diversification, Informal credit, Credit Risk monitoring and Credit analysis and appraisal influence loan repayment performance as indicated by mean of 4.82, 4.65, 4.61 and 4.60 with standard deviation of 0.70, 0.77, 0.60 and 0.52. Most of the respondents agreed that Loan income ratio and Credit identification influence loan repayment performance as indicated by mean of 4.45 and 4.38 with standard deviation of 0.56 and 0.32. This implies that credit management practices facilitated payment of loan. This is in line with Owizy (2013), revealed that credit management has a significant impact on the profitability of Nigeria banks.

**Table 7: Descriptive Statistics on Loan Performance** 

	Non-performing Loans/ Total loan
Minimum	0.108
Maximum	0. 219
Mean	0.0278
Std. Deviation	0.0132

Kurtosis 4.3029

The study found that the Maximum Mean of loan performance, default rate was 0.219 with a Minimum Mean of 0.108. The study found that the mean the mean of loan portfolio performance for DTMFIs was 0.0278, standard deviation of 0.0132 and relatively peaked distribution as indicated by KURT of 4.3029. This implied that use of credit management practices lower default rate. This demonstrated that DTMFIs assess the long term plans of loan applicants to indentify future risks of the business, indentified risk diversification, risk monitoring and credit risk appraisal lower default rates

# **Correlations Analysis**

**Table 8: Correlation of the study variables** 

		Loan Portfolio Performance	Credit Standards	Credit Policy	Credit Terms	Collection Policy
Loan Portfolio Performance	Pearson Correlation Sig. (2-tailed)	0.02				
Credit Standards	Pearson Correlation	.755(*)	1			
	Sig. (2-tailed)	0.02	.001			
Credit Policy	Pearson Correlation	.868(**)	.715	1		
	Sig. (2-tailed)	.003	.002	.004		
Credit Terms	Pearson	.792(*)	.873(*)	.590(*)	1	
	Correlation Sig. (2-tailed)	.001	.001	.007	.003	
Collection Policy	Pearson Correlation	.839(*)	.871(*)	.580(*)	.801(*)	1
	Sig. (2-tailed)	.002	.002	.037	.003	.004

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

The study conducted a Pearson correlation analysis for all the study variables and noted that there existed a very strong negative correlation between the credit management practices and the loan portfolio performance of Deposit Taking MFIs. The strength of association between

<sup>\*</sup> Correlation is significant at the 0.05 level (2-tailed).

credit standards and the loan portfolio performance was strong and positive having scored a correlation coefficient of 0.755 and a 95% precision level. The correlation was statistically significant since it had a P- Value of 0.02 which was less than 0.05 hence statistically significant. There also existed a strong and positive correlation between credit policy and loan portfolio performance with a correlation coefficient of 0.868 and a significance level of 0.01. This correlation was statistically significant since its P- Value of 0.003 was less than 0.05. The strength of association between credit terms and loan portfolio performance was strong and positive having scored a correlation coefficient of 0.792 with a P-Value of 0.001 and a 95% confidence level. The correlation was statistically significant since it had a P-Value of less than 0.001 and therefore statistically significant. The strength of association between collection policy and loan portfolio performance was strong and positive having scored a correlation coefficient of 0.839 with a P-Value of 0.002 and a 95% confidence level. The correlation was statistically significant since it had a P-Value of less than 0.002 and therefore statistically significant. This implied that there existed a positive correlation between the independent variables which are between credit standards, credit policy, credit terms and collection policy and the dependent variable loan portfolio performance.

Coefficients (a)
Table 9 : Coefficients (a)

Model Unstand Coeffic		lardized ients	Standardized t Coefficients		Sig.	
		В	Std.Error	Beta		
1	(Constant) Credit standards	3.852 .827	0.000 0.593	.375 .632	2.445 2.712	.001 0.003
	Credit policy	.732	0.890	.523	.000	0.001
	Credit terms	.636	0.542	.261	.000	0.004
	Collection policy	.719	.476	.279	0.437	0.002

- a. Predictors: (Constant) Credit standards, Credit policy, Credit terms and Collection policy
- b. Dependent: Loan portfolio performance

The established regression equation was;

$$Y = 3.852 + .827X_1 + .732X_2 + .636X_3 + .719X_4$$
 e

Where:

Y= Loan portfolio performance  $\alpha$  = Constant,  $\beta$ = Coefficient factor,  $X_1$ = Credit standards,  $X_2$ = Credit policy,  $X_3$ = Credit terms,  $X_4$ = Collection policy and  $\mu$ = Error Term

From the above regression model, it was found that loan portfolio performance would be at 3.852 holding credit management practices affecting the loan portfolio performance which include credit standards, credit policy, credit terms and collection policy constant at zero. The study established that adoption of credit standards significantly influence loan portfolio

performance (r= -.827, p=0.003<0.05). The results in Table 4.19 shows that credit policy would significantly affect loan portfolio performance (r=.732, p=0.001<0.05). From the regression results in Table 4.19 on credit terms, the study found that credit terms significantly influence loan portfolio performance (r=.636, p=0.004<0.05). From the regression results in Table 4.19 on collection policy, the study found that collection policy significantly influence loan portfolio performance (r=.719, p=0.002<0.05). This clearly indicated that credit standards, credit policy, credit terms and collection policy affect the loan portfolio performance.

# **Conclusions of the Study**

The study concluded that credit management is one of the most important activities in any company and cannot be overlooked by any economic enterprise engaged in credit irrespective of its business nature. Sound credit management is a prerequisite for a financial institution stability and continuing profitability, while deteriorating credit quality is the most frequent cause of poor financial performance and condition. As with any other financial institution, the biggest risk in deposit taking microfinance institution is lending money and not getting it back. The study concluded that each company needs to have its own method of credit management and determining quality of its clients. In conclusion, it was observed that there was a positive significant association among the study variables which included credit standards, credit policy, credit terms and collection policy affect the loan portfolio performance. The study concluded that applying credit standards, evaluating client's credit history before giving out credit, objective standards and parameters to be followed by bank employees responsible for the provision and processing of loans and management. Discussion of findings indicate that favorable credit terms formulated by the deposit taking microfinance institutions including interest rates, collateral, repayment periods, and the cost of loan maturity of loan and credit period affect loan performance.

Various policies that lenders put in place to ensure that credit administration is done effectively, the study concluded that credit policy adopted by deposit taking microfinance institutions has an effect on loan performance, credit insurance, signing of covenants with customers, diversification of loans, credit rating of customers, reports on financial conditions, refrain from further borrowing had an effect on loan performance. Collection efforts are directed at accelerating recovery from slow payers and decreases bad debts losses increase profitability of the banking institutions. Collection policies adopted by deposit taking microfinance institution had an effect on loan performance, court litigation had a great impact on loan performance, collateral assets and enforce saving had an effect.

# Recommendation

Effective management of credit is essential to the long term success of any microfinance institution. From the finding and conclusions deposit taking microfinance institutions should ensure to a very great extent on the adoption of credit standards, credit policy, credit terms and collection polices. Credit standards that a bank uses to determine whether to extend a loan or line of credit to an applicant, the study therefore recommended that there should be optimum credit standards indicating that before giving any loan, client's repaying capacity, status of business and cash flows must be assessed. Credit terms normally stipulate the credit period, interest rate, method of calculating interest and frequency of loan installments.

DTMFIs should develop and maintain a credit administration function that provide guidance to anyone involved in the credit function of the institution and to insure safeguards are in place to manage the loan portfolio. Credit approval decision is made using a purely judgmental approach by merely inspecting the application form details of the applicant. The study recommends that DTMFIs management should assess client capacity to repay the loan helps in taking loan decision whether a client should be a given a loan and about appropriate volume of loan.

The study recommends that DTMFIs should enhance their collection policy by adapting a more court litigation, collateral assets and enforce saving. The collection policy should ensure prompt and regular collection for fast turnover of working capital keeping collection costs and bad debts within limits and hence maintaining collection efficiency. DTMFIs should develop appropriate credit policies to ensure that credit administration is done effectively and increasing the affect loan repayments and bad debts.

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