
**CREDIT APPRAISAL PARAMETERS AND ASSET QUALITY OF MICROFINANCE
BANKS IN KENYA**

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Abstract

Microfinance banks play an important role in the provision of a wide range of financial services and products. However, they have been struggling with huge volumes of increasing NPLs which negatively affect their performance. The general objective of the research was to determine the effect of credit appraisal parameters on asset quality of microfinance banks in Kenya. Specific objectives were to determine the effect of borrower's character, capacity, credit rating, credit history and collateral on asset quality of MFBs in Kenya. The research was underpinned on information asymmetry theory, transaction cost theory, theory of credit scoring and the 5 c's model of client appraisal. The findings reveal significant relationships between credit appraisal parameters and asset quality in MFBs in Kenya. Borrower's character, capacity, credit rating, credit history, and collateral all exhibit positive coefficients, indicating that improvements in these areas are associated with better asset quality. Specifically, borrower's character, capacity, credit rating, credit history, and collateral exhibit coefficients of -0.354, -0.135, -0.163, -0.216, and -0.311, respectively, all significant at $p < 0.05$. These findings underscore the importance of robust credit appraisal processes in mitigating credit risk and maintaining asset quality within MFBs. Therefore, the study recommends enhancing borrower assessment mechanisms, including character evaluation, capacity analysis, credit rating procedures, credit history reviews, and collateral valuation, to progress asset quality management in Kenyan Microfinance banks.

Keywords: *Asset quality, Borrower's capacity, Borrower's Character, Collateral, Credit history, Credit Rating*

INTRODUCTION

The asset quality of the banking industry has been deteriorating for the last few years due to local and international factors leading to poor performance. According to Kenya Bankers Association (KBA) (2023), the sector's Non-Performing Loans (NPL) ratio augmented to 14.05% in 2020 increasing to 14.1% in 2021, 14.7% 2022 and 14.9 % in April 2023. The situation was compounded by the emergence of Covid 19 which saw many customers unable to honour their obligations. Consequently, borrowers were incentivized to modify the terms of their loans, resulting in a total of 401,498 loan accounts worth Ksh.1.63 trillion being restructured in 2020. This constitutes 54.2% of all loans in the banking industry. Although the sector reported slight improvement in asset quality in the in the first half of 2023 with NPL decreasing by 0.3% from

13.0% in 2022 to 12.7%, the NPL coverage ratio decreased by 2.3% from 62.3% in 2022 to 60.0% in 2023 (KBA, 2023).

According to Kluwer (2018), credit appraisal standards are utilized to prevent the extension of credit to borrowers who lack the ability to repay their debts. Parameters used should be such that they are not very stringent nor too liberal. A stringent credit policy that is too strict may turn away prospective clientele, but it also saves the company costs associated with debt collection and management. Conversely, a credit policy that is excessively lenient entices consumers who are not creditworthy, customers who pay slowly, or customers who default on payments (Mwaura & Jagongo, 2017). As a result, there is need to come up with an optimum credit appraisal criterion. Bezemer and Zhang (2019) argue that a suitable criterion should assist managers in both attracting and retaining clients, while also ensuring that it does not adversely affect cash flow. Additionally, it aids in maintaining uniformity in the process of credit acceptance (Musa & Nasieku, 2019).

Character refers to a borrower's financial history and welfare. Lenders evaluate borrowers based on reliability, disposition, and credibility. The system evaluates applicants' financial responsibility and ability to repay loans on time. Any person's credit score is largely affected by their payment history (Tounsi, Hassouni & Anoun, 2018). Prior credit utilization, timely payment, and credit payment duration may be considered. Character includes payment history, credit score, credit record, and relationship with past creditors (Battiston, Stolbova, Napoletano & Roventini, 2017).

The borrower's cash flow determines their loan repayment capacity. When assessing creditworthiness, lenders analyze whether the borrower can make additional loan payments on top of their debt. A responsible credit user is more likely to continue being responsible, while someone who has missed payments or defaulted is more likely to suffer with debt (Zhang & Chi, 2018). Cash flow into the business is a key factor in loan eligibility. As cash flow is important to a business's existence, cash shows lenders the amount available for loan repayments. Former tax documents are used by lenders to evaluate applicants' financial management. Since tax records may not be complete, lenders may use income statements, balance sheets, and cash flow statements to assess repayment capacity. Profundity (Zhang & Chi, 2018). Borrower earnings and stability are important. Lenders analyze business revenue while granting loans (Zhao, 2017). This variable measured income, current assets, and financial solvency.

Loan collateral is property used as security. If the principal method of repayment is unavailable, collateral provides a backup. If the borrower defaults, the lender can repossess the asset to reclaim the outstanding debt. Lender risk decreases when borrowers can and want to provide significant collateral (Zhang & Chi, 2018). Borrowers can pledge various assets to lenders. Real estate, inventory finance, invoice collateral, blanket liens, and cash-secured loans are common collateral. Automobiles and high-value items are usually offered as part of inventory finance. Verify their value before using them as collateral (Zhang & Chi, 2018). Inventory loans, blanket liens, and property were collateral.

Credit ratings measure a borrower's capacity to repay a loan or meet a financial obligation, either generally or for a specific debt. A credit rating can assess an individual, corporation, state or provincial authority, or sovereign government's creditworthiness (Moradi & Rafiei, 2019). More reliable than traditional risk assessment approaches, credit rating evaluation is commonly used to measure borrower reliability. An automated system scores credit instantly, allowing banks to analyze risk and open accounts more swiftly, correctly, and impartially, boosting the portfolio. Finally, it simplifies unpleasant options, lowers credit costs for dependable borrowers, increases

credit availability, and improves credit accessibility (Reis, Pfeuffer & Smith, 2020). The borrower's payment history, debt, and credit activity affect their credit rating.

A person's credit history includes late payments and bankruptcy. A client reporting agency issues a credit report that includes a consumer's reliability, credit status, credit capacity, and credit history. Loan market efficiency depends on accurate credit information. This helps lenders assess and manage risks, gives deserving applicants access to credit, and reduces debt. Credit history reduces MFB credit risk (Aikman, Haldane & Nelson, 2015). Credit rating factors included payment history, new credit, duration of credit history, and credit mix.

Asset quality is of paramount importance in the financial sector. Financial regulatory bodies globally prioritize assessing the asset quality of financial institutions as it is essential in defining their overall condition (Ochola, 2016). Loans and advances are the most prevalent bank assets that necessitate a rigorous assessment of asset quality. Enhancing the quality of loans enhances the profitability of bank loans and decreases the expenses associated with loan defaults. However, achieving this improvement comes at a cost that necessitates careful management by banks (Murigi & Thuo, 2018). The quality of assets has a direct impact on interest revenue and also helps to minimize the costs associated with managing bad debts, as mandated by legal standards. Financial institutions are obligated to reserve funds, which can be deducted as an expense, in order to safeguard against potential losses resulting from loan defaults (Mulyungi & Mulyungi, 2020).

Gizaw, Kebede and Selvaraj (2015) assert that NPLR is the principal determinant of credit risk. Telceke (2017) suggested that there is a direct link between non-performing loans and asset quality. Specifically, when non-performing loans increase, asset quality decreases, and vice versa. According to Wambugu and Mungai (2019), the effective control of loan quality, capital adequacy levels, and liquidity levels is responsible for determining the quality of assets. Sile (2019) stated that bank assets encompass many components such as current assets, credit portfolio, fixed assets, among other investments. The CBK assesses asset quality using the ratio of net NPLs to gross loans. This study assessed the quality of assets by measuring the NPL. The NPLR is a measure of a bank's credit quality and serves as an indicator of the quality of its assets. The NPLR, specifically, signifies the manner in which banks handle their credit risk by establishing the ratio of loan loss amount to the overall loan amount. In Kenya, bad loans were at sh482.6 billion in 2022, sh570.6 billion in 2023. This has been so due to poor asset quality (CBK report, 2023).

In Kenya, MFBs are subject to regulation according to the Microfinance Act (2006). Section 3 of the Act distinguishes between two categories of MFBs: Deposit-taking MFBs and non-deposit-taking MFBs, also referred to as credit-only MFIs. According to the regulations of microfinance institutions that accept deposits (2008), these institutions are divided into two categories: community microfinance institutions, which are licensed to conduct deposit-taking microfinance activities within a specific district, city, or region approved by the CBK; and countrywide microfinance institutions, which are licensed to conduct deposit-taking microfinance activities across the entire country. CBK (2022) reported that as of December 31, 2021, there were twelve (12) licensed MFBs in Kenya. The following financial institutions are included: Choice Microfinance Bank, Faulu, KWFT, SMEP, REMU, Rafiki, Uwezo, Century, Sumac, U&I, Daraja, and Caritas. The MFB have experienced poor loans quality due to non-payment or delayed payment by borrowers.

Problem Statement

Bezemer, Ryan-Collins, van Lerven, and Zhang (2023) did an investigation on credit policy and the 'debt shift' in industrialized nations. Nevertheless, this analysis did not provide any indication of the impact of credit policy on asset quality, and it mostly concentrated on industrialized nations. Sanathane (2020) conducted a panel data study to ascertain the influence of asset quality on profitability in domestic financial institutions in Sri Lanka. Nevertheless, the previous study was conducted within the framework of financial institutions, whereas the present study specifically examines microfinance banks. Barus (2017) researched on how the quality of assets impacts the financial success of SACCOs in Kenya. Nevertheless, this analysis specifically examined the asset quality and performance of the company. Sile (2019) researched the impact of asset quality on the financial health of commercial banks in Kenya. However, this study context was commercial banks. Mwangi (2021) studied the effect of credit management on asset quality of MFIs in Nairobi Metropolitan. This study aimed to fill the conceptual and contextual gaps by studying the effect of credit appraisal parameters on asset quality of MFBs in Kenya.

Objectives of the Study

General Objective

To determine the effect of credit appraisal parameters on asset quality of microfinance banks in Kenya.

Specific Objectives

- i. To ascertain the effect of borrower's character on asset quality of microfinance banks in Kenya.
- ii. To assess the effect of borrower's capacity on asset quality of microfinance banks in Kenya.
- iii. To analyse the effect of borrower's credit rating on asset quality of microfinance banks in Kenya.
- iv. To ascertain the effect of borrower's credit history on asset quality of microfinance banks in Kenya.
- v. To establish the effect of borrower's collateral on asset quality of microfinance banks in Kenya.

Research Hypothesis

The study sought to test for the following null hypothesis;

H₀₁: Borrower's character has negligible impact on asset quality of microfinance banks in Kenya.

H₀₂: Borrower's capacity has negligible impact on asset quality of microfinance banks in Kenya.

H₀₃: Borrower's credit rating has negligible impact on asset quality of microfinance banks in Kenya.

H₀₄: Borrower's credit history has negligible impact on asset quality of microfinance banks in Kenya.

H₀₅: Borrower's collateral has negligible impact on asset quality of microfinance banks in Kenya.

LITERATURE REVIEW

Information Asymmetry Theory

Information Asymmetry Theory was postulated by Stiglitz (1961), Akerlof (1970), and Spence (1973). Asymmetric information is a challenge in financial markets, particularly in the context of borrowing and lending. In these marketplaces, the borrower possesses greater knowledge

regarding their financial condition compared to the lender. This leads to a situation where the market fails to efficiently allocate resources. In an ideal market environment, when both parties have access to complete and free information, and there are no doubts about current and future trade conditions, there is no market failure due to lack of information. Nevertheless, it is important to acknowledge that information in the actual world is not flawless or free. Furthermore, the small company finance market is marked by the presence of risk and uncertainty surrounding future circumstances. The distribution of information between the lender and borrower is asymmetric. This theory helped in explaining the effects of borrower; capacity, borrower's character, borrower's credit rating and borrower's credit history on asset quality of microfinance banks.

Transaction Cost Theory

The transaction cost hypothesis, initially hypothesized by Coase in the 1930s in his renowned work "The Nature of the Firm" and further expanded upon by Williamson in the mid-1970s (Williamson, 1985), posits that the prosperity of a corporation is contingent upon effectively balancing transaction costs and internal costs. Williamson (1989) states that transaction costs result from friction between exchange parties. Transaction costs due to asymmetric information between lenders and borrowers can affect borrowers' decisions and loan quality. Liedholm (1985) states that transaction costs primarily arise from transaction frictions and information asymmetry. Islanders lack comprehensive information regarding the attributes of prospective borrowers. This theory helped in explaining the effects of borrower character on asset quality of microfinance banks.

Theory of Credit Scoring

This was advanced by Fair and Isaac in 1956. The theory of credit scoring pertains to the assessment of indiscreet consumer credit, in which borrowers possess the legal choice to fail. It assumes that defaulters are not externally barred from obtaining future loans, there is unrestricted access for lenders, and lenders are unable to conspire in order to penalize defaulters. The lender's decision to provide restricted credit or credit with elevated interest rates after a default is based on their optimal response to having little knowledge about the borrower's characteristics and actual earnings. The lender gains insight into an individual's borrowing and repayment patterns to determine their creditworthiness and assess their likelihood of defaulting through a credit score (Karapetyan & Stacescu, 2010). This theory was used in explaining the effect of borrower's credit rating on asset quality of microfinance banks in Kenya.

The 5 C's Model of Client Appraisal

Credit Unions utilizes the 5Cs model that developed for credit to evaluate a customer as a potential borrower (Pride, Hughes, & Kapoor, 2008). The 5Cs evaluate a customer's character, capacity, capital, collateral and conditions of the applicant and how all these affect their ability to repay the loan prior to disbursing it. The 5Cs help check the ability of the loan applicant to repay the applied amount of credit as and when they fall due thereby increasing credit performance of the institution (Sarajar, 2013). This model is used to determine the credit appraisal parameters of potential borrowers solely based on the information declared by the applicant (Kealy, 2014). This theory was employed to elucidate the impact of collateral and borrower credit score on the asset quality of MFBs in Kenya.

Empirical Review

Effect of Borrower's Character on Asset Quality

Mungai, Maingi, and Muathe (2018) examined the impact of borrower characteristics on government-funded micro-credit enterprises in Murang'a County, Kenya. The study aimed to

determine the impact of borrower characteristics on micro-credit repayment in Murang'a County. The research employed a descriptive survey design. The study focused on a sample of 1520 social and economic groups in Murang'a County. Data was collected using both a questionnaire and an interview schedule. The descriptive data were analyzed using tables and figures. The hypothesis testing yielded statistically significant findings about the impact of borrowers' characteristics on loan repayment and sustainability. The research discovered that the rural borrower faces significant challenges in terms of the elevated risk and cost associated with borrowing. Moreover, the uncertainty surrounding their ability to repay is exacerbated by their inconsistent revenue streams. The survey discovered that certain spouses had absconded from their houses after obtaining loans, either to avoid repaying the debt or to escape the persistent demands from their partners, or to retain some or all of the borrowed sum.

Effect of Borrower's Capacity on Asset Quality

Simba and Mugo (2018) researched on the effect of borrower's capacity and capital information on credit risk management: A Case of MFIs in Nakuru Town. This research aimed to ascertain the impact of borrowers' information on credit risk management in MFIs in Nakuru Town, Kenya. The research utilized a descriptive research approach and focused on managers and staff involved in finance in 18 MFIs) located in Nakuru Town, Kenya. The research employed a closed-ended questionnaire that underwent piloting to certify its validity and reliability. The acquired data was subsequently encoded and analyzed with SPSS Version 21, and the results were provided in tabular format. In order to test the hypothesis of the research, a regression analysis was conducted. It was determined that the coefficient of correlation (R) indicated a strong and positive correlation for the connection between the independent variables.

Effect of Borrower's Credit Rating on Asset Quality

Kisaka (2016) studied the impact of credit rating practices on the success of financial institution's loan books in Kenya. The aim of the research was to assess the impact of several factors, such as the historical context of customers, their ability to repay loans, credit reference reports, collateral for the loan, and credit rationing, on the performance of the loan book in financial institutions in Kenya. The project employed a cross-sectional survey design. The research population consisted of all 44 financial institutions in Kenya. Information was gathered from both primary and secondary sources. The data was analyzed through multivariate regression analysis with the assistance of SPSS version 21. The findings demonstrated a direct correlation between the credit rating procedures and the loan portfolio success in financial institutions in Kenya. The regression study indicated that all credit rating variables had a favorable influence on the performance of the loan book of financial institutions in Kenya. The variable with the greatest influence was the ability to repay the loan, followed by the credit reference report. The financial institutions also regarded historical background, collateral for the loan, and credit rationing as significant factors in credit risk assessment.

Effect of Borrower's Credit History on Asset Quality

Gachora (2015) examined the impact of credit information sharing on loan performance in financial institutions in Nairobi County. This research was conducted to determine the impact of CIS on loan performance at financial institutions in Nairobi County, Kenya. The findings demonstrated that the implementation of the CIS system resulted in a decline in the amount of loan portfolio arrears in the majority of banks, mostly due to enhanced screening effects. The study also noted a more pronounced and noteworthy impact of the information system to reduce the frequency of payment delays that occur through the loan cycle. The researcher discovered that when information is disseminated by an information exchange organization, such as credit

bureaus and public credit registers, more competition leads to lower interest rates and diminishes the advantages gained from possessing exclusive information.

Effect of Borrower's Collateral on Asset Quality

Masila (2021) researched the impact of collateral on loan repayments in Kenyan financial banks. The primary aim of the research was to determine the impact of collateral on the default rate among financial institutions in Kenya. The target audience consisted of all 42 regulated banks. Secondary data sources were utilized. Data was collected from 2016 to 2020, over a span of five years. The research utilized correlation analysis and multiple linear regression model, employing OLS as the estimation technique. The study revealed that for the period from 2016 to 2020, the only factor that had a meaningful correlation with the default rate was the size of the bank. They exhibited a substantial positive connection. Nevertheless, over the period from 2011 to 2015, the analysis discovered that there was no substantial correlation between default rate and collateral, loan rate, and firm size. Additional discoveries revealed that the model incorporating collateral, loan rate, and bank size did not have a substantial predictive power for the default rate. The conclusive results indicated that there wasn't substantial correlation between default rate and collateral, loan rate, or bank size when examined individually.

RESEARCH METHODOLOGY

This study adopted the descriptive research designs. Descriptive research design was employed in the study as it enables the researcher to describe the phenomenon as it exists while at the same time determining the relationship existing between variables. Since the research aimed to determine the effect of credit appraisal parameters on asset quality of microfinance banks in Kenya, the descriptive research design was appropriate in describing the quality of assets in microfinance banks and ascertain the effect of credit appraisal parameters on asset quality.

The research was carried out in microfinance institutions located in Kenya. As of December 2023, the AMFI reported that there were a total of 12 microfinance banks that had obtained licenses in Kenya. The survey was carried out among the 12 authorized microfinance banks in Kenya. The study participants consisted of 228 respondents working in the credit department of the microfinance banks. Stratified sampling was employed to choose the sample for the investigation. Strategic sampling was employed to select employees in credit department of the microfinance banks.

RESULTS AND DISCUSSIONS

Descriptive Statistics Analysis for the Study Variables

Borrower's Character

The findings show that their organization: examines if the borrower consistently makes loan payments on time ($M= 3.987$, $SD= 0.69$); that it ensures that the borrower communicate openly about any potential challenges in meeting loan obligations ($M= 3.944$, $SD= 0.600$); and that it guarantees the borrower's strict compliance with the terms and conditions specified in the loan agreement ($M= 3.847$, $SD= 0.125$). They were further in agreement that in their organization ensures that the borrower takes responsibility for any deviations from the original loan agreement ($M= 3.801$, $SD= 0.572$); that it examines if the borrower is transparent about their financial situation when discussing loan terms ($M= 3.725$, $SD= 0.277$); and that it examines if the borrower has a history of fulfilling financial commitments promptly ($M= 3.670$, $SD= 0.837$).

Table 1: Descriptive Statistics on Borrower's Character

Statements	Mean	Std. Dev.
Our organization examines if the borrower consistently makes loan payments on time.	3.987	0.69
Our organization ensures that the borrower communicate openly about any potential challenges in meeting loan obligations	3.944	0.6
Our organization ensure the borrower strictly adheres to the terms and conditions outlined in the loan agreement.	3.847	0.125
Our organization ensures that the borrower takes responsibility for any deviations from the original loan agreement.	3.801	0.572
Our organization examines if the borrower is transparent about their financial situation when discussing loan terms.	3.725	0.277
Our organization examines if the borrower has a history of fulfilling financial commitments promptly.	3.67	0.837
Aggregate Score	3.829	0.517

Borrower's Capacity

The findings show that the respondents were in agreement on average that the borrower is required to have a contingency plan in place to address potential financial setbacks (M= 3.935, SD= 0.126); that the borrowers are required to promptly informs lenders of any issues that may affect their ability to make timely payments (M= 3.906, SD= 0.893); and that the borrower should demonstrate resilience in managing unforeseen financial challenges without defaulting on loan payments (M= 3.863, SD= 0.345). They were further in agreement that their organization encourage borrowers to maintain regular and effective communication regarding any changes in their financial circumstances (M= 3.858, SD= 0.316); that their organization investigates if the borrower has a stable and consistent source of income to support loan repayment (M= 3.729, SD= 0.935); and that their organization investigates if the borrower's income is reliable, minimizing the risk of payment disruptions (M= 3.649, SD= 0.291).

Table 2: Descriptive Statistics on Borrower's Capacity

Statements	Mean	Std. Dev.
The borrower is required to have a contingency plan in place to address potential financial setbacks.	3.935	0.126
The borrowers are required to promptly informs lenders of any issues that may affect their ability to make timely payments.	3.906	0.893
The borrower should demonstrate resilience in managing unforeseen financial challenges without defaulting on loan payments.	3.863	0.345
Our organization encourage borrowers to maintain regular and effective communication regarding any changes in their financial circumstances.	3.858	0.316
Our organization investigates if the borrower has a stable and consistent source of income to support loan repayment.	3.729	0.935
Our organization investigates if the borrower's income is reliable, minimizing the risk of payment disruptions.	3.649	0.291
Aggregate Score	3.823	0.484

Borrower's Credit Rating

The findings shows that the respondents agreed on average that their organization investigates if the borrower possesses a credit score that is considered favourable for obtaining credit (M=

3.965, SD= 0.387); that their organization investigates if the borrower's credit score reflects a high level of creditworthiness (M= 3.881, SD= 0.535); and that their organization investigates if the borrower has a well-rounded portfolio of credit accounts (M= 3.768, SD= 0.428). They also agreed that their organization investigates if the payments on the borrower's credit accounts are rarely overdue (M= 3.716, SD= 0.748); that the borrower diverse mix of credit types, contributes positively to their credit rating (M= 3.686, SD= 0.131); and that the borrower is required consistently makes payments on credit accounts by their due dates (M= 3.682, SD= 0.704).

Table 3: Descriptive Statistics for Borrower’s Credit Rating

Statements	Mean	Std. Dev.
Our organization investigates if the borrower possesses a credit score that is considered favourable for obtaining credit.	3.965	0.387
Our organization investigates if the borrower's credit score reflects a high level of creditworthiness.	3.881	0.535
Our organization investigates if the borrower has a well-rounded portfolio of credit accounts.	3.768	0.428
Our organization investigates if the payments on the borrower's credit accounts are rarely overdue.	3.716	0.748
The borrower diverse mix of credit types, contributes positively to their credit rating.	3.686	0.131
The borrower is required consistently makes payments on credit accounts by their due dates.	3.682	0.704
Aggregate Score	3.783	0.489

Borrower’s Credit History

The findings demonstrated that the responders agreed on average that their organization investigates if the borrower has a well-established credit history with a positive track record (M= 3.969, SD= 0.805); that their organization investigates if the borrower's credit history reflects responsible management of financial obligations (M= 3.955, SD= 0.143); and that their organization investigates if the borrower demonstrates prudence in managing their available credit (M= 3.902, SD= 0.32). The respondents also agreed that their organization investigates if the borrower has maintained a healthy credit score over time (M= 3.802, SD= 0.646); that their organization investigates if the borrower has a positive credit history with a good track record of repaying previous loans (M= 3.751 , SD= 0.288); and that their organization investigates if the borrower maintains a reasonable level of credit utilization, avoiding excessive borrowing (M= 3.707, SD= 0.313).

Table 4: Descriptive Statistics for Borrower’s Credit History

Statements	Mean	Std. Dev.
Our organization investigates if the borrower has a well-established credit history with a positive track record.	3.969	0.805
Our organization investigates if the borrower's credit history reflects responsible management of financial obligations.	3.955	0.143
Our organization investigates if the borrower demonstrates prudence in managing their available credit.	3.902	0.32
Our organization investigates if the borrower has maintained a healthy credit score over time.	3.802	0.646
Our organization investigates if the borrower has a positive credit history	3.751	0.288

with a good track record of repaying previous loans.

Our organization investigates if the borrower maintains a reasonable level of credit utilization, avoiding excessive borrowing. 3.707 0.313

Aggregate Score 3.848 0.419

Borrower's Collateral

The findings show that respondents agreed on average that regular inspections of the collateral are conducted to ensure its ongoing value and functionality (M= 3.943, SD= 0.312); that all necessary legal documents related to the collateral are verified and are in order (M= 3.843, SD= 0.9); and that their organization determines if the borrower demonstrates a commitment to maintaining the collateral in good condition throughout the loan term (M= 3.812, SD= 0.663). They were also in agreement that their organization determines if the borrower's collateral has been accurately appraised, and its current value is well-documented (M= 3.779, SD= 0.987); that their organization determines if the borrower has provided comprehensive information about the collateral's value and any factors that may affect it (M= 3.699, SD= 0.305); and that their organization ensures that the borrower has provided clear and valid documentation proving ownership of the collateral (M= 3.662, SD= 0.948).

Table 5: Descriptive Statistics on Borrower's Collateral

Statements	Mean	Std. Dev.
Regular inspections of the collateral are conducted to ensure its ongoing value and functionality	3.943	0.312
All necessary legal documents related to the collateral are verified and are in order	3.843	0.9
Our organization determines if the borrower demonstrates a commitment to maintaining the collateral in good condition throughout the loan term.	3.812	0.663
Our organization determines if the borrower's collateral has been accurately appraised, and its current value is well-documented.	3.779	0.987
Our organization determines if the borrower has provided comprehensive information about the collateral's value and any factors that may affect it	3.699	0.305
Our organization ensures that the borrower has provided clear and valid documentation proving ownership of the collateral.	3.662	0.948
Aggregate Score	3.790	0.686

Asset Quality

The general research objective was to ascertain the effect of credit appraisal parameters on asset quality of MFBs in Kenya. The research therefore collected data on non-performing loans in the selected organizations. Figure 4 presents the trend analysis of the NPLs of the 12 selected MFBs. The study used annual average to compute the trend. From the line graph, it's evident that, on average, microfinance banks in Kenya experienced their highest level of non-performing loans (NPL) in 2018. This peak suggests a potential issue with loan quality or repayment behavior during that period. However, there was a steady decline in NPL observed from 2018 to 2019, indicating a positive trend and potential improvements in asset quality or risk management practices implemented by the microfinance banks. The increase in NPL in 2020 may be attributed to various factors, including the economic disruptions caused by the COVID-19 pandemic. The pandemic led to widespread job losses, reduced business activities, and income instability, affecting borrowers' ability to meet their loan obligations. Despite this increase, there was a slight decline in NPL observed in 2021, indicating possible corrective actions taken by the microfinance banks in response to the challenges faced in the previous year. It's worth noting that

the lowest level of NPL was recorded in 2022, reflecting ongoing efforts by the microfinance banks to address and manage loan quality effectively.

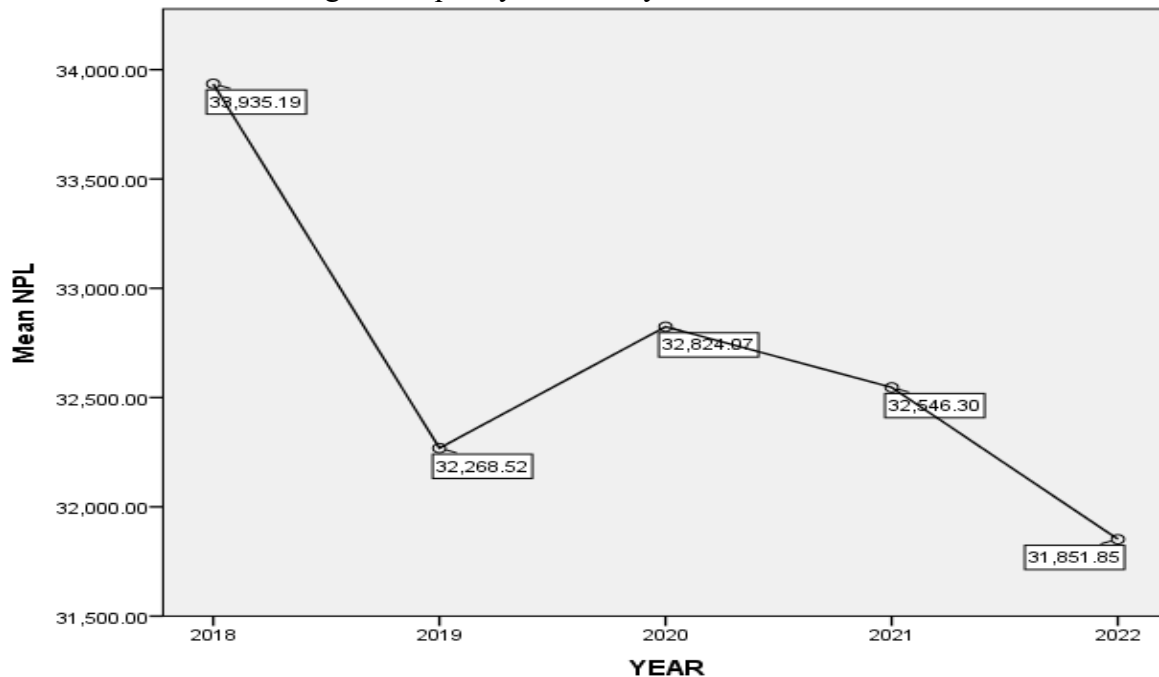


Figure 1: Trend Analysis in Non-Performing Loans of MFB
Inferential Statistics

The study conducted ANOVA to determine the fitness of the model. Results were summarised in table 6.

Table 6: Analysis of Variance

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	74.939	5	14.988	199.271	.000 ^b
1 Residual	9.402	125	.075		
Total	84.341	130			

a. Dependent Variable: Asset quality

b. Predictors: (Constant), Borrower's Character, Borrower's Credit History, Borrower's Capacity, Borrower's Credit Rating, Borrower's Collateral

The ANOVA results in Table 6 suggest that the regression model is statistically significant in predicting asset quality, as evidenced by a highly significant F-test with a value of 199.271 and a corresponding p-value of 0.000. This suggests that the variation in asset quality can be significantly explained by the combination of predictor variables included in the model, namely borrower's character, borrower's credit history, borrower's capacity, borrower's credit rating, and borrower's collateral. The regression model accounts for a substantial portion of the total variation in asset quality. These findings indicate that the model is highly effective in capturing the underlying relationships between credit appraisal parameters and asset quality in microfinance banks, providing valuable insights into the determinants of loan performance.

Further the study conducted student t-test to determine the significance of the study variables in predicting the dependent variable. Results were as presented in table 7.

Table 7: Beta Coefficients of the Study Variables

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.179	.146		8.075	.000
Borrower's Capacity	-.135	.052	-.124	-2.596	.032
Borrower's Credit Rating	-.163	.045	-.163	-3.622	.025
1 Borrower's Credit History	-.216	.050	-.212	-4.320	.021
Borrower's Collateral	-.311	.052	-.231	-5.981	.000
Borrower's Character	-.354	.037	-.335	-9.568	.000

a. Dependent Variable: Asset quality

From the coefficients findings in Table 7, the following regression model was fitted;

$$Y = 1.179 - 0.135 X_1 - 0.163 X_2 - 0.216 X_3 - 0.311 X_4 - 0.354 X_5$$

The constant term in the model represents the baseline asset quality when all predictor variables are zero. In this case, the constant coefficient is 1.179, and it is statistically significant with a p-value of .000. This suggests that even in the absence of borrower-related factors, there is a significant positive effect on asset quality. This finding underscores the importance of other variables in understanding the nuances of asset quality.

The beta coefficient for Borrower's Capacity is -0.135 with a p-value of .032. This indicates that for every unit increase in borrower's capacity, there is a slight decrease in asset quality. While the effect size is relatively small, the statistical significance suggests that borrower capacity plays a role in influencing asset quality, with higher capacity borrowers being associated with slightly lower asset quality.

The beta coefficient for Borrower's Credit Rating is -0.163 with a p-value of .025, suggesting that higher credit ratings are associated with lower asset quality. This finding implies that borrowers with better credit ratings may exhibit lower levels of default or delinquency, contributing to improved asset quality within microfinance banks.

The beta coefficient for Borrower's Credit History is -0.216 with a p-value of .021, indicating that a more favourable credit history is linked to lower asset quality. This suggests that borrowers with a demonstrated history of timely repayment and responsible credit behaviour are less likely to contribute to non-performing loans, thus positively impacting asset quality. The beta coefficient for Borrower's Collateral is -0.311 with a p-value of .000, indicating a highly significant negative relationship between collateral and asset quality. This implies that higher levels of collateral are strongly associated with lower asset quality, possibly due to riskier borrowers requiring more collateral to secure loans, reflecting underlying credit risk.

Finally, the beta coefficient for Borrower's Character is -0.354 with a p-value of .000, suggesting that stronger borrower character traits are associated with lower asset quality. This finding underscores the importance of borrower integrity, honesty, and trustworthiness in loan repayment behaviour, with borrowers exhibiting favourable character traits being less likely to default on their obligations, thereby positively impacting asset quality.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The study concludes that borrower's character negatively and significantly influences asset quality within microfinance banks in Kenya. Borrowers with higher levels of integrity and

reliability tend to exhibit lower non-performing loans (NPLs), contributing positively to asset quality. This underscores the importance of assessing borrower character in loan appraisal processes to mitigate credit risk and enhance asset quality.

The study concludes that borrower's capacity negatively and significantly influences asset quality within microfinance banks in Kenya. The findings suggest that borrower's capacity plays a crucial role in determining asset quality within microfinance banks in Kenya. Borrowers with greater financial capability demonstrate a higher likelihood of loan repayment, resulting in lower NPLs and improved asset quality. Therefore, enhancing borrowers' financial capacity through financial literacy programs and tailored credit products could positively impact asset quality.

The study concludes that borrower's credit ratings negatively and significantly influence asset quality within microfinance banks in Kenya. The study highlights the significance of borrower credit ratings in influencing asset quality within microfinance banks in Kenya. Higher credit ratings are associated with lower NPLs, indicating a positive relationship between creditworthiness and asset quality. Strengthening credit rating mechanisms and promoting financial inclusion could contribute to maintaining favourable asset quality outcomes.

The study concludes that borrower's credit history negatively and significantly influences asset quality within microfinance banks in Kenya. The study highlights the significance of borrower credit history in influencing asset quality within microfinance banks in Kenya. The research underscores the importance of borrower credit history in shaping asset quality within microfinance banks in Kenya. Borrowers with favourable credit histories exhibit lower NPLs, reflecting a positive impact on asset quality. Emphasizing the evaluation of credit histories in loan assessment processes could aid in maintaining sound asset quality standards.

The study concludes that borrower's collateral negatively and significantly influences asset quality within microfinance banks in Kenya. Higher levels of collateralization are associated with lower NPLs, indicating a risk-mitigating effect on asset quality. Strengthening collateral management practices and diversifying collateral options could contribute to sustaining favourable asset quality levels.

Recommendations

To enhance asset quality in microfinance banks in Kenya, it is recommended to implement robust borrower character assessment mechanisms during the loan appraisal process. This involves conducting thorough background checks, including references and credit history analysis, to gauge the integrity and reliability of borrowers. Furthermore, providing financial education programs to potential borrowers can help cultivate responsible financial behaviour, reducing the likelihood of default. Microfinance institutions should also prioritize building long-term relationships with clients to better understand their character traits and anticipate any potential risks.

To improve asset quality, microfinance banks should focus on enhancing borrowers' financial capacity. This can be achieved through tailored financial literacy programs aimed at improving money management skills, budgeting, and financial planning. Additionally, offering flexible repayment terms and loan products that align with borrowers' income streams can help mitigate the risk of default. Strengthening partnerships with other financial institutions to provide access to additional financial services, such as savings and insurance products, can further enhance borrowers' financial resilience.

Microfinance banks should invest in robust credit rating systems to accurately assess borrowers' creditworthiness. This entails leveraging alternative data sources, such as mobile phone usage and utility bill payments, to complement traditional credit scoring methods. By adopting a more

comprehensive approach to credit assessment, microfinance institutions can better identify low-risk borrowers and offer them favourable loan terms. Additionally, regular monitoring and updating of credit ratings can help mitigate the risk of default and maintain healthy asset quality levels.

To improve asset quality, microfinance banks should prioritize the evaluation of borrowers' credit histories. Implementing standardized credit reporting systems and sharing borrower repayment information among financial institutions can provide more comprehensive insights into borrowers' creditworthiness. Microfinance institutions should also offer credit-building products, such as small-scale loans or secured credit cards, to help individuals establish positive credit histories. By incentivizing responsible borrowing behaviour and rewarding timely repayments, microfinance banks can mitigate the risk of default and uphold asset quality standards.

Microfinance banks should streamline and strengthen their collateral management processes to safeguard asset quality. This involves conducting thorough assessments of collateral value and ensuring proper documentation and registration of collateral assets. Additionally, diversifying collateral options beyond traditional assets, such as land or property, to include movable assets like inventory or equipment, can improve accessibility to credit for a wider range of borrowers. Moreover, implementing risk-based pricing strategies that offer lower interest rates for loans secured by high-value collateral can incentivize borrowers to provide adequate security, reducing the risk of default and preserving asset quality.

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