Credit Risk Management on Financial Performance of Selected Microfinance Institutions

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ABSTRACT

The purpose of this study was to look at the impact of credit risk management on the financial performance of a few Kenyan microfinance firms. The study’s approach was a descriptive survey research design and a panel data analysis technique. The study comprised credit managers from all 52 Kenyan microfinance institutions registered in the Association of Microfinance Institutions in Kenya (AMFI) database. The study included all of the institutions that were targeted. The questionnaire, which had previously been tested on local microfinance banks in Kakamega County, was used to collect data. Data analysis included regression analysis and correlation. Throughout the data collection process, the researcher observed integrity. Tables were used to present the study's findings. According to the model summary, credit risk management accounts for 49.1% of the variance in the financial performance of Kenyan MFIs, while other factors not included in the study model account for the remaining 50.9%. With a p-value of 0.01 that is statistically significant. Multiple linear regression analysis revealed that a one-unit change in credit risk management resulted in a significant improvement of 0.672 units in microfinance institution performance (= 0.672 (0.087); at p.01). The study found that prudent and effective credit risk management boosts net profit margins, return on capital invested, and cash flow. The study adds to existing theories by emphasizing the importance of credit risk management in microfinance, lays the groundwork for future research, and advises Kenyan microfinance organizations to invest in efficient credit risk management to improve their financial performance. The report also suggests that studies on Savings and Credit Cooperative Societies (SACCOs) be conducted to compare study findings and that the Association of Microfinance Institutions do studies on non-registered microfinance across the country.

Keywords: Credit Risk, Finance Performance, Microfinance, Return On Capital Employed

I. INTRODUCTION

Microfinance institutions, often known as MFI s, are vital to the success of economies because they make crucial financial services available to people and companies that, for various reasons, do not have access to major financial institutions. These beneficiaries include people who run small businesses, people who live in accommodations for people with low incomes, and those who farm on a small scale (Serwadda, 2018). However, the financial stability of microfinance institutions (MFIs) is regularly jeopardized by issues such as bad loans, worries over liquidity, deteriorating profitability, and difficulties in cash flow. Because of these financial challenges, they are unable to effectively manage day-to-day operations or make payments on existing debts.

According to Wanja and Jagongo (2017), credit risk management (CRM) is an important aspect that has been identified as having a significant impact on the financial performance of microfinance institutions (MFIs). Although there is consensus among certain scholars that CRM has a beneficial impact on financial results, this impact has not gotten widespread acceptance from the academic community as a whole. As a direct consequence of this, there are voids in the body of research pertaining to this topic in the areas of methodology, theory, context, and concept. A significant portion of the currently available research is founded on asymmetry theories, contemporary portfolio management, and agency points of view.

Credit risk management, also known as CRM, is a thorough procedure through which a firm strategically prepares, executes, and maintains the systems, procedures, and controls necessary to assure the timely collection of
payments from its clients while simultaneously lowering the risk of nonpayment (Mashoko, 2020). CRM is an acronym that stands for "credit risk management."

In the same vein, according to Abdullahi et al. (2015), the term "financial performance" refers to how a firm conducts its operations over time, frequently in contrast to past or predicted cost efficiency, managerial accountability, and financial responsibility. In other words, financial performance measures how well a corporation manages its finances. According to Muturi (2016), one of the primary goals of customer relationship management (CRM) is to reduce the number of times that customers default on their loans. There are a variety of indicators that can be used to evaluate the success of a firm. Some of these metrics include sales revenue, losses, profits, return on equity (ROE), return on assets (ROA), and the market value of the company's assets.

According to Addae's (2014) observations, a significant number of smaller enterprises do not possess the necessary human resources and level of knowledge to successfully administer a credit management system. When a business extends credit to its customers, there is always the possibility that the customers will not repay the debt. However, if the credit risk is managed well, the firm may be able to ensure more stable revenue. Evaluation of credit is a fundamental practice that is aimed at minimizing the negative impacts of credit risk. There are several ways available for controlling credit risk, and one of these tactics is the evaluation of credit.

According to studies, more than ninety percent of financial institutions in the United States have put CRM best practices into action. Ernest and Frederic (2017) undertook the task of conducting an in-depth investigation into the dynamic relationship that exists between credit risk management and financial performance. According to the findings of their analysis, implementing a methodical strategy for managing credit relationships across the entirety of the credit life cycle while taking into account all of the pertinent customer data can result in significant increases in profitability and reductions in expenses that were not anticipated.

To ensure that a company's sales income is effectively transformed into cash that can be used, businesses, and manufacturers in particular, utilize CRM as an essential component of the financial controls that they employ in their operations. Naeem et al. (2017) suggest that credit control incorporates all aspects related to credit quality, credit extension, as well as cyclic patterns and sequences in the credit process. This is despite the fact that the banking business is notoriously complex.

A sophisticated credit control system that regulates all lending and borrowing transactions within the financial industry serves as the basis for customer relationship management (CRM). Even though short-term sales may initially grow, institutions that lend credit are exposed to the inherent risk of defaults, as underlined by Bagh, Khan, and Sadaf (2017). This risk can considerably damage the institutions' capacity to maintain their stability over the long term.

1.1 Objectives of the Study
To investigate the impact of credit risk management on Kenyan microfinance institutions' financial performance

II. LITERATURE REVIEW

2.1 Theoretical Framework
2.1.1 Financial Intermediation Theory

Gurley and Shaw (1960) presented the Financial Intermediation Theory, which provides useful insights into how financial organisations, such as microfinance institutions (MFIs), can traverse the complicated landscape of financial markets. This theory was developed to explain the role that financial intermediaries play in the economy. This theory is predicated on two fundamental tenets: the information asymmetry hypothesis, and the agency theory. It sheds light on the ways in which financial intermediaries enable the efficient allocation of capital, eliminate information asymmetry, and cut agency costs within the ecosystem of the financial system.

The idea that there is an imbalance of information is one of the fundamental premises underlying the Financial Intermediation Theory. When different participants in a market such as borrowers and lenders have access to different degrees of information, a situation known as information asymmetry exists. For instance, borrowers might have a more in-depth understanding of their own creditworthiness than lenders do. This information gap can result in a number of difficulties and inefficiencies in the market.

The significance of agency costs is another point that is driven home by the theory. In the context of financial transactions, the term "agency costs" refers to the costs that are incurred as a result of several parties having competing interests. In the case of microfinance institutions (MFIs), these conflicts frequently arise in circumstances in which borrowers and lenders have objectives or motivations that are in direct opposition to one another.
The observations of the Financial Intermediation Theory have a great deal of applicability to the situation of credit risk management in MFIs. MFIs, in their capacity as financial intermediaries, play an essential part in minimising the negative impacts of information imbalance and agency costs. They operate as middlemen between savers and borrowers, providing assistance in determining the creditworthiness of borrowers, minimising the impact of adverse selection, and monitoring borrowers to reduce the likelihood of moral hazard.

Incorporating this theoretical framework into the investigation of credit risk management in MFIs in Kenya enables a more in-depth comprehension of how these institutions might strategically manage their credit risk in order to maintain financial stability and continue to operate sustainably. The Financial Intermediation Theory provides a lens that can be used to analyse the mechanisms by which MFIs can handle information asymmetry and agency difficulties to enhance their financial performance. This can be done by looking at the processes through which MFIs can improve their financial performance.

2.2 Empirical review

A study by Ahmed and Malik (2015) examined how credit risk management affects loan performance in microfinance banks in Pakistan. They used a mixed-methods approach in their research, using both inferential and descriptive statistics. In order to conduct the study, 157 credit department managers in Rawalpindi and Islamabad were surveyed. According to their research, credit risk management has a statistically significant favorable impact on loan outcomes. As a result, the research suggested that secondary data be used in subsequent studies to investigate the impact of credit management on loan performance in more detail, to include more credit management attributes in the study, and to include a larger sample size of microfinance institutions (MFIs).

In a research study carried out in Malaysia by Murthy and Mariadas (2017), information was methodically gathered via the distribution of questionnaires from a sample of 120 microfinance institution (MFI) loan applicants. Within this framework, the study examined the factors that lead to loan failure. Notably, the research identified two critical factors that influence loan default: the borrower's age and the type of business they run. The results showed that these two variables were critical in determining the risk of loan default for MFI borrowers. Furthermore, the research findings indicated a significant association between the borrowers' ages and the particular kind of business they operated. The association between these factors was highlighted by the correlation coefficients, which measured 0.051 for business type and 0.267 for age. Crucially, the statistical examination validated the importance of this association, as indicated by the ultimate ANOVA outcome of 0.000. This study showed strong evidence of the relationship between these variables and how they affect loan results, even though it was much below the traditional significance level of 0.05.

Kargi (2011) performed an investigation to determine how credit risk affected Turkey's banks' profitability. Analysis techniques included regression, correlation, and descriptive analysis of sampling banks' accounts. The study's findings showed that credit risk management significantly affects the earnings of Nigerian banks. It was specifically stated that banks were more vulnerable to financial crises and illiquidity, which would hurt their profitability. The study indicated a shift from conventional lending practices by highlighting the need for financial institutions to modify their lending processes to conform to current credit and market conditions.

Kolapo et al. (2012) carried out a thorough investigation to look into how credit risk affects five Nigerian commercial banks' financial performance over the long run. Their eleven-year study period, from 2000 to 2010, was analyzed using the panel model approach. Their study's main goal was to evaluate the long-term effects of credit risk on these banks' financial health. The results of their investigation showed that credit risk had a constant effect on every bank that was looked at. The study specifically indicated that these banks' profitability was negatively impacted by an increase in non-performing loans and the creation of loan loss reserves. This suggests that these commercial banks' profitability declined as the number of loans that were not repaid according to the conditions and the requirement to set aside reserves for possible loan losses rose. The study's findings demonstrated how crucial efficient credit risk management is to preserving commercial banks' profitability and financial stability. They emphasized how important it is for financial institutions to put strong credit risk mitigation plans in place, particularly in situations where non-performing loans and loan loss reserves can significantly hurt their bottom line.

Addae-Krankye (2014) conducted an analysis on the reasons behind loan defaults at microfinance institutions in Ghana. In this study, a random sample of 250 clients and 25 MFIs were employed. Information was gathered using questionnaires and an interview guide. These numbers add up to a subpar appraisal, and poor customer selection is a major contributor to loan default. The default rates of the ten MFIs under examination (40%) are less than three percent; eight (32%) are between three and six percent; four (16%) are between six and ten percent; and three (12%) are over ten percent. The survey's findings provide a bleak picture of clients' overall assessments.

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Research was done in 2017 by Wanja and Jagongo to look at the loan practices and financial standing of Kenyan commercial banks. Their results underscored the significance of reassessing credit rules in order to lower non-performing loans (NPL) and obtain a competitive advantage when evaluating clients’ creditworthiness. The importance of credit risk analysis was emphasized in the study, especially with regard to the capital-to-risk-weighted asset ratio. Crucially, the study made clear that a dearth of industrial understanding in the field may have led to an oversimplification of the results of many earlier studies on the impact of credit risk management (CRM) on financial performance. On the other hand, their research focused on quantifying credit information based on individual profiles, account activity, and prior behavior of borrowers in order to choose which CRM methods to use.

III. METHODOLOGY

The researcher used a descriptive research design and panel data analysis. The research targeted 52 credit managers of registered microfinance institutions with the Association of Microfinance, which formed the unit of analysis. A census approach was used as the institutions were easily accessible. The researcher sent questionnaires to 52 credit managers of selected microfinance institutions for the collection of data. The quantitative data collected was examined using both descriptive and inferential statistical approaches. SPSS version 24 was used to analyze the data. Descriptive analysis showed the responses of participants using percentages. The inferential statistics involved statistical measurement tools such as regression and correlation analyses to determine the nature and strength of the relationship between the dependent and independent variables. Data was displayed by using tables.

IV. FINDINGS

4.1 Return Rate

The study's target population consisted of 52 microfinance institutions, but only 50 of those institutions met the requirements. As a result, these institutions were given questionnaires, and the results indicated a 96.15% return rate, which is considered appropriate and in accordance with Kothari’s (2004) recommendation that a return rate of more than 80% is acceptable in social science research.

4.2 Demographic Characteristics of Respondents

Several major observations were provided by the study's demographic dispersion as presented in Table 1.

<table>
<thead>
<tr>
<th>Demographic Data</th>
<th>Frequency</th>
<th>Valid %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>39</td>
<td>78</td>
</tr>
<tr>
<td>Female</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Level of Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Degree</td>
<td>29</td>
<td>58</td>
</tr>
<tr>
<td>Masters</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Length of Service</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-5 years</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>6-10 years</td>
<td>27</td>
<td>54</td>
</tr>
<tr>
<td>Above 10 years</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.0</td>
</tr>
</tbody>
</table>

To begin, the bulk of respondents (78% of the sample) were male, with female respondents accounting for 22%. Despite the male predominance, this distribution implies that female employees in middle and senior management roles in the microfinance industry are fairly represented.

Second, a sizable majority of respondents, 58%, held a degree, indicating that they had relevant expertise regarding the microfinance sector. Another 6% of the workers had a diploma, meaning that this group had extensive expertise in the microfinance industry. In comparison, only 15% of those polled held a master’s degree. This implies
that while master's degrees may be beneficial for higher-level management roles, they are not required for entry-level positions in business.

Finally, the study discovered that the majority of respondents (54%) had six to ten years of experience in the microfinance business. The second-largest group, accounting for 24% of the sample, had more than ten years of experience. This suggests that a sizable proportion of respondents possessed relevant knowledge and expertise in the microfinance industry, which can help to improve microfinance performance. The lowest group, 22%, has worked in the industry for one to five years, which might include fresh graduates with little microfinance experience.

4.3 Descriptive Statistics

This section provides a condensed overview of the responses to the inquiry regarding the impact of credit risk control on the financial performance of MFIs in Kenya. The descriptive findings are presented in Table 2.

<table>
<thead>
<tr>
<th>Statement</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>Mean</th>
<th>Std. dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The results of approval reviews are reported to the board and senior management.</td>
<td>8(16%)</td>
<td>14(28%)</td>
<td>12(24%)</td>
<td>8(16%)</td>
<td>8(16%)</td>
<td>3.58</td>
<td>0.919</td>
</tr>
<tr>
<td>The Internal control system ensures reports are timely</td>
<td>9(18%)</td>
<td>15(30%)</td>
<td>11(22%)</td>
<td>8(16%)</td>
<td>7(14%)</td>
<td>3.57</td>
<td>0.921</td>
</tr>
<tr>
<td>Approvals follow the laid down procedures.</td>
<td>8(16%)</td>
<td>14(28%)</td>
<td>8(16%)</td>
<td>12(24%)</td>
<td>8(16%)</td>
<td>3.52</td>
<td>0.928</td>
</tr>
<tr>
<td>Approval is per ISO standards.</td>
<td>10(20%)</td>
<td>12(24%)</td>
<td>9(18%)</td>
<td>10(20%)</td>
<td>9(18%)</td>
<td>3.46</td>
<td>0.931</td>
</tr>
<tr>
<td>Only senior officers approve.</td>
<td>10(20%)</td>
<td>13(26%)</td>
<td>11(22%)</td>
<td>9(18%)</td>
<td>7(14%)</td>
<td>3.43</td>
<td>0.927</td>
</tr>
<tr>
<td>System acknowledges integration of all departments processes executed.</td>
<td>9(18%)</td>
<td>14(28%)</td>
<td>10(20%)</td>
<td>9(18%)</td>
<td>8(16%)</td>
<td>3.49</td>
<td>0.914</td>
</tr>
</tbody>
</table>

The table presents descriptive statistics regarding the perceptions of participants on the impact of credit risk control on the financial performance of microfinance institutions (MFIs) in Kenya. These responses were collected using a Likert scale, allowing participants to express their level of agreement or disagreement with specific statements related to credit risk management. The findings reveal that a significant portion of participants believe that approval reviews are effectively communicated to the board and senior management, with 16% strongly agreeing and 28% agreeing. Additionally, 18% strongly agreed and 30% agreed that the internal control system ensures timely reporting, while 20% strongly agreed and 24% agreed that approvals follow laid-down procedures. However, there is more variability in responses when it comes to whether approvals follow ISO standards, with 10% strongly agreeing and 20% agreeing, while 16% strongly agree that only senior officers approve. Furthermore, 18% strongly agreed and 28% agreed that the system acknowledges the integration of processes across different departments. These perceptions provide valuable insights into the existing credit risk control practices within MFIs and can guide efforts to enhance credit risk management in the microfinance sector in Kenya.

These results align with the body of published literature. For example, Gurley and Shaw (1960) stress that clear communication can greatly enhance risk assessment and decision-making. This is consistent with the existing literature, which emphasizes the critical role that good internal controls play in efficient risk management (Sobehart et al., 2014). Timely reporting of risk-related data is seen as crucial for the early identification of possible credit concerns, enabling swift action to avert monetary losses. This reaffirms the emphasis placed by the literature on the value of internal controls in the context of risk management.

The even distribution of answers about following established approval processes suggests that participants have a range of perspectives. Some acknowledge following the rules, but others voice doubts or see irregularities. This heterogeneity highlights a crucial area for development since, as the literature by Altman and Saunders (1998) highlights, strict adherence to defined procedures is essential for effective risk management.

On the other hand, as stated by Mia (2017), a lesser degree of agreement about approval based on ISO criteria indicates the literature's recognition that international standards are not always accepted inside the microfinance sector. This finding is consistent with the literature's acknowledgment of the need for more uniform adoption of international standards in risk management and suggests a possible avenue for industry-wide standardization and enhancement.
4.3 Inferential Statistics

Model summary: Credit risk management on Financial Performance

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R Square Change</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F Change</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>df1</td>
</tr>
<tr>
<td>1</td>
<td>.701</td>
<td>.491</td>
<td>.489</td>
<td>.75295</td>
<td>.491</td>
</tr>
</tbody>
</table>

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>58.272</td>
<td>1</td>
<td>58.272</td>
<td>52.215</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>54.692</td>
<td>49</td>
<td>1.116</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>112.964</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.996</td>
<td>.179</td>
<td>5.564</td>
</tr>
<tr>
<td></td>
<td>Credit risk management</td>
<td>.672</td>
<td>.087</td>
<td>.669</td>
</tr>
</tbody>
</table>

Dependent Variable: Financial performance

The model summary indicates that credit risk management accounts for 49.1% of the variation in the financial performance of MFIs in Kenya, with the remaining 50.9% being explained by other factors not included in the study model. Additionally, coefficient analysis shows that credit risk management has a significant impact on Kenya's microfinance institutions' financial performance ($\beta = 0.672 (0.087); at p<.01$). Reducing credit approval times by even one percentage point should result in a 0.672-point improvement in the financial performance of microfinance firms. In other words, the relationship between credit risk management and financial performance is unlikely to be due to chance. Hosna et al. (2009) looked at nonperforming loans, CARs, and profitability for four Swedish banks between 2000 and 2008. Return on equity was found to be negatively impacted by nonperforming loans and CAR, although the degree of this link differed by bank. Similar negative relationships between company performance, profitability, and credit risk indicators have been found in other studies (Achou & Tenguh, 2008; Kolapo et al., 2012; Musyoki & Kadubo, 2015). The equation for the linear regression equation model was generated using the information from the regression coefficients as follows:

Financial Performance = 0.996 + 0.672* Credit risk management + 0.179

V. CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusions

The study offers valuable insights into the ways in which credit risk management impacts the financial viability of microfinance companies. The results show that credit risk management plays a significant role in determining MFI effectiveness. Thus, MFIs can improve their financial performance by using effective credit risk management practices. The results demonstrate that MFIs primarily rely on credit risk management to increase profitability and lower losses associated with loan default. Consequently, the study's conclusions disprove the null hypothesis and show that credit risk management has a positive and substantial impact on MFI performance.

5.2 Recommendations

Microfinance should place a high premium on credit risk management. They should develop and put into practice a comprehensive policy and procedure aimed at controlling credit risk, evaluate each borrower's credit risk in depth, regularly check each borrower's creditworthiness, take the necessary steps to manage and mitigate credit risks, and consider obtaining credit insurance to guard against losses resulting from loan defaults. Additionally, consider the following recommendations: Employees should be trained, credit risk policies and procedures should be established,
borrower creditworthiness should be assessed using credit scoring models and other tools, and bias and human error should be minimized.

5.3 Areas for Further Research

The study concludes that financial performance and credit risk management are significantly correlated. To identify the specific credit risk management techniques that have the greatest impacts on financial performance, additional research is necessary. One such technique is SACCOs’ method of comparing study findings and controlling for business size.

REFERENCES


