

## **CREDIT RISK MANAGEMENT ON FINANCIAL PERFORMANCE OF MICRO-FINANCE BANKS IN KENYA**

<sup>1\*</sup> **Ochola Tobias Otieno**  
tobi.ochola@gmail.com

<sup>2\*\*</sup> **Vitalis Mogwambo**  
mogwambov@yahoo.com

<sup>3\*\*\*</sup> **Simeyo Otieno**  
simeyoous@yahoo.com

<sup>1,2,3</sup> *Jaramogi Oginga Odinga University of Science and Technology, Kenya*

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**Abstract:** *The objective of the study was to assess the effect of credit risk management practices on financial performance of micro-finance banks in Kenya. A total of 56 employees comprising of one operation manager, branch manager, internal auditor, and risk management officer from each of the 14 registered micro finance banks were recruited. The data were collected using semi-structured questionnaires. The results showed that the respondents agreed that secured lending is important in maintaining the financial stability of our microfinance bank and that employer's undertaking has a positive impact on the financial performance ( $M=3.929$ ,  $SD=0.164$ ); and that selective lending is effective in improving financial performance. The findings also showed that current credit management practices are effective at improving financial performances. Consequently, it is advised that the bank management adjust their credit-related practices to evolving circumstances, crafting credit policies and strategies that not only curtail the bank's exposure to credit risk but also institute a robust credit risk-management approach by conducting thorough credit evaluations before extending loans to clients.*

**Keywords:** *credit risk management, financial performance, micro-finance banks*

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### **1. Introduction**

The contemporary global landscape is marked by a dynamic and intricate competitive environment, primarily distinguished by its unpredictable nature. Hence, in order to sustain operational viability and competitiveness, organizations must engage in extensive deliberation (Washington, 2014). Microfinance banks play a significant role in fostering economic development by doing a range of responsibilities aimed at enhancing a nation's income. Microfinance banks play a crucial role as intermediaries by collecting deposits and subsequently providing loans to borrowers for both consumption and investment purposes, so making a significant contribution to economic growth (Kallberg & Udell, 2015). Credit risk has emerged as a significant challenge for microfinance banks and other financial institutions in Nepal, posing a growing difficulty in terms of effective management.

In the banking business of Kenya, there has been a significant loss accompanied by mismanagement of banks during the past decade (Omondi, 2015). Several banking institutions that had previously demonstrated strong performance experienced a decline in their operations, resulting in the cessation of their activities. This decline was mostly attributed to uneven credit exposures and a failure to adequately manage risks. Given the aforementioned factors, it can be argued that risk management holds a more prevalent and crucial role within the banking industry compared to other sectors of the economy. The primary objective of banking institutions is to generate supplementary revenue and enhance the value of investments for shareholders of microfinance

banks by providing various financial services. Simultaneously, these institutions must also prioritize effective risk management (Muteti, 2014). However, these phenomena are accompanied by a range of uncertainties.

Risk management, as defined by ISO 31000, encompasses a series of activities within an organization. These activities include the identification, assessment, and prioritization of risks. This process is undertaken prior to the allocation and utilization of available resources, with the ultimate aim of mitigating and reducing the likelihood or consequences of adverse events that may impede the achievement of established objectives. The primary aim of risk management is to ensure the uninterrupted pursuit of organizational objectives, as stated by the International Organization for Standardization (ISO, 31000). According to the Oxford English Dictionary, practice can be described as the customary, habitual, or expected technique or manner in which something is done. Financial performance is a term used to describe the evaluation of a company's monetary and operational effectiveness in relation to its strategic objectives throughout a designated timeframe (Epure & Lafuente, 2012).

## **2. Credit Risk Management**

Credit risk is a prevalent concern for lenders when they face potential financial loss due to the failure of a borrower, counterparty, or obligator to fulfill their contractual debt obligations (Luy, 2010). The management of credit risk is a crucial element within a comprehensive framework for risk management, and is vital for ensuring the sustained performance of a banking institution. This measure aids in mitigating financial losses incurred by banks. The significance of credit risk management to banks cannot be overstated, since it constitutes an essential component of the loan origination and monitoring procedures. The implementation of this strategy serves to mitigate potential risks faced by banks, as it aims to optimize the risk-adjusted rate of return by managing credit risk exposure. The primary objective is to safeguard the bank from any detrimental consequences arising from credit risk. Banks achieve success when they engage in appropriate and managed risk-taking activities that align with their financial resources and expertise (Machiraju, 2008). According to Barbara (2006), it is advisable for bank management to mitigate credit losses by constructing a portfolio of assets, such as loans and securities, that effectively diversify the level of risk. It is well acknowledged that loan losses are inherent to all banks; nonetheless, there exists substantial variation in the level of risk aversion among different financial organizations.

As stated by Colquitt (2007), the loss in question can be attributed to a decline in the creditworthiness of the counterparty, resulting in a decrease in the value of the debt. Alternatively, the borrower may default on their obligations despite having the ability to fulfill them. The occurrence of credit failure in banks is not a novel or infrequent phenomenon, as it has significant implications for their liquidity position, cash flows, and profitability. According to Greuning and Bratanovic (2009), the largest danger to bank performance and the primary factor behind bank failures is identified as such. The study conducted by Cooper, Jackson, and Patterson (2003) provided empirical evidence supporting the notion that variations in credit risk have a significant impact on the composition of banks' loan portfolios, thus influencing the overall performance of the banks. Default risk refers to the potential risk that the counterparty involved in a financial transaction may fail to fulfill its obligations to the investor. In this scenario, there is a decline in credit quality, resulting in an increase in default risk. The cultivation of reliable loan clients and the utilization of credit-risk analysis to ascertain the creditworthiness of borrowers are fundamental to a bank's sustained profitability. Banks have the dual purpose of accepting deposits and providing credit facilities, making them inherently susceptible to credit risk. According to the research conducted by Chen and Pan (2012), credit risk refers to the extent to which the

value of loan instruments and derivatives may fluctuate as a result of variations in the creditworthiness of borrowers and counterparties.

### **3. Financial Performance**

Financial performance refers to the assessment of a company's policies and activities in terms of monetary outcomes, as stated by the business dictionary. The aforementioned findings are evident in the company's return on investment, return on assets, and value added. According to Turyahebya (2013), financial performance, as defined by Stoner (2003), encompasses the capacity to operate with efficiency, generate profits, sustain growth, and effectively respond to environmental opportunities and risks. Solvency metrics provide an assessment of a company's capacity to settle its outstanding debts by liquidating all of its assets. Additionally, it furnishes insights on a company's capacity to sustain operations during a significant financial catastrophe. Toutou and Xiaodong (2011) suggest that financial performance serves as a comprehensive indicator of a bank's ability to create capital-based revenues. Additionally, it serves as an indicator of a bank's comprehensive financial well-being for a specified duration, facilitating the comparison of several banks within the banking sector simultaneously. The financial performance of a bank is often assessed based on its stability and profitability. Stability pertains to the risk concerns associated with a given entity, whereas profitability relates to the financial return it generates.

The financial performance of a firm refers to its capacity to generate additional resources via its daily operations within a specified timeframe. This performance is typically evaluated based on the company's net income and cash flow from operations. The future operational actions of commercial banks are significantly influenced by their financial performance. Prior to delving into the examination of debt and liquidity, it is essential to understand the initial aspect of financial success, which is profitability. It is important to note that the value of stocks is derived from the potential of financial institutions to generate dividends and capital gains in the future. The capacity to promptly fulfill interest obligations does not exhibit a parallel level of significance as the profitability of a corporation. Once the evaluation of a firm's profitability has been conducted, financial institutions are able to fulfill their present and future obligations (Haim & Post, 2005). Hagel, Brown, and Davison (2010) posited that a predominant tendency among economic analysts and investors is to prioritize return on equity as the principal metric for evaluating corporate success. The concept of Return on Equity (ROE) primarily centers on the financial gains that are distributed to the shareholders of a certain organization. For shareholders, this statistic provides a concise and comprehensible measure.

### **4. Statement of the problem**

Risks are inherent uncertainties that are pervasive in all commercial enterprises established with the primary objective of generating profits. Financial institutions are subject to a range of hazards, including liquidity risk, foreign exchange risk, credit risk, interest rate risk, market risk, currency risk, operational risk and commodity risk. These risks are particularly relevant to banks (Cooperman et al., 2000). Diffu (2011) avers that the the global financial crisis that occurred between 2007 and 2009 has underscored the necessity of reevaluating some methodologies employed by the financial sector in evaluating the performance of banks. In order to achieve this objective, it is crucial to acquire a holistic understanding of the primary determinants that could impact the performance of banks. These determinants encompass the sufficiency of business models in relation to risk tolerance, as well as the manner in which this sufficiency is managed both internally and externally through governance mechanisms within banks.

### 5. Study Objectives

The general objective of the study was to examine the effect of risk management on the financial performance micro-finance with a specific objective to assess the effect of Credit risk management on financial performance of micro-finance banks in Kenya.

The study also sought to test the following null hypothesis;

H<sub>01</sub>: There is no relationship between Credit risk management and financial performance of micro-finance banks in Kenya

### 6. Research Methodology

The research adopted descriptive survey research design. The targeted population to this study was 14 registered micro-finance banks in Kenya. The unit of observation was 56 employees comprising of one operation manager, branch manager, internal auditor, and risk management officer from each of the 14 registered micro finance banks in Kenya. Due to the small size of target population, the study adopted census sampling technique. Thus, the sample size for the study was 56 respondents. Semi-structured questionnaires were used for data collection. The collected data was coded before being entered into SPSS where descriptive and inferential statistics were obtained. Descriptive statistics included frequencies, percentages, means, and standard deviations, while inferential statistics included multiple statistics, correlations and regression analysis were carried out to test the study hypothesis.

### 7. Reliability of the Research Instrument

A reliability analysis is usually carried out on Likert questions. The study used Cronbach's alpha which is based on internal consistency to determine the reliability of the data collection tool. The methodology provides the measure of the average measurable item and its correlation. Field, (2009), explained that Cronbach's alpha value greater than 0.7 is considered reliable. Therefore this study selected 0.70 as the acceptable threshold value for reliability. The correlation coefficient results helped determine the reliability of the questionnaire. The reliability results were presented in Table 1. From the findings, the Cronbach Alpha for all the variables was greater than 0.7. This shows that this question met the reliability criteria ( $\alpha > 0.70$ ); an indication that they were all reliable and no adjustment was required. Therefore, no modification of the items was undertaken. The measures of all the variables were considered to be reliable.

Table 1: Reliability Analysis

Variable	Cronbach's Alpha	Number of items	Comment
Credit Risk management practices	0.811	5	Accept
Financial Performance	0.775	4	Accept

### 8. Descriptive Analysis

The objective The objective of the study was to assess the effect of credit risk management practices on financial performance of micro-finance banks in Kenya. Respondents were therefore asked to indicate their level of agreement on the following statements about the effect of credit risk management practices on financial performance of micro-finance banks in Kenya. Table 2 presents summary of the findings obtained.

Table 2: Descriptive Statistics on Credit Risk Management Practices

Statements	Mean	Std. Dev.
Secured lending is important in maintaining the financial stability of microfinance banks in Kenya.	3.779	1.146
Employer’s undertaking has a positive impact on the financial performance of microfinance bank in Kenya	3.929	0.164
Selective lending has lending helps in improving financial performance of microfinance banks in Kenya.	3.777	1.205
Loan restructuring helps microfinance bank in Kenya in improving financial performance.	3.901	1.147
Loan portfolio management is effectively in managing credit risk in microfinance banks in Kenya	3.872	0.19
<b>Aggregate Score</b>	<b>3.852</b>	<b>0.770</b>

From the findings in Table 2 above, the respondents agreed that secured lending is important in maintaining the financial stability of microfinance banks in Kenya (M= 3.779, SD= 1.146); that employer’s undertaking has a positive impact on the financial performance of microfinance banks in Kenya (M= 3.929, SD= 0.164); and that selective lending is effective in improving financial performance of micro-finance banks in Kenya (M= 3.777, SD= 1.205). They also agreed that loan restructuring helps microfinance bank in Kenya in improving financial performance. (M= 3.901, SD= 1.147); and that loan portfolio management is effectively in managing credit risk in microfinance banks in Kenya (M= 3.872, SD= 0.19).

Based on the findings above and supported by an aggregate mean of 3.852 (SD=0.770) it is evident that operations managers, branch managers, internal auditors, and risk management and credit officers of micro-finance banks in Kenya believe that credit risk management practices affect financial performance of micro-finance banks in Kenya. The results are consistent with the study conducted by Achou and Tenguh (2018) on the subject of bank performance and credit risk management. Their research revealed an important relation between the performance of commercial banks, specifically when it comes to yielding, and the management of credit risk, specifically in terms of credit portfolio quality. Enhanced credit risk management practices lead to improved organizational performance. Furthermore, it is in alignment with the viewpoint presented by Owojori et al., (2017) that the failure of banks to recover credit facilities provided to clients significantly contributes to the liquidity challenges experienced by commercial banks.

The other objective of the study was to examine the effect of risk management on the financial performance micro-finance banks in Kenya. Respondents therefore gave their level of agreement on statements about financial performance of micro-finance banks in Kenya. Table 3 presents summary of the findings obtained.

*Table 3: Descriptive Statistics on Financial Performance*

Statements	Mean	Std. Dev.
Poor financial risk management of micro-finance banks affects financial performance	3.952	1.014
Risk management techniques reduces frequency or risks hence improves performance	3.927	0.347
Implementation of credit risk policies reduces variability in profits and financial distress	3.838	1.155
Liquidity mitigation in current assets and liabilities eliminates the risk of poor investments and inadequate economic capital	3.744	0.046

From the findings in Table 3, respondents agreed on average that poor financial risk management of micro-finance banks affects financial performance (M= 3.952, SD= 1.014); that risk management techniques reduces frequency or risks hence improves performance (M= 3.927, SD= 0.347); that implementation of credit risk policies reduces variability in profits and financial distress (M= 3.838, SD= 1.155); and that liquidity mitigation in current assets and liabilities eliminates the risk of poor investments and inadequate economic capital (M= 3.744, SD= 0.046). The results are consistent with the proposition put forth by Kithinji (2010) that various factors such as inadequate management, ineffective legislation, substandard loan underwriting, leniency in credit evaluation, flawed lending practices, and insufficient oversight by the central bank have an impact on the financial performance of commercial banks, potentially resulting in liquidity and solvency issues. The research findings align with the assertions made by Iqbal and Mirakhor (2007) that the implementation of a comprehensive risk management strategy can effectively mitigate an organization's vulnerability to risks and improve its financial performance.

## 9. Correlation Analysis

The study computed Correlation analysis to determine the strength and the direction of the relationship between the variables being studied. If the correlation values are  $r = \pm 0.1$  to  $\pm 0.29$  then the relationship between the two variables is small, if it is  $r = \pm 0.3$  to  $\pm 0.49$  the relationship is medium, and when  $r = \pm 0.5$  and above there is a strong relationship between the two variables under consideration. Table 4 presents the findings obtained.

The findings show that credit risk management and financial performance micro-finance banks in Kenya had a strong positive and significant relationship ( $r = 0.574$ ,  $p < 0.05$ ). The relationship was considered significant since the p-value (0.000) was less than the selected level of significance (0.05). This implies that credit risk management has significant effect on financial performance micro-finance banks in Kenya. The results are consistent with Luy's (2010) assertion that credit risk management holds significant importance for banks, since it constitutes an essential component of the loan procedure. The implementation of this strategy serves to mitigate risks faced by banks, since it involves managing credit risk exposure in order to protect the bank from potential negative impacts. This is achieved by adjusting the risk rate of return, so minimizing the bank's overall risk profile.

Table 4: Correlation Analysis

		Financial Performance	Credit Risk management
Financial Performance	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	49	
Credit Risk management	Pearson Correlation	.574**	1
	Sig. (2-tailed)	.000	
	N	49	49

\*\* . Correlation is significant at the 0.05 level (1-tailed)

**Beta Coefficients of the Study Variables**

From the coefficients in Table 5, the following regression model was fitted;

$$Y = 1.481 + 0.159 X_1 \dots\dots\dots(i)$$

Where ;

Y is Financial performance

X<sub>1</sub> is Credit risk management.

**Table 5: Beta Coefficients of Study Variables**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.481	0.201		7.368	.000
1 Credit Risk management	0.159	0.068	0.067	2.338	.004

a. Dependent Variable: Financial Performance

The findings showed that holding credit risk management to constant at zero, financial performance of micro-finance banks in Kenya would be 1.481. The constant (β= 1.481) was significant at 0.05 significance level (P=0.000). The findings further showed that credit risk management had a coefficient of 0.159 indicating that holding all other factors constant, a unit improvement in credit risk management would result in a 15.9% increase in employee turnover in the insurance industry in Kenya. The coefficient was significant since the p-value obtained (0.004) was less than the level of significance of 0.05. The null hypothesis that ‘There is no relationship between Credit risk management and financial performance of micro-finance banks in Kenya’ was therefore rejected since Credit risk management had positive significant influence on financial performance of micro-finance banks in Kenya. This finding corroborates the conclusions drawn by Kithinji (2010) in his

research, which demonstrated that a rise in credit risk within the banking sector is associated with a gradual emergence of liquidity and solvency challenges.

## 10. Summary and Recommendation

The objective of this study was to assess the effect of credit risk management on financial performance of micro-finance banks in Kenya. The study found that credit risk management is important in maintaining the financial stability of our microfinance bank and has a positive impact on the financial performance of our microfinance bank; and that current credit risk management practices are effective at improving financial performance. The study also found that investing in credit risk management measures is worthwhile for our microfinance bank in terms of improving financial performance; and that their microfinance bank's financial performance would suffer if they did not effectively manage credit risk. It was also established that credit risk management positively and significantly affects financial performance of micro-finance banks in Kenya.

The null hypothesis test was 'There is no relationship between credit risk management and financial performance of micro-finance banks in Kenya'. The study found that credit risk management is statistically significant in explaining financial performance of micro-finance banks in Kenya. The influence was found to be positive. This means that unit improvement in credit risk management would lead to an increase in financial performance of micro-finance banks in Kenya. Based on the findings, the study rejects the null hypothesis and concludes that credit risk management positively and significantly relates with financial performance of micro-finance banks in Kenya.

Analysis from the study underscored the vital importance of credit risk management and control in ensuring that supervised entities maintain sufficient capital to cover business risks and potential losses. Consequently, it is advised that microfinance bank management adjust their credit-related practices to evolving circumstances, crafting credit policies and strategies that not only curtail the bank's exposure to credit risk but also institute a robust credit risk management approach by conducting thorough credit evaluations before extending loans to clients.

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