DEBT RECOVERY TECHNIQUES ON LOAN PERFOMANCE OF DEPOSIT TAKING MICROFINANCE INSTITUTIONS IN MOMBASA COUNTY

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ABSTRACT

The purpose of the study was to investigate the debt recovery techniques on loan performance of deposit taking MFIs in Mombasa County. The theories guiding the study were moral hazard theory, Value Based Portfolio Theory, credit market theory and loanable funds theory. The study used a cross-sectional descriptive research design. The target population of the study was management of the 6 deposit taking MFIs which were licensed by CBK and had fully-pledged branches in Mombasa. The study employed stratified sampling technique whereby the target population was divided into different groups and those with similar characteristics were grouped in the same stratum then sample for the study was selected at random from each stratum. The study employed Yamane formula to derive a sample of 58 respondents. The study used primary and secondary data. A structured questionnaire was used to collect the primary data. Collected data was quantitatively analyzed by use of Statistical Package for Social Science (SPSS) version 26 as the data analysis tool. The data analysis techniques used were descriptive statistics, correlation analysis and multiple regression analysis. Analyzed data was presented in tables and charts for ease of interpretation. The findings revealed that adverse credit listing, collection policy, loan limit reduction and fines & penalties have significant effect on loan performance. The microfinance repossesses security provided to acquire loan from the borrowers. Also the microfinance undertakes auction of the borrower's assets to minimize loan loss and that the microfinance requires the guarantor to settle the loan amount due in case of default by borrower. The study concluded that deposit taking micro finance performs credit scoring on the borrower before issuing approval for loans. In many cases, the deposit taking MFI collaborates with credit bureaus closely through information sharing. The deposit taking MFI, uses adverse credit listing to improve the precision of the signal about the quality of potential borrower and the information shared by the credit bureaus offers MFI imprecise knowledge of a borrower's likelihood of repaying. The study recommended that the management of MFIs should make use of private collection agents to help the institutions recover outstanding loan amounts from the non-paying borrowers. The use of these private collectors has a potential to recover the bad debts as they have unique deterrence measures which are not allowed in the MFIs sector.

Key Words: Fines and Penalties, Adverse Credit Listing, Loan Limit Reduction, Collection Policy

INTRODUCTION

In recent years, lending risk and recovery strategies has gained focal importance because of huge financial losses faced by big international financial organizations (Nikolaidou & Vogiazas, 2017). The quality of credit loan portfolios globally had been steady up until the crisis that hit the global economy in the years 2007 and 2008. The financial institutions' sector and microfinance institutions in particular have adopted additional steps since the financial crisis to avoid any future financial losses caused by mismanagement in loan allocations and credit recoveries.

Globally, a study conducted in the United States of America (Bhatt & Tang, 2016) on four microfinance institutions found that the educational level of a borrower and the proximity of a borrower's business to the lending agency, were the factors that were statistically significant in determining the likelihood of a borrower repaying a credit facility. Still in the US, Altman (2017) in their study of default recovery rates in credit risk modeling noted that as the default rate increase so does the debt recovery rate increase. It therefore calls for measures to be put in place to ensure that credit risk is quickly reviewed to reduce or lower default rate.

In Africa, many banks have suffered financial distress and failure due to non-performing loans. According to African economic outlook (2005), the following can be used to reduce debt recovery problems in African banks; use of reminders has proved to be a good measure to encourage debtors to pay up their debts. Some customers are genuinely not able to remember when their debts are due. In this case, reminders such as short text (SMS), email or a simple telephone call does the magic and enable the client remember their obligation to the bank thereby making them be in a position to repay their debts (Brownbridge, 2016).

In Kenya, over 76% of the banking institutions in the year 2018 noted that they had focused their debt recovery strategies on personal or household loans while 56% had focused their debt recovery

strategies on the trade sectors (CBK, 2019). According to CBK annual reports released shocking evidence that non-performing loans for 2021 was high. According to the annual reports on bank supervision 2020, out of loan book of KES 2.02 trillion in 2020, 5.3 billion was non-performing loans. In addition, Kenya Bankers Association and parliamentary select committee on finance disagreed on the likelihood rise in default rates due to rising interest rates. This does not only call for the financial sector to be prepared in tackling debt recovery but calls for different techniques of debt recovery to be put in place so that as the financial institutions are not caught unawares.

Financial institutions including Microfinance institutions have continued to employ products such as direct debits, mobile banking loan repayment platforms, Mpesa, Airtel money and agent banking among other methods to add onto the traditional loan repayment techniques such as direct deposits, standing orders, checking system as well as salary check off system by employers. These channels have made it easy for borrowers to access the bank and therefore make good of their repayments.

One of the challenges facing many banks is nonperforming loans. Increased lending competition amongst financial institutions has led to extension of loans which are unsecured. The greatest challenge that banks faces is loan default by the customers. Local studies have been undertaken regarding non-performing loans which shows clearly that debt recovery is still a challenge (Nyaoke, 2007 and Africa Economic Outlook, 2005). These studies show that banks still struggle with debt collection leading to the loans going into default.

Despite the fact that microfinance has proven to be an effective and powerful tool for poverty reduction due to its ability to penetrate the poorer strata of society, there have been challenges characterizing the strategies used by microfinance institutions in recovering debt from clients. The difficulty in recovering debts has resulted in a relatively slow

rate of growth and has also kept the cost of credit high. The difficulty microfinance institutions have in recovering debt from clients makes it difficult for them to always have funds available to lend. This leads to a slower rate of growth than would have been desired by the institutions.

Statement of the Problem

In Kenya, the debt market has experienced explosiveness in the degree of NPLs that has risen to Ksh.292 billion. According to CBK annual reports, there is disturbing proof that non-performing loans have been steadily increasing from 2017 to 2021. As indicated in the bank annual supervision report (2021), the efficiency in the financing sector was low since there was a drop of 9.6 % in 2021 of pre-tax profits. There was also a slump in asset quality registration. The non-performing loans rate rose from 8.59 % in 2020 to 9.95% in 2021.

For microfinance institutions, despite MFIs taking measures to mitigate non-performing loans problem, the institutions still have high default rates (20%) that have a negative effect on the performance of MFIs (AMFI, 2021). These institutions are recording high rate of default by their clients which presupposes that most microfinance institutions are not achieving the internationally accepted standard portfolio at risk of 3%, which is a cause for concern (AMFI, 2021). Loan default rate among the individual's borrowers was 13.7% in the year (2015) which is quite high compared to group's borrowers at 5.9% (AMFI, 2021). Micro-finance sector loss hit Ksh 752,930,000 million for the period ended 2017, from a loss of Ksh 388,310,000 million over a similar period in 2016 (CBK, 2020).

Various studies have been done on debt recovery in financial institutions. Mawele (2020) did an assessment on the debt recovery in banks in Zambia. Kipsang (2020) did a study on the effect of debt recovery strategies on loan performance of Fintech companies in Kenya. The study presents contextual gaps. Njenga (2017) investigated the impact of credit management techniques on loan performance in Kenyan deposit taking microfinance

firms. Nyawira (2019) investigated debtor management and financial performance of Microfinance Institutions in Kenya. Kamar and Ayuma (2017) who studied on the effect of debt recovery tactics on the performance of selected financial institutions in Eldoret town and discovered a substantial link between debt recovery and performance. Owich (2021) did a study on debt management and loan performance of commercial banks in Kenya. However, despite extant literature having been done on debt recovery, very few studies have focused on debt recovery techniques in the context of deposit taking Microfinance institutions and the implication on loan performance. The study sought to fill the research gaps by investigating the debt recovery techniques and loan performance of deposit taking Microfinance institutions in Mombasa.

Objectives of the Study

The general purpose of this research was to investigate debt collection techniques on loan performance of deposit taking microfinance institutions in Mombasa County. The specific objectives were;

- To establish the effect of fines and penalties on loan performance of deposit taking Microfinance Institutions in Mombasa County, Kenya.

- To determine the effect of adverse credit listing on loan performance of deposit taking Microfinance Institutions in Mombasa County, Kenya

- To investigate the effect of loan limit reduction on loan performance of deposit taking Microfinance Institutions in Mombasa County, Kenya

- To find out the effect of collection policy on loan performance of deposit taking Microfinance Institutions in Mombasa County, Kenya

The study tested the following hypotheses;

- **H$_{01}$:** There is no significant effect of fines and penalties on loan performance of deposit taking Microfinance Institutions in Mombasa County, Kenya

- **H$_{02}$:** There is no significant effect of adverse credit listing on loan performance of deposit taking Microfinance Institutions in Mombasa County, Kenya

- **H$_{03}$:** There is no significant effect of loan limit reduction on loan performance of deposit taking Microfinance Institutions in Mombasa County, Kenya

- **H$_{04}$:** There is no significant effect of collection policy on loan performance of deposit taking Microfinance Institutions in Mombasa County, Kenya

LITERATURE REVIEW

Theoretical Framework

Moral Hazard Theory

The theory was propounded by Kenneth Arrow in 1963. The assertions of this theory can be traced to the insurance literature. Moral hazard denotes rise in the expected loss (probability of loss due to an event happening) due to individuals and firms behaving in a careless manner because of purchasing insurance. An insured firm may alter its behavior in a manner that increase the expected loss compared to what it would have been without coverage. Its current applications in economics are that "it's a behavior that increases loss as a result of insurance" (Rowell & Connelly, 2016)

Moral hazard concept has been broadly used and is intensely rooted in economics practice thus small attention has been given to the underlying moralistic and ethical notions as suggested by this particular expression or its use (Dembe & Boden, 2016). What should be clear about the term "moral hazard" is that a normative notion arises out of the language Suggesting the presence of a moral danger because of too much insurance provision (Hale,

2016). In the similar way, the study acknowledges the fact that the financial institutions strive to reduce the risk of having non-performing loans. Moral hazard theory supports this study by bringing in the idea that financial institutions through proper debt management techniques have a responsibility to ensure that all the debtors have the capability of repaying their debts as well as the institution meeting their obligations to their lenders. The notion and expectation that another party would likely bear the risk of default creates a moral hazard and eventually will contribute to crisis. The theory supports loan limit reduction variable in the study.

Value Based Portfolio Theory

The study will also be guided by Value Based Portfolio Theory developed by Markowitz in 1959. The value based portfolio theory explains that different components of portfolios play different roles in expanding the overall value of the total portfolio. The specific value gained from each component of the portfolio includes the ratio of contribution to the portfolio outputs like the resale value, safety, reliability and comfort. It also includes the value that customers get from a product in relation to inputs like the price and running costs that customers have to convey in exchange. The derived value of efficiency can be understood as the customers" return investment. Therefore, the debts that have created products offering a maximum customer value are similar to other alternatives which are efficient and experience little possibilities of default and vice-versa (Brealey, & Myers, 2016).

The theory suggests that debt recovery techniques from the perspective of the debtor, is determined by the value that the debt has added to the existing portfolio of investments. Since the 1980s, companies have productively employed a portfolio theory that is modern to market risk. Many companies are now using value at risk models to control their market and interest rate exposures. Unfortunately, however, although credit risk remains the biggest risk challenging most organizations, the duty of applying modern portfolio theory to credit risk has lagged (Lough,

2016). Financial institutions recognize how debt recovery techniques can adversely impact the performance of financial institutions. Due to this, most of the financial institutions are aggressively employing different approaches to debt recovery. The theory supports adverse credit listing variable.

Loanable Funds Theory

This theory was developed by the economist Wicksell and D.H Robertson (1851-1926). Loanable funds refer to the amount of money that is demanded by the consumers and the amount of money that is available for supply by the lenders in an economic entity. According to Wenshen (2016) the rate of interest is determined at the point where demand equals supply of the funds. At this point there is enough opportunity, investors utilize that opportunity and invest more, while savers make more deposits with an expectation of higher interest, at this point the cost of credit is determined (Ngugi, 2016).

The theory creates a major impact to both savers and borrowers, since at the equilibrium position the two parties should be compensated (Emmanuele, 2017). Fluctuations in the rate of interest in a money market arise from a combination of various factors such as demand and the supply of loans and the availability of funds for lending (Nduati, 2017). The theory is linked to this study since it provides knowledge on loan limit reduction rate and the overall implication on debt recovery. The theory supports loan limit reduction variable.
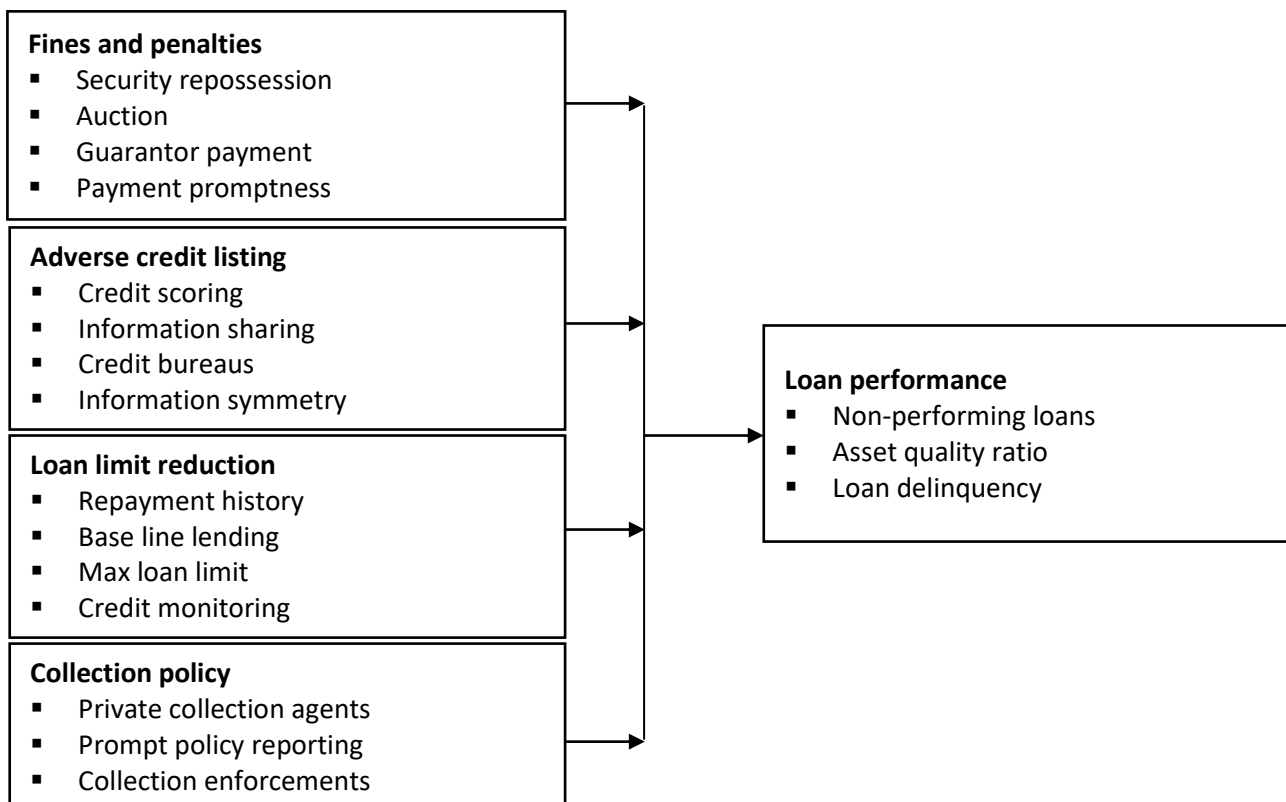
Credit Market Theory

Karl Brunner established Credit Market Theory in 1966. If collateral and other relevant constraints are maintained, the loan rate is the only factor that controls the amount of credit issued by the banking sector, according to the theory. As a result of the rising demand for credit and the fixed supply of it, interest rates have climbed. Any additional risk to a bank-funded project should be represented in a risk premium added to the lending rate to reflect the rising probability of default. The theory assumes that the likelihood of a borrower defaulting and the interest rate paid on the advance have a positive connection. As a result, it is thought that the larger the borrower's failure risk, the higher the interest premium will be (Ewer et al, 2016).

Although this theory does not specifically address how collateral affects the risk premium, it gives the impression that collateral has no bearing on lending rates, and that if a risky borrower wants to have the same lending rate as a borrower with a lower risk profile, all he has to do is pledge more collateral to lower his risk profile and thus enjoy a lower risk premium. Because of the knowledge imbalance between the lender and the borrowers, the "moral hazard" and "adverse selection" phenomena emerge. Because it pertains to both the borrower and the lender, this theory is appropriate for the research. It claims that the borrower has a more accurate evaluation of the risk profile of this investment than the lender does, and that he can take hidden activities to raise the risk of his investment without the lender's knowledge (Armendariz & Morduch, 2016). The problem of adverse selection arises when lenders raise interest rates to protect themselves from default, attracting mainly high-risk borrowers while excluding low-risk borrowers.

Conceptual Framework

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┌─────────────────────────────────┐
│ Fines and penalties             │
│   ▪ Security repossession       │
│   ▪ Auction                     │
│   ▪ Guarantor payment           │
│   ▪ Payment promptness          │
├─────────────────────────────────┤
│ Adverse credit listing          │
│   ▪ Credit scoring              │
│   ▪ Information sharing          │
│   ▪ Credit bureaus              │
│   ▪ Information symmetry         │
├─────────────────────────────────┤
│ Loan limit reduction            │
│   ▪ Repayment history           │
│   ▪ Base line lending           │
│   ▪ Max loan limit              │
│   ▪ Credit monitoring           │
├─────────────────────────────────┤
│ Collection policy               │
│   ▪ Private collection agents   │
│   ▪ Prompt policy reporting     │
│   ▪ Collection enforcements     │
└─────────────────────────────────┘
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┌─────────────────────────────────┐
│ Loan performance                │
│   ▪ Non-performing loans        │
│   ▪ Asset quality ratio         │
│   ▪ Loan delinquency            │
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Independent Variables   **Dependent Variable**

Figure 1: Conceptual Framework

Review of Literature on Study Variables

Fines and Penalties

Ngondo (2018) claims that financial institutions have employed penalties on late debt payments as part of their debt recovery methods throughout the previous few decades in his study on lending rates and loan performance. According to Chava (2016), fines are a proactive tactic because the borrower is made aware of the consequences of paying penalties in the event of default or late repayment. He also mentions that the waiving of penalties and interest is used to entice payment. According to (Kamar and Ayuma, 2016), the strategy used by an institution is heavily influenced by its relationship with the borrower. For the lender, debt recovery is particularly costly because they must incur additional costs. Customers' inability to service their debts can result in a partial or whole loss of the amount owed to the counterparty, and hence to the institution's profitability (Walraven & Barry,

2016). This lays the groundwork for demonstrating the overall hazard that large risks pose to both creditors and savers, necessitating a more sophisticated regulatory intervention system in the banking sector.

Adverse Credit Listing

Financial industry has in the past been faced with the challenges of obtaining comprehensive information on clients' payment history for use during the credit assessment process (Ngondo, 2018). This has led to a high rate of NPLs after defaulters move from one bank to the other to secure credit facilities. Credit information sharing allows both digital and non-digital lenders to address the issue of credit proportioning, according to Weaver and Gahegan (2017). Money lenders face data asymmetry, moral risk (only the borrower knows his or her ability to pay), and adverse selection while expanding an advance (Altman & Sironi, 2016). The assessment is crucial since the

loan becomes a contract that requires the borrower to return the loan within a set period of time without fail. It entails the lender providing value now in exchange for the borrower's promise to repay at a later date (Kemp & Buckley, 2017).

Loan Limit Reduction

Loan limits are the maximum amount of money a lender will allow a consumer to spend using a credit card or revolving line of credit. The limits are determined by banks, alternative lenders, and credit card companies based on several pieces of information related to the borrower. They examine the borrower's credit rating, personal income, loan repayment history, and other factors, (Wakaria, 2016). Limits can be set for both unsecured credit and for secured credit. Unsecured credits with limits are generally credit cards and unsecured lines of credit, (Kairu, 2015). If the line of credit is secured backed by collateral the lender takes the value of the collateral into account. For example, if someone takes out a home equity line of credit, the loan limit varies based on the equity in the borrower's home.

Collection Policy

In its efforts to recover a delinquent debt, a bank may use the services of private collection agencies (Early, 2016). Private collection agencies charge fees, which are paid out of amounts collected. The creditor agency retains the final authority to resolve disputes, compromise debts, suspend or terminate collection action, and refer accounts to Credit Reference Bureaus. The credit reference agency ought therefore to supplement and inter-pose between the lending institution/creditor and the borrower/debtor. The other point to be taken up is about levels of intervention between the creditor, debtor, and the lawyer.

Loan Performance

Loan performance is explained as the degree to which financial objectives are being or has been accomplished. It is the process of measuring the results of a firm's policies and operations in monetary terms. It is used to measure firm's overall financial health over a given period of time and can also be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (King & McGrath, 2016).

Empirical Review

Sakindi (2017) investigated debt recovery and financial performance of commercial banks in Rwanda. The research used descriptive research design because of this design was suitable to this research. The target population of this research comprised the whole staff of KCB with a number of 127. The sample size was taken by using simple Random Sampling as the sample techniques. The research used a sample size of 56 selected population using Yamane's formula. The data collection was analyzed by using SPSS program 18 version employees of KCB. The research project instrument was self-administered questionnaire that was designed in consideration with the research objectives and the literature review. The study revealed that the relationship of debt recovery and financial performance is positively associated with project performance.

Thuku (2017) investigated the factors affecting loan limit to small and medium enterprises in Kenya: a case study of agriculture sector in Nyeri County. A descriptive research design was employed to gather quantifiable information through the use of open and close-ended questions. The target population was 200 SMEs in agriculture sector that have been in operation for more than 3 years. Stratified random sampling was used to select a sample size of 67. Data was analyzed using descriptive statistics and Statistical Package of Social Sciences (SPSS). The findings of the study revealed that that majority of the respondents agreed that the size of a firm and location affects access to finance and older firm (more than 3 years) have more experiences of applying for loans than younger firms below 3 years.

Kipsang (2020) did a study on the effect of debt recovery strategies on loan performance of Fintech companies in Kenya. This study used descriptive survey design approach to incorporate various elements of the study. A population of 121

managers was used to determine a sample size of 92 respondents. This study was based on descriptive research design. This study made use of stratified sampling tactic. In order to collect primary data from the respondents, a questionnaire was used for data collection. Descriptive statistics were instrumental in analyzing percentages and frequencies and inferential statistics deployed for analyzing correlation and regression analysis. The study results showed that there existed a significant and positive relationship between the study variables and loan performance.

Owich (2021) did a study on debt management and loan performance of commercial banks in Kenya. The specific objectives of the study included, establishing the effect of credit risk assessment, periodic loan review, loan collateral and early warning signs of loan delinquency affect loan performance of commercial banks in Kenya. The research design applied was causal research design. The target population of the research project was 108 managers from banks in tier II, and tier III. The research embraced purposive sampling to come up with a sample size of 85 respondents. The data collected from the questionnaire was analyzed using IBM SPSS version 21.0 software. The findings revealed that commercial banks loan performance aligns with the effectiveness of credit management practices evident in the banks.

Mutiria (2017) conducted a research on factors influencing the credit limits to small and medium enterprises: a case of Kiambu County, Kenya. A descriptive survey research design was adopted to carry out the study. The study had a population of 2, 750 SMEs in Kiambu county, out of which, a stratified sampling technique was used to pick a sample of 384 respondents. The sampling frame was adopted from office of economics and statistical data in Kiambu County. This study utilized primary data. Data was collected using structured questionnaire. The findings on types of SME financing revealed a significant relationship exists between types of SME financing and credit limits. Under this question personal savings, funds from family and friends, bank loans, microfinance loans, venture capital funds, asset-based financing, SACCO loans, NGO loans and government loans were explored, and were all statistically significant.

METHODOLOGY

The study utilized cross-sectional survey research design. The choice of this design compared to other designs is that data can be collected within a bracket of short period and the data can be collected less costly (Creswell, 2014). According to CBK (2020) there are 13 licensed Microfinance Banks in Kenya. However, the current study unit of observation was branches of 6 deposit taking MFIs which are licensed by CBK and have fully-pledged branches in Mombasa. The study unit of analysis was branch credit managers of the 6 deposit taking Microfinance institutions in Mombasa. The sampling frame was deposit taking MFIs which are licensed by CBK and have fully-pledged branches in Mombasa. Census technique was used due to small number of the target population (Cooper and Schindler, 2014).

The primary data was collected by use of close ended questionnaires which were structured based on the research objectives. The researcher used questionnaires because they are easier to analyze as they are in immediate usable form, easier to administer and lastly they are economical to use in terms of time and money (Cooper & Schindler, 2016). Secondary data was collected to address dependent variable using secondary data collection sheet. The study conducted pilot test on ten participants to test the data collection tool validity and reliability.

Data analysis is the act of converting data collected from respondents into useful information that can be used in the decision-making process in a diagnostic and cohesive manner (Knudsen & Kjeldgaard, 2014). Collected data was analyzed using Statistical Package for Social Sciences (SPSS) software version 25. Descriptive statistics in the form of mean and standard deviation was utilized to provide meanings to data collected. Inferential

statistics such as linear regression and Pearson's correlation was used to establish the correlation between loan performance and data recovery techniques. The following linear regression model was adopted to test the statistical significance of the study predictor variables on dependent variable;

$$Y = \beta_\theta + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

Y= Loan performance

β_θ = Regression intercept

β_1-β_4 are the coefficient of the regression model

X_1= Fines and penalties

X_2= Adverse credit listing

X_3= Loan limit reduction

X_4= Collection policy

ε= Error term

FINDINGS AND DISCUSSIONS

Descriptive Statistics Results

This study carried out the following descriptive statistics; mean, standard deviation of all the study variables.

Fines and Penalties

The first objective of the study was to establish the extent to which fines and penalties affect loan performance. Respondents were required to do this on a 5 point Likert scale where 1 represented Strongly disagree while 5 represented Strongly agree. The results are displayed in Table 1.

Table 1: Fines and Penalties

	Mean	Std deviation
Penalties on loans motivates borrowers to adhere to the payment plans of their loans	4.79	1.306
The microfinance repossesses security provided to acquire loan from the borrowers	4.40	.955
The microfinance undertakes auction of the borrower's assets to minimize loan loss	4.28	.295
The microfinance requires the guarantor to settle the loan amount due in case of default by borrower	4.99	.374

The results in Table 1 have shown that respondents agreed that penalties on loans motivates borrowers to adhere to the payment plans of their loans and that the microfinance repossesses security provided to acquire loan from the borrowers as indicated by a mean of 4.79 and mean of 4.40 respectively. Respondents also agreed that the microfinance undertakes auction of the borrower's assets to minimize loan loss (mean=4.28) and that the microfinance requires the guarantor to settle the loan amount due in case of default by borrower (mean=4.99).

Adverse Credit Listing

The second objective of the study sought to establish the effect of adverse credit listing on loan performance. Data was collected through the Likert-scale measuring the level of agreement of the respondents with respect to the given aspects of adverse credit listing. The results are as presented in Table 2.

Table 2: Adverse Credit Listing

	Mean	Std. Deviation
My micro finance conducts credit scoring on the borrower when granting loans to the clients	4.89	.270
Adverse credit listing improves the precision of the signal about the quality of credit seeker	4.58	.548
Information shared by the credit bureaus offers MFI imprecise knowledge of a borrower's likelihood of repaying	4.80	.897
The MFIs collaborates with credit bureaus closely through information sharing	4.92	.274

The results in Table 2 showed that respondents agreed that the micro finance conducts credit scoring on the borrower when granting loans to the clients and that adverse credit listing improves the precision of the signal about the quality of credit seeker as indicated by a mean of 4.89 and mean of 4.58 respectively. Respondents agreed that information shared by the credit bureaus offers MFI imprecise knowledge of a borrower's likelihood of repaying (mean=4.80). Respondents were in agreement to the statement that the MFIs collaborates with credit bureaus closely through information sharing (mean=4.92).

Loan Limit Reduction

The third objective of the study sought to establish the effect of loan limit reduction on loan performance. Data was collected through the Likert-scale measuring the level of agreement of the respondents with respect to the given aspects of loan limit reduction. The results are as presented in Table 3.

Table 3: Loan Limit Reduction

	Mean	Std. Deviation
Micro finance institutions have a maximum loan limits policy for new clients	4.87	.390
My micro finance institution has a baseline lending policy to new clients	4.66	.229
Limiting the amount of credit reduces cases of bad debt in case the borrower fail to pay	4.75	.540
My microfinance institution determines loan limit using past credit history	4.50	.613

The results in Table 3 showed that respondents agreed that Micro finance institutions have a maximum loan limits policy for new clients and that the micro finance institution has a baseline lending policy to new clients as indicated by a mean of 4.87 and mean of 4.66 respectively. Respondents also agreed that limiting the amount of credit reduces cases of bad debt in case the borrower fail to pay (mean=4.75) and that the microfinance institution determines loan limit using past credit history (mean=4.50). The findings agree with Thuku (2017) whose study established that loan limit has significant effect on loan performance of financial institutions.

Collection Policy

The fourth objective of the study sought to establish the effect of collection policy on loan performance. Data was collected through the Likert-scale measuring the level of agreement of the respondents with respect to the given aspects of collection policy. The results are as presented in Table 4.

Table 4: Collection Policy

	Mean	Std. Deviation
Microfinance uses the services of private collection agents on borrowers	4.16	.555
Microfinance policy reporting is prompt and effective	4.19	.308
Microfinance has a department which carries out collection enforcement	4.80	.619
The Microfinance collection policy is effective and dynamic	3.97	.456

The results in Table 4 revealed that respondents agreed that microfinance uses the services of private collection agents on borrowers and that microfinance policy reporting is prompt and effective as indicated by a mean of 4.16 and mean of 4.19 respectively. Respondents also agreed that microfinance has a department which carries out collection enforcement (mean=4.80) and that the Microfinance collection policy is effective and dynamic (mean=3.97).

Multiple Regression Analysis

The primary objective of the following regression analysis is to determine the relationship between explanatory variables and the response variable.

Data was regressed to determine the extent of the effect between explanatory variables and response variable as shown in the following sections.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.734[a]	.539	.499	1.856742

a. Predictors: (Constant), Collection policy, Loan limit reduction, Adverse credit listing, Fines and penalties

The regression results in Table 5, showed a moderate regression between debt recovery techniques and loan performance. In the model summary, the R^2 is 0.539 indicating that predictors explain 53.9% change in loan performance.

Table 6: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	113.458	4	28.365	7.018	.001[b]
	Residual	97.014	24	4.042		
	Total	210.472	28			

a. Dependent Variable: Loan performance

b. Predictors: (Constant), Collection policy, Loan limit reduction, Adverse credit listing, Fines and penalties

An F-test was used to test the statistical significance of the regression equation. The regression was statistically significant (F=7.018, p <.005).

Table 7: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.289	.984		.294	.000
Collection policy	.150	.174	.143	.863	.004
Loan limit reduction	.063	.160	.065	.396	.036
Adverse credit listing	.184	.141	.223	1.301	.022
Fines & penalties	.254	.242	.219	1.047	.006

a. Dependent Variable: Loan performance

From Table 7, the model would appear as follows:

$$Y = 0.289 + 0.150X_1 + 0.063X_2 + 0.184X_3 + 0.254X_4$$

The regression model indicates that loan performance would increase by 0.289, given that all the other factors are held constant at zero. Further in the regression model it shows that a unit increase in collection policy would lead to an increase in DTMFIs loan performance by 0.150. A unit increase in loan limit reduction would lead to a positive increase in loan performance of DTMFIs by 0.063, and a unit increase in adverse credit listing would lead to an increase in DTMFIs loan performance by 0.184. Further, regression results showed that a unit increase in fines & penalties would lead to an increase in DTMFIs loan performance by 0.254.

The predictors had significance levels of 0.05 and below implying that collection policy, loan limit reduction, adverse credit listing and fines & penalties have significant effect in explaining the variation in DTMFIs loan performance.

Discussion of Key Findings and Hypotheses Testing

The study used p-values to test hypotheses and achieve the objectives of the study. The first objective of the study was to establish the effect of fines and penalties on loan performance. Penalties and fines was found to have a positive and significant effect on loan performance of (β= .254, $p < 0.05$). This implies that a unit increase in fines & penalties would lead to an increase in DTMFIs loan performance by 0.254 when loan limit reduction, adverse credit listing and collection policy are held constant. Findings led to rejection of the null hypothesis that there is no significant effect of fines and penalties on loan performance.

The second objective sought to investigate the effect of adverse credit listing on loan performance of DTMFIs in Mombasa. Adverse credit listing was found to have a positive and significant effect on loan performance of (β= .184, $p < 0.05$). This implies that a unit increase in adverse credit listing would lead to an increase in DTMFIs loan performance by 0.184 fines and penalties, collection policy and loan limit reduction are held constant. Findings led to rejection of the null hypothesis that adverse credit listing has no significant effect on loan performance.

Third objective sought to investigate the effect of loan limit reduction on loan performance. Regression results revealed that loan limit reduction had significant positive effect on loan performance of (β= .063, $p < 0.05$). This implies that an increase in loan limit reduction by one unit increases loan performance by .063 units when collection policy, adverse credit listing and fines & penalties are kept constant. The findings agree with Thuku (2017) whose study established that loan limit has significant effect on loan performance of financial institutions. Findings led to rejection of the null hypothesis that there is no significant effect of loan limit reduction on loan performance.

Fourth objective was to determine the effect of collection policy on loan performance of deposit taking MFIs in Mombasa. Collection policy had a positive and significant effect on loan performance of (β= 0.150, $p<0.05$). This implies that an increase in collection policy by one unit leads to an improvement in loan performance by 0.150 units when adverse credit listing, loan limit reduction and fines & penalties are held constant. Findings led to rejection of the null hypothesis that there is no significant effect of collection policy on loan performance of deposit taking MFIs.

CONCLUSIONS AND RECOMMENDATIONS

Summary

Assessment of Fines & Penalties on loan performance formed the first objective of the study. The findings revealed that penalties on loans motivates borrowers to adhere to the payment plans of their loans and that the microfinance repossesses security provided to acquire loan from the borrowers. Also the microfinance undertakes auction of the borrower's assets to minimize loan loss and that the microfinance requires the guarantor to settle the loan amount due in case of default by borrower. Regression results revealed that fines & penalties has a positive and significant effect on loan performance.

The second objective of the study was to investigate the effect of adverse credit listing on loan performance. The findings indicated that the micro finance conducts credit scoring on the borrower when granting loans to the clients and that adverse credit listing improves the precision of the signal about the quality of credit seeker. Information shared by the credit bureaus offers MFI imprecise knowledge of a borrower's likelihood of repaying. The MFIs collaborates with credit bureaus closely through information sharing. Regression results revealed that adverse credit listing has a positive and significant effect on loan performance.

The third objective of the study was to investigate the effect of loan limit reduction on loan performance. Findings found out that the deposit taking micro finance institutions have a maximum loan limits policy for new clients and that the micro finance institution has a baseline lending policy to new clients. Limiting the amount of credit reduces

cases of bad debt in case the borrower fail to pay and that the microfinance institution determines loan limit using past credit history. Regression results revealed that loan limit reduction has a positive and significant effect on loan performance.

The fourth objective of the study was to find out the effect of collection policy on loan performance of deposit taking MFIs. Findings revealed that deposit taking microfinance uses the services of private collection agents on borrowers and that microfinance policy reporting is prompt and effective. Also it was established that microfinance has a department which carries out collection enforcement and that the Microfinance collection policy is effective and dynamic. Regression results revealed that collection policy has a positive and significant effect on loan performance.

Conclusions

The study concluded that fines & penalties has significant effect on loan performance in deposit taking MFIs. By imposing penalties on loans, it serves to reduce the non-performing loans by making borrowers repay their dues for fear of penalization which could be costly on the loanees. In extreme cases, it was revealed that deposit taking MFIs retain collateral security and dispose-off when the borrower is at the purge of defaulting. When the collateral is not enough to cover for the outstanding amount, the deposit taking MFI moves to auction the borrowers' assets to recover for the loan and also activates mechanism to recover outstanding loans from the loan guarantor.

The study concluded that adverse credit listing has significant effect on loan performance in deposit taking MFIs. The deposit taking micro finance performs credit scoring on the borrower before issuing approval for loans. In many cases, the deposit taking MFI collaborates with credit bureaus closely through information sharing. The deposit taking MFI, uses adverse credit listing to improve the precision of the signal about the quality of potential borrower and the information shared by the credit bureaus offers MFI imprecise knowledge of a borrower's likelihood of repaying.

The study concluded that loan limit reduction has significant effect on loan performance in deposit taking MFIs. Also the act of minimizing the amount of credit due to borrower reduces cases of bad debt in case the borrower failing to pay. The deposit taking microfinance institution determines loan limit using past credit history. Micro finance institutions have a maximum loan limits policy for new clients and that the micro finance institution has a baseline lending policy to new clients.

The study concluded that collection policy has significant effect on loan performance in deposit taking MFIs. It is concluded that the deposit taking microfinance utilizes the private collection agents to recover outstanding amounts from the defaulting borrowers. Also the deposit taking microfinance institutions have prompt and effective collection policy reporting. In addition to the collection policy, the MFIs have dedicated department which carries out collection enforcement.

Recommendations

The study recommended that the management of deposit taking MFIs should strictly impose penalties and fines on defaulting loans as it was found to have a significant effect on loan performance. The penalties and fines should be geared towards reducing the amount of non-performing loans as it triggers borrowers to rush to clear the amounts due. The deposit taking MFIs should dispose loan collateral security and in other cases should seek to dispose-off borrowers' assets to recover outstanding loans. The MFIs should recover default amount for the loan guarantors

The study recommended that the deposit taking micro finance should carry out robust credit scoring on the potential borrowers prior to loan issuance to minimize chances of default. Also the study recommends that the MFIs should seek mutual collaboration with credit reference bureaus by sharing information crucial to weed out borrowers with bad credit scoring. This would enhance MFIs' precision on borrower standings.

The study recommended that the management of deposit taking MFIs should make prudent decisions geared towards reducing the amount of credit due to borrower. This would greatly reduce the damage by the MFIs in case the borrower defaults. More precisely, the deposit taking MFIs should base their decisions on whether to give loan or to decline based on the borrower past credit history. The Micro finance institutions should set maximum loan limits policy for new clients.

The study recommended that the management of MFIs should make use of private collection agents to help the institutions recover outstanding loan amounts from the non-paying borrowers. The use of these private collectors has a potential to recover the bad debts as they have unique deterrence measures which are not allowed in the MFIs sector.

In addition, the MFIs should invest in collection policy reporting which is prompt and effective. Also the MFIs should dedicate a whole department to handle loan recovery functions.

Suggestions for Further Studies

The current study was limited on investigating the effect of debt recovery techniques on loan performance of deposit taking MFIs. The debt recovery techniques adopted in the current study accounted for 53.9% change in loan performance. This shows that there are other debt recovery techniques which were left out in the study and have a potential to affect loan performance of MFIs. This call for further research to unearth the other debt recovery techniques and establish their effect on loan performance of not only MFIs but also other financial institutions.

REFERENCES

Altendorf, A., & Schreiber, J. (2016). Assistive technology in dementia care: methodological issues in research design. *Journal of Assistive Technologies, 9*(1), 23-51.

Altman, E., & Sironi, A. (2016). Credit Risk Modelling: A Review of the Literature and Empirical Evidence. *Risk Management, 5*(1), 56-71.

Kipsang B, (2020), *Effects of debt recovery strategies on loan performance of Fintech Companies in Kenya*, United State International University.

Ogola, B. A. (2016), *Debt recovery as an operational strategy used by NIC bank to manage Non Performing Loan portfolio. Nairobi*: University of Nairobi.

Baloro, J. (2018). African Responses to the Debt Crisis: The Relevance of Public International Law. *Savings and Development, 24*(1), 239-267.

Brealey, R. & Myers, S. (2016). *Principles of corporate finance* (8th edition), London: McGraw-Hill.

Brownbridge, M. (2016), *The Cause of Financial Distress in Local Banks in Africa and Implications for Prudential Policy*. UNCTAD/OSG/DP/132

Chamboko, R., & Bravo, J. (2016). On the modelling of prognosis from delinquency to normal performance on retail consumer loans. *Risk Management, 18*(4), 264-287.

Chan, T. K., & Abdul-Aziz, A.-R. (2017). Financial performance and operating strategies of Malaysian property development companies during the global financial crisis. *Journal of Financial Management of Property and Construction, 22*(2), 45-78.

Chava, S. (2014). Environmental Externalities and Cost of Capital. *Management Science, 60*(9), 23-47.

David, M. (2018). *Effects of Mobile-Based Lending Process on Non-Performing Loans in Commercial Banks in Nakuru Town.* Nairobi: JKUAT.

Dubois & Anderson (2010), *Managing household debts*: *Social service provision in the EU.* Dublin: European Foundation for the Improvement of Living and Working Conditions.

Kamar, H., & Ayuma, C. (2016). Effect of Debt Recovery Techniques on Performance of Selected Financial Institutions in Eldoret Town. *International Journal of Humanities and Social Science Invention*, 1-15.

Kavassalis, P., & Stieber, H. (2018). An innovative Reg Tech approach to financial risk monitoring and supervisory reporting. *The Journal of Risk Finance, 19*(1), 45-67.

Kawalec (2002), *Different Models of Debt Restructuring, 'Observations based on experiences with bad debt difficulties in industrialized countries and Central European transition economies.* Presentation at the International Seminar on Comparative Experiences in Addressing Banking Sector Issues in Central/ Eastern Europe and Central Asia.

Ketchen, D. J., Bergh, D., & Boyd, B. (2019). The Research Design Canvas: A Tool for Creating Better Studies. *Research Methodology in Strategy and Management, 11*(1), 56-91.

Kipsang, B. (2020), *Effect on debt recovery strategies on loan performance of FinTech firms in Kenya.* Unpublished Thesis, United States International University-Africa, Kenya.

Kisala, P. (2014). *The Effect of Credit Risk Management Practices on Loan Performance.* Nairobi: University of Nairobi.

Lough, W. H. (2016). Business Finance, a Practical Study of Financial Management in Private Business Concerns. United Kingdom Retrieved from: http://chestofbooks.com/finance/private/Business/Factors-Considered-By-Banks-In-Making-Loans.htm

Luoto, J., McIntosh, C., & Wydick, B. (2017). Credit Information Systems in Less Developed Countries: A Test with Microfinance in Guatemala. *Economic Development and Cultural Change, 55*(2), 313-334

Markowitz, H.M. (1959). Portfolio Selection: Efficient Diversification of Investments. New York: John Wiley & Sons

Mawele, N. (2020), Assessment of debt recovery in banks. A case of Zanaco in Zambia. Unpublished thesis, Cavendish University, Zambia.

Mniwasa, E. E. (2014). The financial intelligence unit and money laundering control in Tanzania: The law, potential and challenges. *Journal of Money Laundering Control, 14*(2), 23-65.

Mohamed, H. S. (2017). Factors Affecting Debt Recovery in Commercial Banks In Kenya a Case Study at Equity Bank Kenya Limited. *Imperial Journal of Interdisciplinary Research (IJIR), 3*(10), 54-64.

Sharma, A. J. (2016). When debt comes knocking. *Emerald Emerging Markets Case Studies, 6*(4), 76-121.

Muturi, E., & Rotich, G. (2016). Effect of Credit Management Practices on Loan Performance in Deposit Taking Microfinance Banks in Kenya. *International Journal of Innovations, Business and Management (IJIBM)*, *10*(1).

Nyawira, I. (2019), Debtors management and financial performance of Microfinance Institutions in Kenya. Unpublished Thesis, Kenyatta University, Kenya.

Owich, M. A. (2021), Debt management and loan performance of commercial banks in Kenya. *International Academic Journal of Economics and Finance*, 3(7), pp. 42-71

Ping, L., (2017). "China Banking Regulatory Commission," New Delhi, November 14- 16, [Online]http://www.imf.org

Visaria, S., (2016). Legal Reform and Loan Repayment: The Micro Economic Impact of Debt Recovery Tribunal in India. American Economic Journal: Applied Economics Retrieved from: http://www.jstor.org/discover/10.2307/25760171?uid=3737696&uid=2&uid=4&sid=47 698992983537