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The Dichotomy of Risk and Loan Repayment: Which Way Microfinance Banks?

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Abstract:

Repayment of disbursed loans to borrowers remains the central focus of every lending financial institution. Microfinance banks (MFBs) are vehicles of financial inclusion designed to onboard the unbanked majority, especially in developing countries. However, the transition drags along with it worrying default trends that threaten to overturn the gains of this concept. Reports indicate that of 45% of default borrowers in the USA, 60% terminate into bad debts. The statistics in Nigeria depict growing non-performing loans. The loan repayment trend among MFBs reflects a trajectory that calls for urgent intervention measures to secure steady operations to the extent of meeting their arising financial obligations. Existing empirical studies were biased in favour of credit risk and left the mitigation perspective of its management, which serves to diagnose and neutralize potential adverse lending outcomes. Extant literature is dedicated to investigating parameters associated with profitability. The main objective of this study was to investigate the relationship between credit risk management and loan repayment among microfinance banks in Kenya. Credit risk and moral hazard theories underpinned the study. Secondary balanced panel data for eight years, sourced from the annual reports of 12 regulated MFBs in Kenya, was used. Moderated multiple regression was applied to realize the study objective and results indicated that credit risk management yields a negative but significant change in loan repayment ($\beta = -0.009874$, $p = 0.0260$). This implies that a unit increase in the credit risk management ratio leads to an inverse but significant -0.98% decrease in loan repayment. Based on this finding, it is recommended that efforts to enforce a reduction in non-performing loans should coincide with measures to filter the profile of loan applicants to eliminate borrowers with tainted credit history.

Keywords: Credit risk management, loan repayment, loan default, non-performing loans, microfinance banks

1. Introduction

Loans issued by microfinance organizations ought to be cheap and affordable. Consequently, for lending entities to achieve sustainability, there is the overriding urgency to recover loans disbursed to create a chance to generate internal funds for other qualified applicants to benefit.

Credit risk management has been defined as deliberate measures taken to overcome the risk that expected cashflows emanating from loans issued by MFBs may not be forthcoming (Saunders & Cornett, 2011). It is variously referred to in the literature as default risk management (Boahene, Dasah & Agyei, 2012; Chikalipah, 2018; Tadele, 2021). Financial institutions focus on reducing NPLs due to the risk that results in the principal loans and interests not being recovered (Otieno, Nyagol and Onditi, 2016).

Studies on credit risk management and loan performance in MFBs in Pakistan reported that there is a significant positive relationship between the two constructs (Ahmed & Malik, 2015). The majority of studies conducted employed qualitative measures of credit risk management such as assessment of borrowers upon loan application (Boahene et al., 2012) and graduated loaning system, where the value of loan disbursement amounts are pegged on the assessed credit history of the borrower (Ahmed & Malik, 2015).

Maina, Kinyariro and Muturi (2016) undertook a study on credit risk management in commercial banks. The results indicated that returns on loans are significantly affected by credit risk. This is consistent with the findings of Lalon (2015), Warsame (2016), Paulino, Mwambia and Kithinji (2018). It has been disclosed that the risk of default increases with weak collateral committed by borrowers (Paulino et al., 2018). This takes place where limited information is available to support valuation reports for collateral with which loans are taken. However, this phenomenon is not common with MFBs, given that most of the loans advanced are largely unsecured. This extensively opens MFBs to credit risk since there is no adequate fallback alternative in the event of potential failure to offset arising obligations on the part of borrowers. Torban (2020) attempted to associate credit risk exposure of failed loan repayments by borrowers to the laxity of the mechanisms employed by MFBs staff. This, however, was a finding in a case study carried out in a town in Ethiopia

whose operating circumstances may be unique to the entity and not safely generalizable. No known study has been undertaken to quantitatively establish the relationship between credit risk management as a parameter to overcome the non-performing loans phenomenon among MFBs.

Empirical evidence suggests credit risk management promotes financial performance ($\beta=0.529$, $p<0.01$) (Orichom & Omeke, 2020). Other studies (Obamide *et al.*, 2015 and Warsame, 2016) whose findings support this preposition and which adopted constructs of credit risk management, among them credit risk analysis and risk control, reported that all their study parameters enhance loan repayment performance. Risk control was measured by opinions collected from credit managers and not known quantitative parameters that employ financial ratios. Orichom and Omeke (2020) adopted a cross-sectional research design among MFIs in Uganda. The study was grounded on the theoretical foundation of agency theory. Its focus was tilted towards the perspective of credit risk management and financial performance from the lenses of operations management and not the corporate application. The measures of the study variables were exclusively qualitative, besides the fact that financial performance is a parameter of growth for the overall institution, while loan repayment contributes to financial performance.

Chakravarty and Pylypiv (2015) undertook a study to establish the role of subsidization and organization status on repayment rates by MFIs. The study aimed at assessing the influence of subsidies on loan repayment by MFIs. The results indicated that loan write-offs are positively correlated with credit risk, implying that as more loans are declared to be non-performing and hence unpayable, efforts to enhance recovery from borrowers subside, leading to potential inadequate cash reserves. The study setting depicted MFIs as enjoying subsidies on borrowings, which resulted in a relaxed collection campaign and, hence, the threat to credit risk. Additionally, the objective of the study was not to assess the mitigation measure of credit risk management but to evaluate the consequence of relaxed recovery administration mechanisms in the face of subsidies.

MFBs in Kenya are reported to have restructured 4348 loans valued at Kshs.20.6B, representing 0.05% of total loan accounts in 2019 (CBK, 2020). In 2020, a total of 72,559 loans valued at Kshs234.7B were restructured, representing 0.6% of the total loan portfolio (CBK, 2021). By the close of the year 2020, 204,802 of the 915,115 loans issued by MFBs whose value was Kshs98.7B were non-performing (CBK, 2021). This represents 22.4% of total microfinance loans and 15.5% of the total loan value. Loan restructuring is a credit risk mitigation measure adopted by lenders to stretch the repayment period of outstanding loans to decrease the value of instalments as an incentive to stimulate repayment (Tahu & Susilo, 2017).

It has been empirically demonstrated that financial entities, especially conventional banks, have adopted credit risk management practices with a view to overcoming the effect of non-performing loans. Attempts have been made by scholars to suggest practical approaches to mitigate its effect, especially in conventional banking institutions. However, the steps are bolstered by the collateral against which loans are secured. The vulnerability of microfinance banks (MFBs) to the effects of non-performing loans is incomparable with that of conventional commercial banks since the majority of their disbursed loans are unsecured. Even though attempts to discount the exposure have been reportedly achieved through group lending, it remains unclear how such initiatives are coordinated to influence loan performance. Much of the studies conducted on credit risk management used qualitative data collected from respondents comprising loanees and financial institutions' credit departments. In this context, there is a paucity of empirical evidence that has ventured to measure credit risk management among MFBs quantitatively using established financial ratios. MFBs disburse funds in the form of loans to borrowers. This money is pooled together from deposit savings, made either by individuals or in groups. Once collected, these funds are loaned out to customers and they form the largest source of assets to MFBs. It is only when borrowed loans are predictably repaid that the MFBs' operations can be regarded as sustainable and optimal. The progressive nature with which borrowed funds are subsequently repaid by borrowers for eventual further lending to other qualifying applicants represents a favourable loan performance phenomenon.

1.1. Problem Statement

There is concern from the perspective of microfinance lenders to contain the non-performing loans challenge, which piles pressure on their liquidity position. Studies have been undertaken focused on credit risk, essentially to isolate exposure elements with the capacity to adversely impact MFBs' liquidity position. The majority of studies have reflected credit risk and how it relates to financial performance and profitability. Attention has not been directed to empirically assess how credit risk management loan repayment relates to granted, financial performance and profitability to assess the relevance of a financial institution. However, all this begins from the source of revenue: loan repayment. It is when loans are paid that MFBs are reported to be on a well-managed financial trajectory and with good performance comes profitability. At the same time, for optimum credit risk management outcomes to be realized, the precautionary framework needs to be assessed from the standpoint of recovery, which has, hitherto, not been investigated.

1.2. Objective

The objective of this study was to investigate the relationship between credit risk management and loan repayment among microfinance banks in Kenya.

To achieve this objective, the study framed the end of the null hypothesis:

- H_{01} : There is no significant relationship between credit risk management and loan repayment among microfinance banks in Kenya

1.3. Theoretical Literature

The study was grounded on the credit risk theory and the moral hazard theory. The credit risk theory was propounded by Robert Melton in 1974. The theory proposes a model designed to help assess the credit risk of a company by characterizing the company's equity as a call option on its assets. The theory has been extensively applied in the conventional banking industry to justify the measures taken to protect loopholes in credit issuance processes to protect lenders from run-away cases of delinquency and non-performing loans. Borrowers are believed to hold more information, which is critical to be brought to the knowledge of lenders to facilitate flowless understanding before loan issuance. However, failure to craft approaches to extract these details from borrowers works to the detriment of lenders and exposes them to direct losses in the form of NPLs. Unlike conventional commercial banks, which have nationwide customer bases and more elaborate technological and human capacity, MFBs face the challenge of mounting fool-proof interventions while evaluating the performance of their borrowers. Past studies have used this theory to interrogate the usefulness of historical loan appraisal measures, such as peer-to-peer controls, in advocating group lending.

The moral hazard theory was propounded by Merton (1977). It views borrowers as withholding critical information upon getting advanced financial resources out of the inspiration that not much loss is directly shouldered by them. There are studies that have used this theory to explain the state of borrowers when they conspire to borrow with little motive to repay (Kumar & Sensarma, 2017; Masanyiwa et al., 2022). This study used the moral hazard theory to explain why MFBs must engage in initiatives to eliminate borrowers with tainted credit history from their customer base to mitigate the risk of loss of projected income.

2. Empirical Literature

Credit risk management refers to the mechanisms designed to overcome the risk that funds loaned out shall not be repaid within the specified time period. This is regarded as the likelihood of loss of money due to potential default on due and payable loans (Ahmed & Malik, 2015). Credit risk management is a measure necessitated by the reality that loanees fall in default and remain in such breach of their repayment obligations over a period of time. There is an inherent perspective of risk whenever MFBs issue loans. An increase in default rates frustrates the financial objectives of MFBs. Studies on credit risk management identify it as the most profound intervention targeted at arresting the threat to the ability of financial institutions to sustain their operations using internally generated liquid assets. It responds to the adverse changes in the operating environment triggered by financial distress among borrowers.

The a-priori expectation of this thesis is that credit risk management is positively correlated with loan repayment performance. That is to say, whenever aggressive interventions are put in place to mitigate the likelihood of default, it is expected that borrowers will be under pressure to honour their obligations and consequently result in high loan repayment. Therefore, an increase in credit risk management was expected to trigger a simultaneous increase in loan repayment and vice versa.

Extant literature on credit risk management has covered different dimensions of interest to scholars (Zamore, 2018). Credit risk management analysis can be carried out as a system focusing on three perspectives: borrower, financial entity and geography. Borrower-linked credit risk management looks at controlling delinquency by observing the subject from the perspective of the loanee, while the entity-focused inquiry narrows on the mechanisms employed by the lender to overcome (Chong, 2021).

Emekter *et al.* (2015) evaluated credit risk and loan performance among peer-to-peer online lending firms in the United States of America. The study focused on the default risk of borrowers with the returns generated by the lenders by comparing the calculated theoretical interest rate with the actual interest rate charged by the lending club for each credit grade category. The study adopted binary logistic regressions and Cox Proportional Hazard test and showed that the binary regression model projected an R^2 of 0.065. The study was a survey design, targeting to establish the influence of referral customers in online lending. The findings indicated that credit risk is high among closely related borrowers and that its relationship with loan repayment is positive and significant. Moreover, it was reported that an increase in credit risk is correlated with an increase in loan default.

Ademola and Adegoke (2021) examined the socio-economic factors influencing loan repayment in Nigerian MFBs. The study used purposive sampling to identify MFBs in populated parts of Nigeria from whom target respondents, comprising credit officers and their customers, were selected for participation. The study adopted descriptive statistics and multiple regression analysis to synthesize data collected using structured questionnaires. The study focused on average monthly income alongside loan size and repayment mode among the choice surrogates of the independent variables. The results indicated that interest rates were negatively correlated with loan repayment ($R = -0.112$, $p = 0.012$), suggesting that a lower interest rate charged on loans yields a higher loan repayment rate. It recommended that repayment periods should be made longer to allow for adequate time to honour loan obligations. Additionally, the researchers recommended a sharp reduction of loan interest to motivate loan repayment.

Khan, Siddique and Sarwar (2020) undertook a study on determinants of NPLs among Pakistan's listed banks for the period between 2005 and 2017. Using panel data, the study used both random and fixed effects regression to analyze the study variables. The study used operating efficiency, in much the same context as credit risk management was used as a construct in this study, to assess its relationship with non-performing loans. It was hypothesized that operating efficiency was positively correlated with NPLs. The results showed that credit risk management had a negative relationship with NPLs ($\beta = -0.0804$, $p = 0.000$) using the random effect model, while fixed effect indicated $\beta = -0.0910$, $p = 0.000$. This finding suggests that an increase in credit risk management leads to a significant reduction in non-performing loans. The hypothesis of the study, to the extent that operating efficiency was positively correlated with NPLs, failed to be accepted. According to the research findings, credit risk management is negatively correlated with non-payment of loans.

Tadele (2021) undertook a study on whether credit risk was affected by MFIs' board structure in Sub-Saharan Africa. The inquiry employed pooled Ordinary Least Squares on unbalanced panel data and used non-performing loans as a measure of credit risk. The findings showed that credit risk was high in MFIs with lean board structures, especially where the top managers did not possess sound work experience in financial management matters. This study interrogated the nexus between the experience level of top managers of MFIs and the likelihood of non-repayment of loans. Orichom and Omeke (2020) investigated the relationship between credit risk management and financial performance in Uganda's MFBs. Adopting the agency theory, the study design included simple random sampling to collect data from MFBs involved. Cross-sectional research design was used for inquiry from a possible population of 85. Purposive sampling was used to select the respondents, including the credit officers, managers and accountants of the various categories of participating MFIs, which included various categories of MFIs. Qualitative data were obtained using semi-structured questionnaires that adopted the Likert-scale for analysis. The reported findings show that there was a significant and positive correlation between credit risk management and financial performance ($\beta = 0.529$, $p = 0.01$).

Reviewed literature analyzed credit risk either against financial performance, lending performance or profitability. The studies investigating financial performance present contradicting outcomes, with some reporting significant but negative correlations and others indicating a correlation between credit risk and financial performance. The juxtaposition in the findings presents a lacuna in the empirical literature that needs to be investigated.

2.1. Research Design and Study Area

This research was carried out using a correlational research design. All the microfinance banks that are regulated in Kenya for the study period, between 2015 and 2022, were included in the study. The study was conducted at the headquarters of the Central Bank of Kenya (CBK), Nairobi. The CBK regulates microfinance banks in Kenya and exercises periodic supervision to ensure conformity of their operations with the requisite laws and procedures.

2.2. Data Source and Collection Procedure

The data used in this research was secondary and quantitative in nature, obtained from audited published financial statements as maintained by the CBK on its official website. Between 2015 and 2022, there were 12 MFBs which were included in the research. This gave a total of 96 observations factored in this study. Data were recorded in prepared data sheets to facilitate the computation of financial ratios. The data sources were regarded as authentic and reliable given the strict and rigorous operational environment in which MFBs operate as enforced by the CBK.

2.3. Data Analysis and Presentation

This study used panel data, which combines cross-section (MFBs) and time series (annual financial data) of all the study objects, forming a panel data set of 96. Analysis of the data was achieved using E-Views software estimation methods. The results were presented in tables and figures to display the output of descriptive statistics and regression results.

2.4. Variables and Model Specification

The independent variable for this study, credit risk management, was measured using the financial ratio of total cash and cash equivalents divided by deposits. Loan repayment, which was the dependent variable, was surrogated by the ratio of non-performing loans divided by total assets. The priori expectation was that a high credit risk management ratio would give rise to a low loan repayment ratio, which is the most preferred outcome. The inverse result would depict an adverse result.

The model for the study comprised an assessment of the study variable, which included other control variables of management efficiency and liquidity management. The panel regression model was depicted as follows:

$$LRP_{it} = \alpha_0 + \alpha_1 MCRK_{it} + \alpha_2 ME_{it} + \alpha_3 MLDM_{it} + \mu_{it}$$

Where:

α_0 : The Intercept

MCRK = Credit Risk Management; measured by the ratio of total cash and cash equivalents divided by customer deposits

ME = Management efficiency, measured by the ratio of staff expenses and directors' emoluments to total assets, being the control variable

MLDM = Liquidity Management; measured by the ratio of net loans to customer deposits

LRP = Loan repayment, measured by the ratio of net non-performing loans to total assets

α_1 , α_2 and α_3 = Regression coefficients

μ_{it} = The error term

i = cross-section, representing the microfinance companies

t = time-series, representing annual data per firm

3. Results and Discussion

In order to address the potential possibility of upsetting the established assumptions of classical linear regression, diagnostic tests were employed on the data before analysis was done. The following tests were conducted to ascertain data suitability before conducting the regression analysis.

3.1. Unit Root Test

For data to be regarded as stationary, its mean and variance must be constant over a period of time. This makes it impractical to generalize the findings to other contexts. The Levin Lin Chu test for stationarity was used to conduct the unit root test for the data and the results were as shown in table 1.

Method	Stat	Prob*
Levin, Lin & Chu t*	3.4657	0.003

Table 1: Unit Root Test on Credit Risk Management

* Represent significance at the 0.05 level

Method	Stat	Prob*
Levin, Lin & Chu t*	-1.8057	0.035

Table 2: Unit Root Test on Loan Repayment

* Represent significance at the 0.05 Level

From the outcome of the unit root test conducted, as shown in tables 1 and 2, credit risk management and loan repayment variables indicate significance levels of 0.003 and 0.035, respectively. The null hypothesis under unit root testing indicates that there is a unit root in the data. Since both outcomes posted significant results, it confirms that the null hypothesis failed to be accepted and therefore, it was confirmed that there was no unit root in the residual. This confirms that the data was stationary, hence an indicator that there was no fear of experiencing spurious results. The data was found to be stationary at levels and was not transformed for stationarity purposes.

3.2. Model Specification Test

To determine the best model to run the data to test the relationship between the variables, a Hausman Test was conducted. The results are shown in table 3.

Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random		9.294250	3	0.0256*
Cross-Section Random Effects Test Comparisons				
Variable	Fixed	Random	Var (Diff.)	Prob.
ME	0.428569	0.305039	0.004086	0.0533
MLDM	0.022004	0.032111	0.000014	0.0070
MCRK	-0.010829	-0.006535	0.000003	0.0188

Table 3: Hausman Test for the Study Model

* Represent Significance at the 0.05 Level

The null hypothesis under Hausman testing is that the random effect model is most preferred, while the alternative hypothesis roots for the fixed effect model. The results in table 3 indicate that the output posted a significant outcome at 0.0256, which was below the 5% significant benchmark. Therefore, the null hypothesis failed to be accepted and the alternative hypothesis, which favours the fixed effect model, failed to be rejected. Therefore, analysis of the data was done using a fixed effect model.

3.3. Multicollinearity Test

Data are said to have multicollinearity conditions if there is a correlation between two or more explanatory variables, making it impractical to explain effects to draw reliable and logical conclusions. Multicollinearity is said to exist when variance inflation factors (VIF) values exceed 10. Testing was done on the data for multicollinearity and the results were as indicated in table 4.

	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF
C	0.000101	11.93314	NA
MCRK	2.11E-05	1.549386	1.549386
MLDM	5.93E-05	1.536852	1.536852
ME	0.013354	12.00036	1.067218

Table 4: Testing for Multicollinearity Using VIF

Legend: MCRK = Credit Risk Management, MLDM = Liquidity Management, ME = Management Efficiency

Source: Field Data, 2023

As shown in table 4, all the centered VIF values lie below 10, suggesting the explanatory variables did not present multicollinearity challenges.

3.4. Descriptive Statistics

Table 5 presents the descriptive statistics relating to the study variables of loan repayment, credit risk management, liquidity management, and management efficiency.

	LRP	MLDM	MCRK	ME
Mean	0.058497	2.78E-15	1.92E-15	0.083282
Median	0.033344	-0.169709	-0.185046	0.072043
Maximum	0.372642	6.781433	14.36709	0.306122
Minimum	-0.183333	-1.452363	-1.694078	0.011299
Std. Dev.	0.089479	1.118274	1.742627	0.053644
Skewness	0.768780	3.042879	6.402868	1.637485
Kurtosis	4.947896	16.94806	51.14514	6.185074
Jarque-Bera	24.63355	926.3389	9927.766	83.48050
Probability	0.000004	0.000000	0.000000	0.000000
Sum	5.615750	2.63E-13	1.71E-13	7.995032
Sum Sq. Dev.	0.760619	118.8010	288.4913	0.273379
Observations	96	96	96	96

Table 5: Descriptive Statistics on Loan Repayment, Credit Risk Management, Liquidity Management and Management Efficiency for the MFBs
Legend: LRP= Loan Repayment, MLDM = Liquidity Management, MCRK = Credit Risk Management, ME = Management Efficiency
Source: Field Data, 2023

Table 5 indicates that all the study parameters gravitated around the mean and therefore, the data used in the analysis were normally distributed.

3.5. Trend Analysis

A trend analysis of the study variables was conducted to establish their behaviour pattern. The results are shown in figure 1.

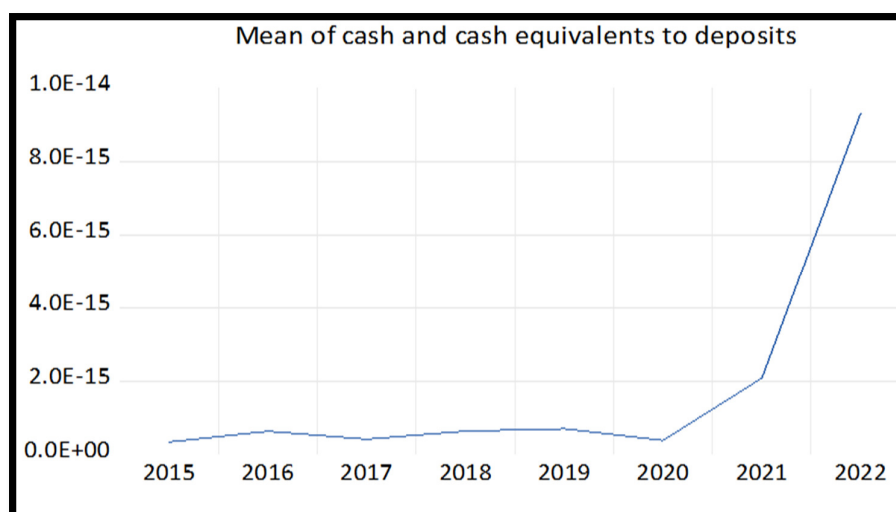


Figure 1: Trend for Credit Risk Management
Source: Field Data, 2023

Figure 1 reveals that the ratio of cash and cash equivalents to member deposits remained significantly low from the start of 2015 until the year 2020, when a significant rise was noted, leading to a sharp rise from 2021 to 2022. The graph implies that MFBs have never employed credit risk mitigation measures until the year 2020, when the reality and need to monitor their loan books dawned on them, which was embraced and sustained all the way to the end of the study period.

3.6. Regression Results

Dependent Variable Loan Repayment				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.025046	0.009824	2.549565	0.0127*
ME	0.401666	0.112987	3.554967	0.0006*
MLDM	0.020110	0.007460	2.695535	0.0085*
MCRK	-0.009874	0.004353	-2.268152	0.0260*
R-squared	0.826936			
Adjusted R-squared	0.797024			
S.E. of regression	0.049850			
F-statistic	27.64544			
Prob(F-statistic)	0.000000			
Durbin-Watson	1.726765			

Table 6: Fixed Effect Regression Output for the Study Model
 Legend: LRP= Loan Repayment, MLDM = Liquidity Management,
 MCRK = Credit Risk Management, ME = Management Efficiency
 * Represent significance at the 0.05 level
 Source: Field Data, 2023

The panel regression results, as shown in table 6 reveal that there is a negative but significant relationship between credit risk management and loan repayment ($\beta = -0.009874$, $p = 0.0260$). This implies that a unit increase in credit risk management leads to a significant 0.98% decrease in loan repayment performance. The results show that as the credit risk management ratio, measured by the ratio of total cash and cash equivalents divided by customer deposits, increase, the ratio of net non-performing loans to total assets decrease minimally but significantly. Since the basic model's adjusted R^2 was 0.826936 and $p = 0.0000$, as reported in table 6, it can be deduced from the findings that credit risk management, together with the combined variables of the study account for 82.69% of the changes in loan repayment among MFBs in Kenya.

The findings in table 6 reveal that credit risk management is negatively but significantly correlated with loan repayment ($\beta = -0.009874$, $p = 0.0260$). The results reveal that a unit increase in credit risk management measures yields a 2.6% decline in the performance of loan repayment among MFBs' borrowers. This outcome is consistent with past findings (Otieno *et al.*, 2016; Khan *et al.*, 2020; Ademola & Adegoke, 2021), who reported a negative but significant relationship between credit risk management and loan repayment. However, it contradicts the findings of Orichom and Omeke (2020), who reported a positive and significant relationship between credit risk management and financial performance ($\beta = 0.529$, $p = 0.01$). This finding buttresses the results of Khan *et al.* (2020), who used a fixed effect model to analyze the relationship between the study variables but reported a lower rate of indicated $\beta = -0.0910$, $p = 0.000$.

When loan repayment is high, financial performance is deemed to be on an upward trajectory. By inference, efforts to mitigate against loss due to default are expected to yield favourable loan repayment and thus improve repayment. However, the findings suggest that when such loan loss mitigation measures are escalated, non-performing loans increase, leading to a low loan repayment ratio. From the study results, it can be inferred that whenever measures are employed to mitigate potential loss due to default, the outcome yields suppressed loan repayments. This position contradicts the prevailing pronouncement of the credit risk theory, which advocates for measures to interrogate loanees as mitigation mechanisms to control for future default. The theory presupposes that due to inevitable information asymmetry between borrowers and lenders, financial institutions must take deliberate steps to extract as many critical details as possible from the borrowers to provide a balanced understanding of the established credit integrity of loanees. However, from this finding, it can be deduced that taking preventive measures to arrest potential default is counterproductive to the financial entity, as non-performing loans are seen to escalate with enhanced loaning restrictions.

One possible explanation for this output is the pointer to the likelihood that there are a growing number of distressed borrowers in the market. New applicants for loan products are exposed to stringent qualification benchmarks before accessing the funds, while those already enjoying loan advancements are under biting pressure to repay under operating circumstances that stretch them to distress levels. The upshot of this scenario gives rise to three possible outcomes. To begin with, tight credit control mechanisms stifle loan applications such that only a few qualify for loans. This leads to excess availability of funds lying at the disposal of MFBs. Secondly, the strict enforcement for recovery of defaulted loans leads to the disposal of charged assets that eventually generate dissatisfied and distraught borrowers who do not contemplate the application of new products. Aggressive loan recovery measures yield a collection of funds with no corresponding disbursements on account of distressed borrowers. Thirdly, borrowers unable to repay and with no substantive alternative sources fall into indefinite default status, leaving the MFBs with no recourse as the accumulation of debt escalates unabated.

On account of the credibility of the tests shown, the null hypothesis, H_{01} , for the study objective to the effect that there is no significant relationship between credit risk management and loan repayment among microfinance banks in Kenya, failed to be accepted and the alternative hypothesis failed to be rejected.

4. Conclusion and Recommendations

The findings show a conflicting relationship between credit risk management and loan repayment. Whereas it was expected that efforts to mitigate loss due to non-repayment of loans would lead to improved collections, results have indicated that the opposite is true. From this outcome, it is recommended that regulatory efforts to enforce a reduction in non-performing loans should go hand in hand with measures to filter the profile of loan applicants to eliminate borrowers with tainted credit histories. Further studies should be undertaken with a panel of many observations to compare the outcomes with those of this study.

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