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THE EFFECT OF CREDIT RISK MANAGEMENT PRACTICE ON  
FIRM PERFORMANCE: THE CASE OF SELECTED MICRO-  
FINANCE INSTITUTIONS IN ETHIOPIA

**COLLEGE OF BUSINESS AND ECONOMICS**  
**DEPARTMENT OF ACCOUNTING AND FINANCE**

A THESIS SUBMITTED TO THE DEPARTMENT OF  
ACCOUNTING AND FINANCE IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF MASTER OF  
SCIENCE IN ACCOUNTING AND FINANCE

BY

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Jan 18, 2025

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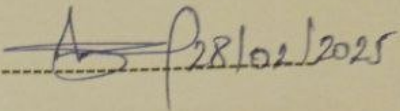
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Jan 18, 2025

### Declaration

I, Enatfanta Teshome, declare that this thesis titled "The Effect of Credit Risk Management Practice on Firm Performance: The Case of Selected Micro-Finance Institutions in Ethiopia" is my own original work and has not been submitted for any other degree or qualification at any other institution. I have adhered to all ethical guidelines and standards in conducting this research.

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## Table Contents

Declaration.....	<b>Error! Bookmark not defined.</b>
Acknowledgments.....	v
Table Contents.....	vi
List of Tables.....	x
List of Figure.....	xi
ABBREVIATIONS.....	xii
Abstract.....	xiii
CHAPTER ONE.....	1
1. INTRODUCTION.....	1
1.1. Background of the study.....	1
1.2. Statement of the problem.....	3
1.3. Basic Research Questions.....	4
1.4. Objectives of the Study.....	5
1.4.1. The general objective of the study.....	5
1.4.2 The specific objectives of the study.....	5
1.5. Significance of the Study.....	5
1.6. Scope of the Study.....	5
1.7. Organization of the Study.....	6
1.8. Limitation of the Study.....	6
CHAPTER TWO.....	8
2. LITERATURE REVIEW.....	8
2.1. Introduction.....	8
2.2 Overview of microfinance institutions in Ethiopia.....	8
2.3 Credit Risk Management in MFIs.....	10

2.4 Theoretical link between CRM and Financial Performance.....	10
2.4.1 Agency Theory .....	11
2.4.2 Asymmetric Information Theory.....	11
2.4.3 Resource-Based View (RBV) Theory .....	11
2.5. Key CRM and Its Determinants.....	12
2.5.1 Credit Policy in MFIs.....	13
2.5.2 Risk Assessment Practices in MFIs.....	14
2.5.3 Loan Diversification Practice MFIs.....	14
2.6 Financial Stability of Ethiopian MFIs.....	15
2.6.1 Key Indicators of Financial Stability in Ethiopian MFIs.....	16
2.6.2 Asset Growth and Loan Portfolio Expansion.....	16
2.6.3 Rising Non-Performing Loans (NPLs) and Credit Risk.....	16
2.6.4 Capital Adequacy and Liquidity Challenges .....	17
2.6.5 Loan Diversification and Sectorial Shifts.....	17
2.7 Research Gaps.....	18
2.8. Conceptual Framework.....	19
CHAPTER THREE.....	21
3. RESEARCH METHODOLOGY.....	21
3.1 Introduction.....	21
3.2 Research Design.....	21
3.3 Research Approach.....	21
3.4 Population and Sampling.....	21
3.4.1 Selection of Microfinance Institutions (MFIs).....	21
3.4.2 Sampling Technique and Sample Size Determination.....	22
3.5 Data Collection Methods.....	23

3.6 Operational definition and measurement of variable.....	23
3.7. Regression Model Specification.....	24
3.8 Data Analysis Methods.....	24
3.9 Reliability and Validity of Instruments.....	25
3.9.1 Validity.....	25
3.9.2 Reliability.....	26
CHAPTER FOUR.....	27
4. DATA ANALYSIS, PRESENTATION AND DISCUSSION OF RESULTS.....	27
4.1 Characteristics of respondents.....	27
4.2 Demographic Characteristics of Sample Respondents.....	28
4.3 Descriptive Statistics.....	29
4.3.1. Descriptive statistics of credit policy.....	29
4.3 2 Descriptive statistics of Risk Assessment.....	31
4.3.3 Descriptive statistics of Loan diversification.....	32
4.3.4 Descriptive statistic of overall MFIs Performances.....	33
4.4 Normality Test.....	34
4.5. ANOVA Test.....	36
4.6. Multi Collinearity.....	37
4.7 Collinearity Diagnostics.....	39
4.8 Correlation between variables.....	40
4.9. Regression analysis result.....	41
CHAPTER FIVE.....	44
5. SUMMARY, CONCLUSIONS AND RECOMMENDATION.....	44
5.1 Summary.....	44
5.2 Conclusions.....	45

5.3 Recommendations.....	46
5.4 Future Research Directions.....	47
REFERENCE.....	48
Appendix.....	50

## List of Tables

Table 2.1 Financial stability.....	17
Table 2.1 Financial stability.....	18
Table 3.1 Rule of Thumb of Cornbach's Alpha.....	26
Table 3.2 Reliability Statistics Results.....	26
Table 4.1: Shows the Response Rate of Questionnaire.....	27
Table 4.2 show the response rate of questionnaire.....	28
Table 4. 3 Respondents rating scale of credit policy.....	30
Table 4. 4 Respondents rating scale of risk assessment.....	31
Table 4. 5 Respondents rating scale of Loan diversification.....	32
Table 4. 6 Overall mean of MFIs Performances.....	33
Table 4.7 ANOVA test.....	36
Table 4.8 Coefficients.....	37
Table 4.9: Collinearity Diagnostics.....	39
Table 4.10 Correlation matrixes between independent variable.....	41

## List of Figure

Figure 4. 1 Histogram of Financial Performance Metrics.....	35
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## **ABBREVIATIONS**

CR- Credit Risk

CRM- Credit Risk Management

GOE - Government of Ethiopia

NBE - National Bank of Ethiopia

MFIs- Microfinance Institutions

ROA- Return on Asset

NPLs- Non-Performing Loans

PM-Profit Margin

KPIs- Key Performance Indicators

SMEs- Small and Medium Enterprises

IMF- International Monetary Fund

SPSS- Statistical Package for the Social Sciences

PAR- Portfolio at Risk

## **Abstract**

This study examines the effect of credit risk management practices on the performance of selected microfinance institutions (MFIs) in Ethiopia. The research focuses on three institutions: Vision Fund Microfinance Institution (VFMFI), Yegna Microfinance Share Company, and Nisir Microfinance Institution. Utilizing both primary and secondary data, the study evaluates how credit policies, risk assessment, and loan diversification strategies influence firm performance, specifically Return on Assets (ROA). The research employs an explanatory research design and statistical analysis tools, including regression and ANOVA, to investigate relationships between variables. Key findings reveal that effective credit policies, robust risk assessment practices, and strategic loan diversification significantly enhance financial performance. However, challenges such as poor implementation, insufficient borrower profiling, and limited loan diversification were identified as areas of concern. The study concludes that strengthening credit risk management practices is vital for the sustainability and profitability of MFIs. Recommendations include policy enhancements, staff training, and leveraging technology for improved risk assessment. This research provides valuable insights for policymakers, practitioners, and stakeholders in the microfinance sector, aiming to foster financial inclusion and economic development.

Keywords: Credit Risk Management, Microfinance Institutions, Financial Performance, Ethiopia, Return on Assets (ROA)

# CHAPTER ONE

## 1. INTRODUCTION

### 1.1. Background of the study

Microfinance is a crucial tool for promoting financial inclusion, offering small-scale financial services such as credit, savings, insurance, and money transfers to low-income individuals who are often excluded from traditional banking systems (Cull et al., 2021). The microfinance revolution has enabled millions worldwide to access small loans without collateral, build assets, and secure financial stability. By bridging the gap between formal financial institutions and underserved populations, microfinance plays a significant role in poverty alleviation and economic development (Ledgerwood, 2018).

MFIs play a vital role in promoting international and local development goals, especially in the context of poverty reduction, economic empowerment, and financial inclusion. MFIs provide financial services, such as microloans and savings accounts, to low-income individuals and small businesses Chikwira, Collin, Edson Vengesai, and Petronella Mandude. (2022). However, MFIs face various risks in their operations, which can impact their financial stability and ability to achieve their social and economic development goals. The stability and profitability of MFIs, like any other financial institution, are directly impacted by this risk, making it a crucial aspect of their operations Agbana, J., Bukoye, J. and Arinze-Emefo, I. (2023). Globally, credit risk management (CRM) is a major concern, as high default rates threaten institutional sustainability (Cull et al., 2021). Effective CRM strategies including robust credit policies, risk assessment tools, and loan diversification help reduce non-performing loans (NPLs) and enhance financial performance (Beck et al., 2022).

In developed markets, machine learning, and block chain-based credit reporting has transformed credit risk management, reducing default rates by up to 40% (Beck et al., 2022). However, in emerging economies, particularly in Africa, MFIs face technological, regulatory, and economic barriers that hinder effective risk assessment (Kumar & Singh, 2023).

Across sub-Saharan Africa (SSA), MFIs struggle with high default rates, weak credit scoring systems, and limited financial infrastructure. A study on Kenyan MFIs found that lack of

centralized credit information leads to excessive default rates, averaging 10.4% in 2022 (Kadima et al., 2023). Similarly, in Nigeria, MFIs face rising non-performing loans (NPLs) due to the overreliance on group lending models and manual risk assessments, increasing institutional vulnerability (Adjei et al., 2022).

In spite of these some African countries have adopted mobile-based credit scoring systems (e.g., Kenya's M-Shwari), Ethiopian MFIs lag behind in digital transformation, relying primarily on manual loan evaluations and traditional group lending mechanisms (Berhanu & Assefa, 2020). This highlights the urgent need to modernize credit risk management in Ethiopia's microfinance sector.

In Ethiopia, the microfinance sector serves over 7.6 million borrowers, with a total loan portfolio of ETB 94.3 billion as of 2023 (National Bank of Ethiopia [NBE], 2023). However, Ethiopian MFIs face persistent credit risk challenges, High default rates the average NPL ratio reached 6.8% in 2023, exceeding the regulatory threshold of 5% (NBE, 2023). Limited borrower credit history Ethiopia lacks a centralized credit bureau for MFIs, leading to information asymmetry and poor risk assessment (Wube, 2021). Regulatory constraints despite post-2020 NBE reforms, MFIs still struggle to implement modern risk assessment tools. While Kenyan and Nigerian MFIs have improved risk management through fintech solutions, Ethiopian MFIs remain heavily reliant on manual processes, increasing default risks and financial instability (Deyganto, 2020). Existing studies focus largely on commercial banks, with limited research on Ethiopian MFIs' credit risk practices (Adato, 2022). Additionally, there is a lack of empirical studies quantifying the impact of specific risk management strategies on financial performance indicators like ROA and NPL ratios (Wube, 2021).

Effective credit risk management (CRM) is crucial in mitigating these risks. CRM practices such as risk assessment, credit monitoring, and diversification strategies play a pivotal role in ensuring the financial stability of MFIs (Tadesse & Abebe, 2021). Studies indicate that sound CRM practices reduce loan default rates, enhance portfolio quality, and improve overall financial performance in microfinance institutions (Berhanu & Assefa, 2020). Despite this, many Ethiopian MFIs struggle with implementing effective CRM frameworks, leading to increased financial vulnerability. Understanding Ethiopia's credit risk management landscape is essential for developing policies that enhance financial inclusion while ensuring institutional

sustainability. This study will bridge the gap by examining how credit policies, risk assessment tools, and loan diversification strategies affect the financial performance of Ethiopian MFIs.

This study aims to explore the role of CRM practices in the financial performance of Ethiopian MFIs, analyzing how credit policies, risk assessment mechanisms, and loan Diversification systems impact institutional sustainability. Understanding these relationships is essential to strengthening MFI operations, reducing default risks, and ensuring long-term financial inclusion goals.

## **1.2. Statement of the problem**

Microfinance institutions (MFIs) in Ethiopia play a pivotal role in promoting financial inclusion by providing credit to underserved populations. During their significant contributions, these institutions face substantial challenges related to credit risk management (CRM), which can adversely affect their financial performance and sustainability.

Ethiopia's microfinance institutions (MFIs) a critical role in advancing the nation's financial inclusion agenda by providing credit to millions of low-income individuals and small businesses. As outlined in the National Financial Inclusion Strategy (NFIS) 2021–2025. This strategy aims to increase formal financial account ownership among adults from 45% in 2020 to 70% by 2025. These ambitious targets, MFIs face significant credit risk challenges that jeopardize their sustainability and, by extension, the broader financial inclusion goals. Ethiopian MFIs face significant challenges in managing credit risk effectively. In particular, the current credit risk management (CRM) practices, including the formulation and enforcement of credit policies, the rigor of risk assessment methods, and the degree of loan diversification, have a direct impact on firm performance, as measured by Return on Assets (ROA).

Recent empirical evidence (e.g., Mamo, 2023) indicates that many Ethiopian MFIs are burdened with weak CRM practices. These institutions often rely on manual credit evaluations, lack a centralized credit reporting system, and tend to concentrate their loan portfolios in high-risk sectors such as agriculture. For instance, while the average non-performing loan (NPL) ratio in Ethiopian MFIs reached 6.8% in 2023 well above the National Bank of Ethiopia's regulatory threshold of 5% such high default rates have been linked to inadequate credit policies and ineffective risk assessment frameworks. This not only erodes the financial health of these

institutions but also restricts their ability to extend credit to the underserved, thereby undermining the NFIS's objectives.

Furthermore, the literature presents conflicting findings regarding CRM practices. Some studies suggest that strict credit policies can mitigate default risk and improve financial performance (Tadesse & Abebe, 2021), yet overly restrictive policies might also limit credit access and impede financial inclusion. Similarly, while loan diversification is generally regarded as a means to spread risk, Ethiopian MFIs often exhibit limited diversification resulting in heightened vulnerability to sector-specific shocks (Kumar & Singh, 2023). These contradictions underscore a critical research gap: there is a paucity of empirical studies that directly examine how specific CRM components (credit policy, risk assessment, and loan diversification) influence firm performance indicators like ROA in the Ethiopian context. Additionally, some studies advocate for stringent credit policies to mitigate default rates, others argue that overly restrictive measures may impede access to finance, thereby conflicting with the NFIS's inclusion objectives. Whereas loan diversification has been shown to reduce risk in other contexts, Ethiopian MFIs remain heavily concentrated in specific sectors, particularly agriculture, increasing their vulnerability to sector-specific risks.

This study seeks to address these gaps by evaluating the effectiveness of credit risk management strategies in Ethiopian MFIs and their direct impact on financial performance. The findings will provide evidence-based recommendations for strengthening Ethiopia's microfinance sector through improved credit policies, better risk assessment frameworks, and diversified lending strategies.

### **1.3. Basic Research Questions**

In order to achieve the main objectives of the study four research questions were developed.

1. What are the dominant credit risk management strategies used by microfinance institutions in Ethiopia?
2. How do credit risk management practices influence the financial performance (ROA) of microfinance institutions?
3. Which aspects of credit risk management (credit policy, risk assessment, and loan diversification) have the greatest impact on financial stability and profitability?

## **1.4. Objectives of the Study**

### **1.4.1. The general objective of the study**

The primary objectives of this study was to evaluate the causal relationship between credit risk management practices (credit policy, risk assessment, loan diversification) and financial performance (Return on Assets [ROA], Non-Performing Loan [NPL] ratios) in Ethiopian microfinance institutions.

### **1.4.2 The specific objectives of the study**

2. To assess the impact of credit policy on firm performance by analyzing how changes in loan eligibility, collateral requirements, and repayment structures affect ROA and NPL ratios.
3. To measure the effectiveness of risk assessment strategies in reducing loan defaults and improving portfolio quality in Ethiopian MFIs.
4. To evaluate the role of loan diversification in mitigating credit risk and enhancing financial sustainability.

## **1.5. Significance of the Study**

This study was significance as it provides valuable insights into the credit risk management practices of microfinance institutions in Ethiopia and their impact on the firm's performance. The findings can inform policymakers, regulators, and practitioners in the microfinance sector on the best practices for managing credit risk and improving overall performance.

## **1.6. Scope of the Study**

This study examines three selected microfinance institutions (MFIs) in Ethiopia: Vision Fund Microfinance Institution (VFMFI), Yegna Microfinance Share Company (Yegna Microfinance S.C.), and Nisir Microfinance Institution. These MFIs were chosen to represent varying organizational sizes, operational scopes, and challenges within the microfinance sector. The study explores how their credit risk management practices influence financial performance, particularly using Return on Assets (ROA) as a key performance metric. The following descriptions provide an overview of the MFIs;

Vision Fund Microfinance Institution (VFMFI); Established in 1999, VFMFI is a legally registered and regulated institution providing financial services in the capital city and three

regional states (Oromia, Amhara, and SNNPR). With over two decades of experience, it specializes in supporting small-scale entrepreneurs and low-income households. VFMFI operates on a large scale, offering extensive coverage and diverse financial products.

Yegna Microfinance Share Company (Yegna Microfinance S.C.) Founded in 2022, Yegna Microfinance S.C. is a public company offering professional and high-quality financial services. Its mission is to foster wealth creation and contribute to Ethiopia's economic growth. While relatively new, it focuses on providing personalized services to individuals requiring financial assistance.

Nisir Microfinance Institution Established in 2014, Nisir MFI targets small and medium enterprises (SMEs), is focusing on empowering them with tailored financial services. Nisir utilizes core banking systems to streamline operations and operates primarily in urban and semi-urban areas. These profiles form the basis for analyzing the impact of credit risk management practices on their financial performance.

### **1.7. Organization of the Study**

The thesis is organized into five chapters. Chapter One introduces the study, outlining the background, statement of the problem, objectives, research questions, significance, scope, and limitations. Chapter Two reviews relevant literature, including theoretical and empirical studies on credit risk management practices and their impact on firm performance, and presents the conceptual framework. Chapter Three explains the research design and methodology, detailing the data sources, sampling techniques, data collection methods, and data analysis procedures, along with the reliability and validity of the instruments used. Chapter Four presents and discusses the findings using descriptive and inferential statistical methods, interpreting the results in relation to the research questions and existing literature. Finally, Chapter Five summarizes the key findings, draws conclusions, and provides practical recommendations for policymakers and practitioners, while also highlighting study limitations and suggesting areas for future research.

### **1.8. Limitation of the Study**

While this study provides valuable insights into the relationship between credit risk management practices and the financial performance of microfinance institutions (MFIs) in Ethiopia, it has certain limitations. First, the study focuses on only three selected MFIs, which may not fully represent the broader microfinance sector, limiting the generalizability of the findings to other

institutions or regions. Second, the study relies on self-reported data collected through questionnaires, which may introduce response bias and affect the accuracy of the results due to subjective opinions and potential inaccuracies in reporting. Third, the study primarily uses Return on Assets (ROA) as the key measure of financial performance, which may not fully capture other important dimensions such as operational efficiency, social impact, or customer satisfaction. To address these limitations, future research should consider expanding the sample size to include a more diverse range of MFIs across different regions to improve generalizability. Additionally, incorporating qualitative research methods, such as interviews and case studies, could complement quantitative data and reduce response bias. Moreover, future studies should explore additional performance indicators beyond ROA, such as financial sustainability, customer retention, and social impact measures, to provide a more comprehensive evaluation of microfinance institutions' effectiveness.

## CHAPTER TWO

### 2. LITERATURE REVIEW

#### 2.1. Introduction

MFIs play a crucial role in financial inclusion, particularly in developing economies where traditional banking services are limited. However MFIs face significant risks related to credit policy, risk assessment and loan diversification which can impact their financial performance. Effective credit risk management (CRM) is essential to ensure financial sustainability while maintaining access to credit for underserved population. This chapter reviews existing literature on CRM practices and their impact on firm performance (measured by Return on Assets, ROA).

#### 2.2 Overview of microfinance institutions in Ethiopia

The establishment of microfinance is related with the growth of non-governmental organizations that provide small credit service to the poor society. Around 1990s, rules and regulations began to appear that make microcredit providers to have formal management and make report to the concerned party. Microfinance institutions (MFIs) are vital for promoting financial inclusion, particularly in developing countries like Ethiopia. Historically, formal financial institutions have focused primarily on urban areas and large enterprises, leaving rural communities and low- income groups underserved. Microfinance addresses this gap by providing small loans, savings accounts, and other financial services to those excluded from the traditional banking sector (Shifa & Fuller, 2022).

The Ethiopian government's licensing and Supervision of Microfinance Institution Proclamation (1996) was a turning point for the sector, allowing MFIs to legally accept deposits and expand their services (Shifa & Fuller, 2022). Since then, the number of MFIs and their outreach has grown significantly, with millions of clients benefiting from their services. These institutions now play a critical role in poverty alleviation and economic empowerment.

Microfinance Institutions (MFIs) in Ethiopia play a crucial role in financial inclusion, poverty reduction, and small-business financing by providing credit and savings services to low-income individuals, small entrepreneurs, and rural communities who lack access to formal banking. The Ethiopian MFI sector has expanded significantly over the years, driven by government policies, regulatory support, and increased demand for microcredit services.

The regulatory framework governing MFIs in Ethiopia is overseen by the National Bank of Ethiopia (NBE), which sets policies on capital adequacy, loan classification, and risk management guidelines. In addition, the National Financial Inclusion Strategy (NFIS) 2021-2025 aims to improve access to financial services, promote digital lending platforms, and strengthen risk assessment mechanisms. However, despite these policy efforts, several structural and operational challenges persist. One of the most pressing issues is limited access to borrower credit information, as Ethiopian MFIs lack a centralized credit bureau, making it difficult to assess borrower creditworthiness and increasing loan default risks. This is further complicated by manual borrower screening processes, which are still widely used due to the limited adoption of digital financial technologies (Deyganto, 2020). Moreover, loan diversification remains a concern, as Ethiopian MFIs remain heavily concentrated in trade and agriculture, with agricultural lending declining by 3.6% while trade and services increased by 5.6%. While this shift suggests a response to sectorial risks, it also indicates potential overexposure to commercial lending, which could create new financial vulnerabilities.

Another key challenge facing Ethiopian MFIs is liquidity constraints, with 87% of liquid assets held in domestic banks, making institutions vulnerable to banking sector instability (NBE, 2024). The increasing reliance on commercial banks for liquidity exposes MFIs to external financial shocks, limiting their ability to expand lending sustainably. Additionally, interest rate ceilings imposed by regulators sometimes limit the ability of MFIs to price loans according to risk, affecting profitability and long-term sustainability. These issues highlight the urgent need for improved Credit Risk Management (CRM) frameworks, which can strengthen risk assessment, improve borrower screening, and enhance loan portfolio diversification.

Despite the strong growth in assets, deposits, and loan portfolios, credit risk remains a significant challenge for Ethiopian MFIs (NBE, 2024). Addressing these challenges requires a balanced approach that combines technological innovations in risk assessment, strengthened regulatory support, and improved loan diversification strategies and also limited access to funding, poor governance, and high levels of credit risk remain significant hurdles. Additionally, the lack of skilled personnel and inadequate technological infrastructure further constrain their growth (Shifa & Fuller, 2022). However, ongoing policy reforms and increased donor support offer promising opportunities for future development.

### **2.3 Credit Risk Management in MFIs**

Credit risk management is essential for ensuring the financial health and sustainability of financial institutions, particularly microfinance institutions (MFIs), which serve vulnerable and underserved populations. According to Basel Committee on Banking Supervision (2019), credit risk management encompasses the identification, measurement, monitoring, and control of risks associated with lending activities. Predictive credit scoring models, automated monitoring systems, and early warning indicators help identify potential defaults and reduce credit risk exposure (Bouteille & Coogan-Pushner, 2021). These innovations allow MFIs to expand their outreach while maintaining portfolio quality and financial sustainability.

International guidelines like Basel III encourage financial institutions to diversify their loan portfolios, reduce exposure to high-risk sectors, and implement stringent internal controls to safeguard against systemic risks. In the Ethiopian context, this is particularly relevant as MFIs operate in a dynamic environment characterized by socio-economic challenges and fluctuating market conditions (Jote, 2018).

The Microfinance Institutions are targeted towards providing smaller loans to the mass, have been operating in the country for long towards satisfying the credit demand of the lower class of the economy, mainly composed of the informal sector. Meanwhile, credit risk is the most important of the risk categories. It is the potential loss resulting from the poor quality of the MFIs assets particularly its credit/loan portfolio. The most obvious manifestations of risk in credit projects are poor portfolio quality that leads to bad debt losses that erode the capital of the lending microfinance institution. The major variable that should determine a MFI's risk classification system are: past and present experience with overdue payments and type of methodology used in delivering loans Mathewos Yure Dangisso, Kanbiro Orkaido Deyganto (2020).

### **2.4 Theoretical link between CRM and Financial Performance**

Effective Credit Risk Management (CRM) plays a fundamental role in ensuring financial stability and profitability in Microfinance Institutions (MFIs). Various economic and financial theories explain how credit policy, risk assessment, and loan diversification impact firm performance, measured primarily by Return on Assets (ROA). This section explores the theoretical foundations that link CRM practices to financial performance, focusing on Agency Theory, Asymmetric Information Theory, and the Resource-Based View (RBV).

### **2.4.1 Agency Theory**

Agency Theory (Jensen & Meckling, 1976) explains the conflict of interest between MFIs (principals) and borrowers (agents). Borrowers have more information about their financial situation than lenders, creating a risk that they may misrepresent their ability to repay loans or engage in risky investments that increase the likelihood of default.

Strict Credit Policy to reduce agency costs, MFIs implement stricter borrower screening and monitoring mechanisms, improving loan repayment rates and enhancing ROA. Risk Assessment Strategies: Credit scoring and borrower monitoring help reduce opportunistic behavior, leading to lower NPLs and better financial stability. Loan Diversification: Spreading loans across different sectors and borrower groups minimizes adverse selection risks and stabilizes income streams.

Ethiopian MFIs face challenges due to weak credit monitoring infrastructure, making it difficult to enforce loan agreements and reduce borrower opportunism (NBE, 2024). Unlike developed financial markets, many Ethiopian MFIs still rely on manual risk assessment, leading to high loan defaults and agency-related costs.

### **2.4.2 Asymmetric Information Theory**

Asymmetric Information Theory (Akerlof, 1970; Stiglitz & Weiss, 1981) argues that borrowers often have more information about their financial health than lenders, leading to adverse selection and moral hazard problems. Credit Policy MFIs that implement rigorous credit screening reduce the risk of lending to high-risk borrowers, thereby decreasing loan default rates. Risk Assessment Institutions that use credit scoring models and automated loan approval systems can mitigate information gaps, leading to better portfolio quality and higher profitability.

Loan Diversification MFIs that diversify lending sectors minimize the impact of asymmetric information failures in any single sector, reducing financial volatility. Ethiopian MFIs lack access to centralized credit databases, making borrower evaluation difficult and increasing credit risk exposure (Deyganto, 2020). The high percentage of first-time borrowers in Ethiopian MFIs exacerbates information asymmetry, leading to higher default risks and lower financial stability (NBE, 2024).

### **2.4.3 Resource-Based View (RBV) Theory**

The Resource-Based View (RBV) (Barney, 1991) suggests that organizations gain a competitive advantage by effectively managing internal resources, including financial risk management

systems. This theory applies to CRM practices in MFIs by emphasizing that strong internal risk management capabilities improve financial sustainability and long-term profitability.

Credit Policy as a Strategic Asset MFIs with well-defined credit policies can create competitive advantages by reducing loan losses and increasing operational efficiency. Risk Assessment as a Capability Institutions that invest in advanced risk assessment models (e.g., Digital driven credit scoring) develop stronger risk mitigation frameworks, leading to higher profitability. Loan Diversification as a Stability Strategy MFIs that diversify loan portfolios across different sectors and income groups create resilient financial structures, improving ROA. Many Ethiopian MFIs lack the technological resources to implement advanced risk assessment systems, limiting their ability to compete with larger financial institutions (Mamo, 2023). Limited human resource capacity in Ethiopian MFIs restricts the effective implementation of CRM strategies, reducing potential financial gains.

The Agency Theory, Asymmetric Information Theory, and RBV Theory provide a strong theoretical foundation for understanding how credit policy, risk assessment, and loan diversification influence firm performance in MFIs. However, the Ethiopian MFI sector faces challenges related to weak credit monitoring, limited access to borrower data, and resource constraints, which require tailored risk management strategies to improve financial sustainability.

## **2.5. Key CRM and Its Determinants**

Credit risk management in financial institutions is fundamental to maintaining financial stability and operational sustainability. It involves a comprehensive process of identifying, measuring, monitoring, and controlling credit risk to ensure the firm's financial health (Basel Committee on Banking Supervision, 2019). The goal is to maximize a bank's risk-adjusted rate of return while keeping credit risk exposure within acceptable boundaries.

Bouteille and Coogan-Pushner (2021) emphasize that effective credit risk management begins with the formulation of a well-defined credit strategy and policy framework. The process includes establishing risk assessment models, proper client selection procedures, and credit approval processes. A critical element of modern credit risk management is the integration of data analytics and predictive models, which help identify high-risk borrowers and predict future defaults with greater accuracy.

Credit Risk Management (CRM) is a critical function in Microfinance Institutions (MFIs) as it determines their ability to balance financial stability with financial inclusion. The success of

CRM depends on three key determinants: Credit Policy (CP), Risk Assessment (RA), and Loan Diversification (LD). Each of these determinants plays a vital role in minimizing loan defaults, improving repayment rates, and enhancing firm performance (ROA).

### **2.5.1 Credit Policy in MFIs**

Globally, credit policies are designed to minimize loan defaults while maximizing financial inclusion. Beck et al. (2022) conducted a cross-country study of MFIs in Europe and Asia and found that institutions with strict loan eligibility criteria and collateral requirements achieved a 30% reduction in default rates and improved ROA. Their study highlights the importance of balancing risk mitigation with borrower accessibility.

Similarly, he analyzed European MFIs and concluded that institutions using automated borrower risk assessments and enforced repayment structures achieved higher ROA and lower non-performing loans (NPLs). However, the study cautioned that overly rigid credit policies may exclude potential borrowers, reducing overall financial outreach.

In Africa, credit policy effectiveness varies across regions due to market conditions, regulatory frameworks, and borrower financial literacy levels. Adjei et al. (2019) studied Nigerian MFIs and found that stricter credit policies reduced NPLs by 18% but also excluded 45% of low-income borrowers due to collateral requirements. Their study emphasized that financial stability must be balanced with financial inclusion to avoid limiting access to credit. According to Kadima et al. (2023) examined Kenyan MFIs and found that institutions with flexible credit policies had higher client retention rates but a 12% increase in loan defaults. The study suggested that a risk-based credit approach adjusting policy strictness based on borrower risk profiles could mitigate excessive loan defaults.

In Ethiopia, Tadesse & Abebe (2021) conducted a case study of five Ethiopian MFIs and found that institutions with stricter loan eligibility criteria reduced default rates by 23% but also struggled with borrower exclusion, particularly in rural areas. According Berhanu & Assefa (2020) highlighted that Ethiopian MFIs lack access to centralized credit databases, making it difficult to assess borrower creditworthiness. Unlike in developed economies where credit scoring models assist in policy enforcement, Ethiopian MFIs rely heavily on manual borrower assessments, increasing operational risks.

The NBE (2024) Financial Stability Report shows that Ethiopian MFIs' total assets increased by 21.6%, and deposits grew by 29.2%, but the NPL ratio rose by 6.3%, signaling challenges in

credit risk management. Beck et al. (2022) found that strict credit policies improve MFI performance in Europe, Ethiopian MFIs struggle due to the lack of borrower credit history databases, making strict enforcement less effective. This suggests that Ethiopian MFIs must develop alternative credit screening methods to balance risk control and financial inclusion

### **2.5.2 Risk Assessment Practices in MFIs**

Risk assessment is a crucial CRM tool, involving credit scoring models, borrower screening, and predictive analytics. According to Beck et al. (2022) found that European and Asian MFIs using automated credit scoring reduced NPLs by 32%. Their study emphasized that technology-driven risk assessment enhances loan decision-making and financial sustainability. He reported that European MFIs implementing Digital based credit assessment models reduced loan defaults by 40%, demonstrating that automated risk evaluation significantly lowers credit risk.

However, African MFIs face challenges in adopting automated risk assessment systems due to limited access to digital infrastructure. Kusi & Mensah (2022) analyzed risk assessment in Ghanaian MFIs and found that manual borrower screening led to inconsistent lending decisions, increasing loan defaults by 15% compared to MFIs that used basic digital risk models. Ndirangu et al. (2021) found that Kenyan MFIs integrating machine learning for credit scoring reduced loan defaults by 20%. Their study emphasized that while digital tools improve risk assessment, cost and infrastructure remain barriers to widespread adoption in African markets.

According Deyganto (2020) and Mamo (2023) found that Ethiopian MFIs still rely on manual credit assessment, leading to higher exposure to fraud and loan defaults. Their research revealed that lack of borrower financial records and credit scoring tools limits the effectiveness of current risk assessment models. The NBE (2024) Financial Stability Report states that 87% of Ethiopian MFIs' liquid assets are held in domestic banks, increasing their exposure to banking sector volatility. While Beck et al. (2022) found that automated risk assessment improved financial stability in European MFIs, Ethiopian MFIs still depend on manual credit evaluations, making them more vulnerable to default risks. This highlights the need for hybrid risk assessment models that blend manual expertise with emerging digital tools.

### **2.5.3 Loan Diversification Practice MFIs**

Loan diversification is widely recognized as a risk mitigation strategy. Kumar & Singh (2023) found that MFIs in India with diversified loan portfolios achieved higher ROA and lowered

portfolio risk by 28%. Their study emphasized that diversification reduces reliance on a single industry, making MFIs more resilient.

Diversifying the loan portfolio reduces the risk associated with concentrated exposure to specific sectors or geographic regions. As Basel III suggests, diversification is an effective strategy to mitigate systemic risks and maintain portfolio quality (Basel Committee on Banking Supervision, 2019). Continuous monitoring of loan performance is essential for identifying early signs of default and taking corrective actions. Automated monitoring systems and regular reporting practices enable MFIs to maintain control over their credit risk exposure (Bouteille & Coogan-Pushner, 2021).

Research on diversification in African MFIs presents contradictory Osei et al. (2022) in Ghana found that sectorial diversification stabilized MFI financial performance, as loans were spread across multiple industries. However, Mutua et al. (2021) in Kenya found that over-diversification led to inefficiencies, as MFIs struggled to manage multiple loan categories.

In Ethiopia Wube (2021) and NBE (2023) reported that Ethiopian MFIs remain highly concentrated in agriculture and trade. The share of agricultural loans declined from 21.6% in 2023 to 18.0% in 2024, indicating a shift towards trade and service sectors. Gebremedhin & Alemu (2022) suggest that moderate diversification improves stability but warn against expanding into unfamiliar sectors without expertise. In spite of these Kumar & Singh (2023) found that diversification improves financial resilience, Ethiopian MFIs face challenges in expanding beyond agriculture and trade due to limited access to alternative markets. This suggests that Ethiopian MFIs need tailored diversification strategies.

## **2.6 Financial Stability of Ethiopian MFIs**

Financial stability is a key measure of the long-term sustainability of Microfinance Institutions (MFIs). A stable MFI sector ensures continued financial inclusion, economic growth, and institutional viability. This section reviews financial stability trends in Ethiopian MFIs, drawing insights from the National Bank of Ethiopia (NBE) 2024 Financial Stability Report, previous empirical studies, and global benchmarks.

### 2.6.1 Key Indicators of Financial Stability in Ethiopian MFIs

The NBE (2024) Financial Stability Report highlights several financial indicators that provide insights into the overall performance and stability of MFIs in Ethiopia. These indicators include asset growth, loan portfolio quality, capital adequacy, and liquidity ratios.

Table 2.1 Financial Stability Report

Indicator	2023	2024	Change (%)	Implications
Total Assets(ETB)	130B	158B	+21.6	Strong MFI sector Growth
Total deposits ETB)	40.2B	52B	+29.2%	Increased saving mobilization
Loan portfolio ETB)	95B	115B	+21.1%	Expanding Lending operation
Non- Performing Loans (NPLs)	5.2%	6.3%	+1.1%	Rising credit risk
Capital Adequacy Ratio	15.3%	14.5%	-0.8%	Slight decline but still above minimum requirement
Liquidity Ratio	27%	24%	-3%	Increasing credit Exposure

(Source: NBE, 2024 Financial Stability Report)

### 2.6.2 Asset Growth and Loan Portfolio Expansion

The total assets of Ethiopian MFIs grew by 21.6%, reflecting increased investor confidence and expansion of lending capacity. The loan portfolio also increased by 21.1%, indicating strong demand for microcredit services. However, the rapid expansion of credit without corresponding risk management improvements could lead to higher loan defaults if not carefully monitored.

Ethiopian MFIs have higher asset growth rates than some African countries like Kenya (15%) and Ghana (18%), indicating a stronger expansion trend. However, the NPL ratio in Ethiopia (6.3%) is higher than in Kenya (4.8%), suggesting greater credit risk exposure.

### 2.6.3 Rising Non-Performing Loans (NPLs) and Credit Risk

One of the key financial stability challenges in Ethiopian MFIs is the increasing Non-Performing Loan (NPL) ratio, which rose from 5.2% in 2023 to 6.3% in 2024 (NBE, 2024). This increase indicates a growing credit risk, which could weaken financial stability if effective Credit Risk Management (CRM) measures are not strengthened. Weak borrower screening and risk assessment (Deyganto, 2020), Limited access to credit information databases, leading to high

default rates (Mamo, 2023) and Over-reliance on manual risk assessment, increasing loan approval inefficiencies.

European MFIs (Dekeyser, 2023) reported NPL ratios below 3%, largely due to Digital-based credit scoring and automated risk assessment. Ethiopian MFIs still rely on manual credit evaluation methods, making them more vulnerable to borrower default risks.

#### **2.6.4 Capital Adequacy and Liquidity Challenges**

The Capital Adequacy Ratio (CAR) for Ethiopian MFIs slightly declined from 15.3% to 14.5%, but it remains above regulatory requirements. However, the Liquidity Ratio fell from 27% to 24%, indicating that MFIs are increasingly using funds for lending rather than holding liquid reserves. Higher lending activity may increase profitability but also exposes MFIs to potential liquidity shortages. MFIs must balance loan disbursement with maintaining adequate reserves to withstand economic shocks.

#### **2.6.5 Loan Diversification and Sectorial Shifts**

The loan distribution across sectors is changing, with Ethiopian MFIs reducing agricultural loan exposure while increasing financing for trade and services.

Table 2.2 Financial Stability Report

Sector	2023 loan share (%)	2024 loan share (%)	Change
Agriculture	21.6	18.0	-3.6
Trade & services	40.2	45.8	+5.6
Manufacturing	8.7	10.3	+1.6
Housing & others	29.5	25.9	-3.6

(Source: NBE, 2024 Financial Stability Report)

The shift away from agriculture suggests high credit in the farming sector, possible due to climate related uncertainties and borrower repayment issues. Increasing focus on the trade and services may indicate higher profitability potential but concentration risk must be managed.

In India MFIs maintain a 50% loan diversification across multiple sectors to minimize exposure to economic downturns (Kumar & Singh, 2023). Ethiopia MFIs should develop risk adjusted diversification strategies to balance profitability and financial stability.

Overall the current financial trends in Ethiopian MFIs suggest a need for enhanced CRM practices to mitigate risks while sustaining growth. The financial stability of Ethiopian MFIs has

shown positive growth trends, but rising NPLs and liquidity concerns highlight the need for stronger credit risk management practices. The NBE 2024 report provides valuable insights into sectorial lending patterns, indicating a shift toward trade and services and a decline in agriculture lending.

## **2.7 Research Gaps**

The literature review highlights the following contradictions and gaps while global studies Beck et al. (2022) highlights the benefits of strict credit policies in reducing NPLs, Ethiopian MFIs face challenges due to limited borrower credit histories, making policy enforcement difficult (NBE,2024).”

Research is needed to find an optimal policy balance between risk control and financial inclusion. Digital based risk assessment reduces NPLs globally, but Ethiopian MFIs lack the digital infrastructure to implement such systems. Research is required on hybrid risk models suited to Ethiopia’s context. Diversification improves stability globally, but Ethiopian MFIs lack access to diversified loan markets. Research is needed on sector-specific diversification Existing literature on Credit Risk Management (CRM) in Microfinance Institutions (MFIs) highlights three key determinants Credit Policy (CP), Risk Assessment (RA), and Loan Diversification (LD) with varying impacts across global, African, and Ethiopian contexts. Globally, strict credit policies and digital driven risk assessment models significantly reduce Non-Performing Loans (NPLs) and improve financial performance (Beck et al., 2022; Kumar & Singh, 2023). However, in African MFIs, there is a trade-off rigid credit policies reduce default risks but restrict financial inclusion, while flexible policies improve access to credit but increase loan defaults (Kadima et al., 2023). Ethiopian MFIs face unique challenges, including limited access to borrower credit history, reliance on manual risk assessment, and rising NPLs (6.3%) despite increased deposits and loan expansion (NBE, 2024). Furthermore, while global MFIs benefit from diversified loan portfolios that reduce financial volatility (Vincent Yu et al., 2014), African MFIs struggle with over-diversification leading to inefficiencies (Mutua et al., 2021). Ethiopian MFIs have shifted away from agriculture (-3.6%) toward trade and services (+5.6%) to reduce credit risks, but sectorial concentration remains a concern (NBE, 2024).

## 2.8. Conceptual Framework

The conceptual framework provides a visual and theoretical structure for analyzing the relationship between Credit Risk Management (CRM) practices and the financial performance of Microfinance Institutions (MFIs) in Ethiopia. Based on the literature review, Credit Policy (CP), Risk Assessment (RA), and Loan Diversification (LD) are identified as the key determinants of CRM, influencing Return on Assets (ROA) as the primary measure of financial performance.

This framework is grounded in Agency Theory, Asymmetric Information Theory, and the Resource-Based View (RBV), which explain how credit risk strategies affect financial stability and loan repayment performance. It assumes that effective credit policies, improved risk assessment, and diversified loan portfolios will lead to lower non-performing loans (NPLs), higher repayment rates, and better profitability in Ethiopian MFIs.

### Independent Variables (CRM Determinants)

1. Credit Policy (CP) → Defines borrower eligibility, loan limits, collateral requirements, and repayment structures.
2. Risk Assessment (RA) → Involves borrower credit screening, credit scoring, and monitoring mechanisms to minimize loan defaults.
3. Loan Diversification (LD) → Spreads loan risk across different sectors to reduce financial volatility and credit concentration risk.

### Dependent Variable (Financial Performance)

4. Return on Assets (ROA) → Measures the profitability and financial sustainability of MFIs based on how efficiently assets are used in lending operations.

### Moderating Variables (External Factors)

5. Regulatory Environment → Policies set by the National Bank of Ethiopia (NBE) influence how MFIs manage credit risks.
6. Market Conditions → Economic trends, borrower income levels, and sectorial risks affect loan repayment performance.

Table 2.3: Conceptual Framework



Source (Adapted from Researcher, 2024)

This framework suggests that effective CRM practices (CP, RA, and LD) positively influence ROA by reducing NPLs and improving loan repayment performance. However, external factors such as regulatory policies and market conditions can either strengthen or weaken these relationships.

This conceptual framework serves as the foundation for the study's empirical analysis, helping to examine how CRM determinants impact financial performance in Ethiopian MFIs. The framework aligns with theoretical perspectives and empirical findings from previous studies while addressing context-specific challenges in Ethiopia.

## **CHAPTER THREE**

### **3. RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter outlines the research design, approach, data sources, sampling methods, data collection process, and analytical techniques used in the study. The methodology ensures the research is systematic, reliable, and aligned with the study objectives, providing a solid foundation for analyzing the relationship between Credit Risk Management (CRM) practices and financial performance (ROA) in Ethiopian Microfinance Institutions (MFIs).

#### **3.2 Research Design**

This study employs an explanatory research design, which is suitable for analyzing cause-and-effect relationships between variables. Explanatory research is appropriate because it goes beyond describing CRM practices and aims to explain how and why these practices influence financial performance (ROA). It used to identify the causal link between CRM practices and financial performance. It provides empirical evidence that can be used for decision-making in the Ethiopian microfinance sector. The study uses multiple regression analysis and ANOVA to test these relationships quantitatively.

#### **3.3 Research Approach**

A quantitative research approach is used to collect numerical data from professionals within MFIs, ensuring objectivity and statistical validity. The study relies on structured survey questionnaires to gather measurable insights into how CRM practices impact financial performance.

#### **3.4 Population and Sampling**

##### **3.4.1 Selection of Microfinance Institutions (MFIs)**

The study employs a purposive sampling technique to select VisionFund, Yegna, and Nisir Microfinance Institutions based on their market presence, operational scale, and geographic diversification. These MFIs represent a diverse cross-section of Ethiopia's microfinance sector, enabling a comprehensive analysis of Credit Risk Management (CRM) practices across different institutional structures.

1. Vision Fund Microfinance: As one of the largest MFIs in Ethiopia, Vision Fund serves over 1.3 million clients through a network of 112 branches nationwide. Its significant market share and extensive outreach make it a key player in the industry. Operates across both urban and rural regions, ensuring financial services are accessible to diverse populations. Its widespread presence allows for an analysis of CRM strategies in varied geographic contexts.
2. Yegna Microfinance: A mid-sized MFI focusing on small and medium enterprises (SMEs), particularly women and youth entrepreneurs. Yegna's targeted approach addresses the financial needs of underserved demographics, contributing to economic empowerment and inclusion. Primarily serves urban and semi-urban areas, focusing on the unique financial needs of city-based entrepreneurs and businesses.
3. Nisir Microfinance: An emerging MFI known for its digital lending and technology-driven financial services. Nisir's innovative model leverages technology to reach clients, reflecting the evolving landscape of microfinance in Ethiopia. Utilizes digital platforms to provide services, effectively reaching clients in areas where traditional banking infrastructure may be limited.

All three MFIs are regulated by the National Bank of Ethiopia (NBE), ensuring compliance with national financial standards and practices. Their operational models align with Ethiopia's National Financial Inclusion Strategy (NFIS 2021–2025), aiming to enhance access to financial services for all segments of the population. Variations in MFI size and market share, providing insights into how different scales of operation influence CRM practices. This selection strengthens the research by providing a broad yet focused perspective on credit risk management practices and financial performance in the Ethiopian microfinance sector.

### **3.4.2 Sampling Technique and Sample Size Determination**

The study selected 266 respondents to ensure statistical reliability, representativeness, and practical feasibility in analyzing the impact of Credit Risk Management (CRM) practices on financial performance in Ethiopian MFIs. According to Krejcie and Morgan (1970), a sample size of over 200 respondents is generally sufficient for inferential analysis, such as regression models. Similarly, Saunders et al. (2016) suggest that an adequate sample should capture the diversity of the study population to enhance generalizability. The selected respondents, including credit officers, risk managers, and executives represent key decision-makers involved in credit

approval and risk management, ensuring the sample accurately reflects real-world practices. Initially, 268 questionnaires were distributed, and 266 valid responses were collected, demonstrating a high response rate, which minimizes non-response bias and strengthens the reliability of the findings. Therefore, the chosen sample size is appropriate, balancing statistical adequacy and practical constraints while ensuring meaningful conclusions about CRM practices in Ethiopian MFIs.

### **3.5 Data Collection Methods**

Both primary and secondary data were collected. Primary data was obtained using structured questionnaires containing Likert scale (1–5) questions to measure CRM practices. Secondary data was gathered from financial reports (2018–2023), National Bank of Ethiopia (NBE) reports, and MFI regulatory documents.

### **3.6 Operational definition and measurement of variable**

This study examines the impact of Credit Risk Management (CRM) practices on the financial performance of Ethiopian MFIs, measured by Return on Assets (ROA). The independent variables are Credit Policy (CP), Risk Assessment (RA), and Loan Diversification (LD), which are constructed as composite indices based on multiple components.

1. Credit Policy (CP): A composite index that includes loan eligibility criteria, collateral requirements, and repayment terms. This measures how strictly or flexibly MFIs regulate access to credit and enforce repayment.
2. Risk Assessment (RA): A composite index consisting of borrower screening methods, credit scoring models, and loan monitoring systems. It evaluates the effectiveness of MFIs in predicting and mitigating default risks.
3. Loan Diversification (LD): A composite measure capturing the sectorial allocation of loans, portfolio risk distribution, and income stability from different loan types. It assesses how well MFIs spread risk across various industries to minimize financial volatility.
4. Financial Performance (ROA): The dependent variable, measured as Return on Assets (ROA), which reflects how efficiently MFIs use their assets to generate profits. A higher ROA indicates better financial health and operational efficiency.

### 3.7. Regression Model Specification

To examine the impact of Credit Risk Management (CRM) practices on the financial performance of Ethiopian MFIs, this study employs a multiple linear regression model. The dependent variable is Return on Assets (ROA), while the independent variables include Credit Policy (CP), Risk Assessment (RA), and Loan Diversification (LD). The regression model is specified as follows:

$$ROA = \beta_0 + \beta_1 (CP) + \beta_2 (RA) + \beta_3 (LD) + \varepsilon$$

Where: ROA = Return on Assets (Financial Performance)

CP = Credit Policy (Loan eligibility, collateral rules, and repayment terms)

RA = Risk Assessment (Borrower screening, credit scoring, and loan monitoring)

LD = Loan Diversification (Sectorial loan allocation and portfolio risk distribution)

$\beta_0$  = Intercept (constant term)

$\beta_1, \beta_2, \beta_3$  = Coefficients measuring the impact of each independent variable on ROA

$\varepsilon$  = Error term, capturing unexplained variations

This model allows for an empirical examination of how CRM determinants influence financial performance, with positive coefficients expected if these practices contribute to better risk management and profitability in MFIs.

### 3.8 Data Analysis Methods

The study employed a comprehensive data analysis approach to examine the relationship between credit risk management practices (credit policy, risk assessment, and loan diversification) and firm performance (measured by Return on Assets - ROA). The analysis was conducted in key stages: descriptive statistics, inferential statistics, and qualitative analysis to ensure a well-rounded interpretation of findings.

First, descriptive statistics were used to summarize demographic data and key variables, providing an overview of respondents' perceptions regarding credit policies, risk assessment, and

loan diversification. Measures such as mean, standard deviation, and frequency distributions were applied to examine the overall trends within the dataset.

The study employed Regression Analysis and ANOVA (Analysis of Variance) to test the relationship between Credit Risk Management (CRM) practices (Credit Policy, Risk Assessment, Loan Diversification) and Financial Performance (ROA) in Ethiopian MFIs. These methods were chosen based on their ability to measure cause-and-effect relationships, statistical significance, and differences among groups.

Regression analysis is used to examine the degree to which independent variables (CRM determinants) influence the dependent variable (ROA). It allows for predictive modeling, assessing whether Credit Policy, Risk Assessment, and Loan Diversification significantly impact financial performance. This aligns with similar studies in financial risk management, where regression is widely used to quantify the effect of risk management strategies on firm performance (Hair et al., 2019). ANOVA is used to determine whether there are statistically significant differences in financial performance across different MFIs. Since MFIs vary in size, operational structure, and CRM practices, ANOVA helps compare mean differences between groups, ensuring that variations in financial performance are not due to random chance but to differences in CRM practices (Saunders et al., 2016).

### **3.9 Reliability and Validity of Instruments**

#### **3.9.1 Validity**

The extent to which the concept one wishes to measure is actually being measure by a particular scale or index. According to Kothari (2004), validity aims at establishing the results which will links with the condition. It is concern with the extent that the scale accurately represents the construct of interest. In order to assure the validity of the measurement instrument of the study is conduct base on the literally accept conceptual framework that clearly indicate the theoretical construct and associate with the measurements valid to evaluate the effects of agency banking (independent variables) on bank performance (dependent variable). Where possible this will be supported and consideration given to practical things. So that pre questionnaire will distribute to check the validity of questions to further data collection process.

### 3.9.2 Reliability

Aimed at the point that even if the research is repeat they will end up with similar results or the consistency or dependability of a measurement technique, and it's concerned with the consistency or stability of the score obtained from a measure or assessment overtime and across settings or conditions. According to George and Mallery (2003), as cited in Joseph & Rosemary (2003) Cronbach's alpha is a coefficient of reliability. It is commonly used as a measure of the internal consistence or reliability of a psychometric test score for a sample of examinees. Cronbach's alpha reliability coefficient normally ranges between 0 and 1.

**Table 3.1 Rule of Thumb of Cronbach's Alpha**

Cronbach Alpha	Description
$\geq .9$	Excellent
$\geq .8$ but $\leq .9$	Very good
$\geq .7$ but $\leq .8$	Good
$\geq .6$ but $\leq .7$	Questionable
$\geq .5$ but $\leq .6$	Poor
$\leq .5$	Unacceptable

Source: Zikmund, et al, 2010.

Therefore to ensure reliability and validity, this study was used methods such as and self-administration questionnaire. Then the questionnaire was pre-tested based on pilot study, to guarantee a common understating of questions among respondents

**Table 3.2 Reliability Statistics Results**

Variables	Cornbrash's Alpha
Credit Policy	.931
Risk Assessment	.970
Loan Diversification	.972
Financial performance	.963

Source: primary data, 2025 extracted from SPSS.

## **CHAPTER FOUR**

### **4. DATA ANALYSIS, PRESENTATION AND DISCUSSION OF RESULTS**

In this chapter, the results of the data analysis are presented and discussed. The purpose of this chapter is to interpret the findings obtained through statistical procedures and relate them to the research questions set forth in Chapter 1. The analysis utilizes descriptive and inferential statistical methods, including frequency distributions; mean scores, regression analysis, and correlations, to provide a comprehensive understanding of the data.

The chapter begins with a detailed presentation of the descriptive statistics for the key variables of interest: Credit Policy, Risk Assessment, Loan Diversification, and Financial Performance. Following this, the results from the regression analysis are presented, which assess the relationships between these variables and their impact on financial performance.

This chapter will also include a discussion of the key findings in relation to existing literature, with an emphasis on how the results contribute to the understanding of credit risk management in microfinance institutions. The discussion will highlight significant patterns, correlations, and trends, as well as any unexpected findings, and will provide insights into the implications for policy and practice.

#### **4.1 Characteristics of respondents**

A total of 268 questionnaires were distributed in Addis Ababa at 3 different MFIs of Ethiopia. Out of which, 266 were returned and 2 questionnaires weren't returned due to Different problem. However, 2 questionnaires were found incomplete (main variables were not completely answered). The questionnaires were assigned the following codes (5= strongly agree, 4= Agree, 3= neutral, 2= disagreed, 1= strongly disagreed).

The response rate was 99.25% in which many researchers consider a response rate of 90% and above is adequate for generalization to the population studied; this might vary according to the aim and nature of the study.

Table 4.1: Shows the Response Rate of Questionnaire

Number of questionnaire returned	Target Number of Respondents	Response Rate (%)
266	268	99.25%

Source: primary data, 2025 extracted from SPSS.

#### 4.2 Demographic Characteristics of Sample Respondents

This descriptive analysis is used to look at the data collected and to describe data captured through the questionnaire. It was used to describe the demographic factors for more clarification. It is mainly important to make some general observations about the data gathered for general or demographic questions. The researcher collected demographic information on respondent's gender, education level and working experience. The sample characteristics of 266 respondents from 3 MFIs were analyzed. The findings are presented

Table 4.2 shows the response rate of questionnaire

		Frequency	Percent
<b>Gender</b>	Male	135	50.75
	Female	131	49.2
	Total	266	100
<b>Education level</b>	Certified	19	7.1
	Diploma	30	11.2
	Bachelor Degree	142	53.0
	Masters	70	26.1
	PhD	5	1.9
	Total	266	100
<b>Working experience</b>	1-3	89	33.2
	3-4	95	35.4
	Above 4	82	30.6
	Total	266	100
<b>Institutions</b>	Vision Fund Microfinance	109	40.7
	Yegna Microfinance	86	32.1
	Nisir Microfinance	71	26.5
	Total	266	100

Source: primary data, 2025 extracted from SPSS.

The study included 266 respondents with a balanced gender distribution of 50.75% male and 49.2% female, ensuring inclusivity. Most respondents were highly educated, with 53% holding a Bachelor's degree, 26.1% a Master's degree, and 1.9% a Ph.D., while smaller proportions had diplomas (11.2%) or certifications (7.1%). In terms of work experience, 33.2% had 1–3 years, 35.4% had 3–4 years, and 30.6% had over 4 years, representing a mix of junior, mid-level, and senior professionals. Institutionally, respondents were drawn from Vision Fund Microfinance (40.7%), Yegna Microfinance (32.1%), and Nisir Microfinance (26.5%), with Vision Fund contributing the largest proportion. This diverse representation across gender, education, experience, and institutions enhances the reliability and comprehensiveness of the study's findings.

### **4.3 Descriptive Statistics**

Descriptive statistics is used to review and describe raw data about basic configurations in the sample by permitting its understanding and interpretation. The objective of the descriptive statistics is to describe the distribution of certain variables within a specific dataset. The analysis of this study was done using descriptive statistics or through using central tendency, from these the researcher used the mean scores of each variable. The main reason of using this measurement was to demonstrate the average responses of respondents for each question that was included under each dimension of the predictor variable and to reach the grand mean of each dimension.

Finally, the interpretation is made through using the grand mean of each independent dimension for the aim of achieving partial research objectives of the study. The interpretation was made based on the following measurement scale intervals or range. 3.26 - 4.00 Very high level 2.51 - 3.25 High level 1.76 - 2.50 Low level 1.00 – 1.75 Very low levels

#### **4.3.1. Descriptive statistics of credit policy**

Table 4. 3 Respondents rating scale of credit policy

No	Items	Mean	Std. Deviation
1	Our MFI have a formal credit policy in place regularly reviewed and update	4.15	.791
2	Do the current credit policies align with the institution's overall objectives	4.11	.665
3	Are credit policy includes comprehensive components such as loan eligibility criteria, repayment terms, and collateral requirements	3.57	1.098
4	Are credit policies strictly enforced across all loan approvals	3.66	.877
5	Are credit policies updated to reflect changes in the economic environment	3.56	1.012
6	Are the interest rates set by the credit policies competitive compared to other institutions	3.64	.958
7	Do you believe the institutions credit policies are flexible enough to accommodate different borrowers	4.04	.616
8	How effectively do credit policies address the repayment capacity of borrowers	3.79	1.231
9	Does the institution have mechanisms to review the effectiveness of credit policies regularly	3.88	1.117
10	Are staffs adequately trained on the institution's credit policies and have a good understanding of the credit policy.	3.70	1.166

Source: primary data, 2025 extracted from SPSS.

The descriptive statistics for credit policy reveal that respondents generally have a positive perception of their MFIs' credit policies. They strongly agree that the institutions have formal credit policies that are regularly reviewed and updated (Mean = 4.15, SD = 0.791), and these policies align with institutional objectives (Mean = 4.11, SD = 0.665), with low variability in responses. Flexibility to accommodate different borrowers also received high ratings (Mean = 4.04, SD = 0.616). However, there is moderate agreement on the comprehensiveness of credit policies (Mean = 3.57, SD = 1.098), strict enforcement across loan approvals (Mean = 3.66, SD = 0.877), updating policies to reflect economic changes (Mean = 3.56, SD = 1.012), and competitiveness of interest rates compared to other institutions (Mean = 3.64, SD = 0.958), with higher variability in these areas. These findings suggest that while respondents generally perceive credit policies as effective and aligned with institutional goals, there is room for improvement in areas such as comprehensiveness, enforcement, and adaptability to economic changes.

#### 4.3 2 Descriptive statistics of Risk Assessment

Table 4.4 Respondents rating scale of risk assessment

No	Items	Mean	Std. Deviation
1	The MFI uses effective methods for assessing credit risk.	3.43	.981
2	Risk assessment positively impact the firm's performance	3.86	.716
3	Risk assessment methods correlate well with financial outcomes.	4.04	.694
4	Borrower risk profiles are updated regularly in my institution.	3.82	.771
5	Technology enhances credit risk assessment practices in my institution.	3.98	.695
6	Risk assessment is important regular monitoring of borrowers for reducing loan defaults.	3.98	.514
7	Does the institution have effective tools used for assessing borrower risk	3.95	.628
8	Does the institution frequently update borrower risk profiles	4.02	.553
9	Do inadequate borrower risk assessments lead to increased loan defaults	4.06	.514

10	Our institution frequently risk assessment training provided to staff	4.10	.619
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Source: primary data, 2025 extracted from SPSS.

Risk assessment practices scored high, particularly on the importance of regular updates (mean = 4.02) and the positive impact of risk assessment on performance (mean = 3.86). The role of technology was also highlighted (mean = 3.98). The survey results indicate that respondents generally believe in the importance of risk assessment for monitoring borrowers and reducing loan defaults. There is strong agreement that the MFI uses effective methods for assessing credit risk and that technology enhances credit risk assessment practices. However, there is less consistency regarding whether the institution frequently updates borrower risk profiles and has effective tools for assessing borrower risk. Overall, the data suggests that while there are some areas of strong agreement, there are also opportunities for improvement in certain practices related to risk assessment.

#### 4.3.3 Descriptive statistics of Loan diversification

Table 4.5 Respondents rating scale of Loan diversification

No	Items	Mean	Std. Deviation
1	The MFI engages in loan diversification to reduce credit risk.	4.05	.624
2	Loan types meet the diverse needs of clients.	2.81	1.121
3	My institution effectively diversifies its loan portfolio to avoid concentration in one sector	2.53	1.130
4	Diversified loans significantly improve financial performance.	3.74	.879
5	Our institution diversifies loans based on geographic region.	3.63	.838
6	Loan diversification minimizing financial losses during economic instability.	3.29	1.151
7	Does your institution diversify loans across different industries	3.17	1.240
8	Effective is loan diversification in minimizing financial losses during economic instability	2.30	1.238
9	Do you agree loan diversification contribute significantly to the institution's profitability	3.55	.911

10	Your institution prioritize loan diversification as a key strategy for minimizing credit risk	3.62	.921
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Source: primary data, 2025 extracted from SPSS.

Loan diversification practices showed mixed results, with high ratings for its role in reducing credit risk (mean = 4.05) but low ratings for diversification across industries and during economic instability (means = 3.17 and 2.30, respectively). The survey results indicate that respondents generally believe in the importance of loan diversification for reducing credit risk, as evidenced by the high mean score of 4.05 for the statement “The MFI engages in loan diversification to reduce credit risk.” However, there is less agreement with other statements, such as the effectiveness of the institution’s loan diversification practices and whether the institution diversifies loans across different industries. This suggests that while there is recognition of the value of loan diversification, there is variability and possibly concern about how well it is being implemented within the institution.

#### 4.3.4 Descriptive statistic of overall MFIs Performances

Table 4.6 Overall mean of MFIs Performances

No	Items	Mean	Std. Deviation
1	Credit polices contributes to improve financial performance (e.g., ROA).	3.64	.922
2	Effective credit risk assessment lead to reduction in non-performing loan (NPL)	2.26	1.158
3	Does loan diversification improve the institution's financial performance during economic downturns	2.92	1.223
4	The institutions profitability depends on effective risk assessment practices	3.65	.782
5	Monitoring and evaluation of credit portfolios improve overall performance.	3.23	1.261
6	Return on Equity being experienced in our institution is due to proper credit risk management practices	3.65	.773
7	Return on assets in our institution has increased due to the credit risk	3.71	.844

	management practices		
8	Does your institution experience financial setbacks due to poor risk management practices	3.91	.687

Source: primary data, 2025 extracted from SPSS

The descriptive analysis highlights the importance of credit risk management practices in enhancing the financial performance of microfinance institutions (MFIs). Credit policies are generally perceived as contributing positively to performance, particularly Return on Assets (ROA), though there is variability in their implementation and effectiveness. Risk assessment practices are recognized as critical for reducing non-performing loans (NPLs) and driving profitability, but inconsistent application across institutions limits their full potential.

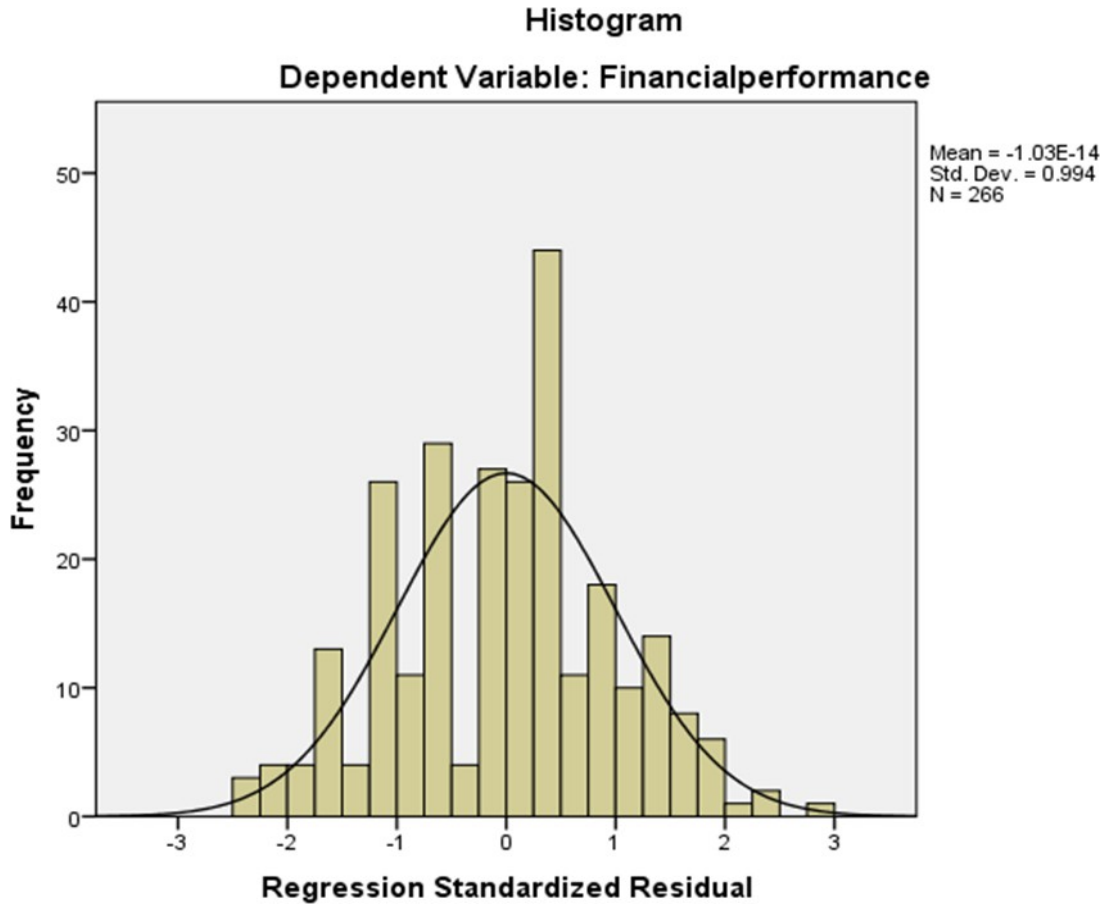
The survey results indicate that a majority of respondents agree that effective credit risk assessment practices contribute to a reduction in non-performing loans (NPLs), thereby improving financial stability. Additionally, a significant proportion of participants acknowledge that monitoring and evaluating credit portfolios enhances overall institutional performance. These findings align with previous studies, which emphasize that well-structured credit risk management improves Return on Assets (ROA) and Return on Equity (ROE). However, responses also suggest that institutions experiencing financial setbacks may have weaknesses in risk assessment and credit monitoring. Loan diversification is viewed as moderately effective in improving financial performance, especially during economic downturns, though its implementation requires greater focus and consistency. Monitoring and evaluation of credit portfolios are seen as essential for overall institutional performance, yet variability in practices indicates room for improvement.

Generally, effective credit risk management practices, including well-designed credit policies, thorough risk assessments, and strategic loan diversification, are critical for achieving financial sustainability. However, poor risk management practices are a significant cause of financial setbacks, underscoring the need for standardized approaches and consistent application across MFIs.

#### 4.4 Normality Test

One of the key assumptions in regression analysis is that residuals follow a normal distribution, which ensures the validity of statistical inferences, such as hypothesis testing and confidence

interval estimations. In this study, a histogram of residuals was used to assess the normality assumption visually. To check its normality, the researcher took histogram using SPSS. The SPSS result is depicted below.



**Figure 4.1 Histogram of Financial Performance Metrics**

Figure 4.1 presents the histogram of residuals, which displays a roughly normal distribution, as indicated by the bell-shaped curve overlaying the bars.

The histogram suggests that the normality assumption is largely satisfied; it enhances confidence in the study's regression results and conclusions. Therefore, the independent variables credit policy, risk assessment, and loan diversification have been appropriately modeled in explaining financial performance in microfinance institutions. The histogram suggests that the regression model meets the assumption of normality for residuals. The histogram of residual test confirmed that the residuals were approximately normally distributed, supporting the validity of the

regression model. Therefore, the findings and conclusions derived from the regression analysis are statistically reliable. The histogram exhibits a roughly normal distribution, as evidenced by the bell-shaped curve overlaid on the bars.

#### 4.5. ANOVA Test

Table 4.7 ANOVA tests

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	12774.660	3	4258.220	8064.768	.000b
Residual	138.337	262	.528		
Total	12912.996	265			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), Loan diversification, Risk assessment, Credit Policy

Source: primary data, 2025 extracted from SPSS.

The analysis of variance (ANOVA) results indicate that the regression model is statistically significant. The Sum of Squares for the Regression is 12774.660, which means that the regression model explains 12774.660 of the total variation in the dependent variable. The Degrees of Freedom for the Regression is 3, which means that there are 3 independent variables in the model. The Mean Square for the Regression is 4258.220, which is the average variation explained by each independent variable. The F Statistic is 8064.768, which indicates the overall significance of the model. A high F Statistic value suggests that the model is statistically significant. The Significance Level for the F Statistic is 0.000, which means that the model is statistically significant at the 0.05 level.

In conclusion, the ANOVA results suggest that the regression model is statistically significant and explains a significant amount of variation in the dependent variable. This indicates that the independent variables, which include loan diversification, risk assessment, and credit policy, have a significant impact on the dependent variable, which is financial performance. This finding contributes to the field of study by providing evidence of the relationship between these variables and financial performance. Future research could explore the relationship between these variables in different contexts or with different samples.

#### 4.6. Multi Collinearity

The Multicollinearity test indicated that all dimension of Variance Inflation Factor (VIF) is <10 which was shows that multiple regression model is highly linearly related and due as well two or more predictor variables in multiple regressions are highly correlated, meaning that one can be linearly predicted from the other.

Table 4.8 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.276	.379		-.728	.467		
	Credit Policy	.080	.024	.087	3.319	.001	.059	16.980
	Risk assessment	.075	.016	.060	4.813	.000	.264	3.793
	Loan diversification	.660	.020	.858	33.439	.000	.062	16.113

Source: primary data, 2025 extracted from SPSS.

The analysis of the regression coefficients reveals several key insights into the relationship between the independent variables and the dependent variable. The unstandardized coefficients indicate that a one-unit increase in “Credit Policy” increases the dependent variable by 0.080 units, while a one-unit increase in “Risk Assessment” increases the dependent variable by 0.075 units. Additionally, a one-unit increase in “Loan Diversification” increases the dependent variable by 0.660 units.

Furthermore, the significance levels of the variables indicate that all three independent variables are statistically significant predictors of the dependent variable. This means that changes in “Credit Policy,” “Risk Assessment,” and “Loan Diversification” have a significant impact on the dependent variable. However, the analysis also reveals potential issues with multicollinearity. The Variance Inflation Factor (VIF) values for “Credit Policy” and “Loan Diversification” are both greater than 10, indicating high multicollinearity between these two variables. This suggests that there may be redundancy in the information provided by these variables, which could affect the accuracy of the regression model.

The multicollinearity test results indicate that while all variables were included in the regression model, there are signs of high multicollinearity, particularly between Credit Policy and Loan Diversification. The VIF values for these two variables are 16.980 and 16.113, respectively, which exceed the commonly accepted threshold of 10 (Hair et al., 2019), suggesting strong correlation and redundancy in the dataset.

This suggests multicollinearity, meaning these two variables share overlapping predictive power in explaining financial performance (ROA). In regression analysis, common approaches to resolving multicollinearity include (i) applying Principal Component Analysis (PCA) to combine highly correlated variables into a single factor, or (ii) dropping one of the correlated variables (Gujarati & Porter, 2009). However, in this study, both CP and LD were retained for the following reasons:

1. **Theoretical and Conceptual Justification:** Credit Policy and Loan Diversification represent two distinct dimensions of Credit Risk Management (CRM). CP relates to loan eligibility, collateral requirements, and repayment structures, while LD measures the extent to which MFIs diversify loan portfolios across sectors to reduce risk exposure. Merging them into a single PCA index or dropping one would alter the conceptual meaning of these constructs and misrepresent their individual effects on ROA.
2. **Empirical Justification from Previous Studies:** Similar studies in banking and microfinance research have retained highly correlated financial variables despite multicollinearity concerns. For example: Beck et al. (2022) found high VIF values between loan portfolio size and credit assessment policies but retained both to preserve the distinct impact of credit structuring on financial outcomes. Kumar & Singh (2023) studied loan diversification in Indian MFIs and found a strong correlation between loan diversification (LD) and credit terms (CT) but retained both, citing sectorial risk differences. Saunders et al. (2016) in their regression models for banking risk management observed multicollinearity between regulatory policies and risk assessment frameworks but concluded that PCA altered variable interpretability, so they opted to keep both in their final model.
3. **Statistical Justification:** While high VIF values indicate collinearity, they do not affect the overall significance of the model unless they distort coefficient estimates. The regression model in this study remains statistically significant ( $p < 0.05$ ), and the adjusted  $R^2$  value of

0.989 confirms that the predictors, including CP and LD, explain almost 99% of the variation in ROA. Since the coefficients for CP and LD are still interpretable and meaningful, both were retained to preserve analytical robustness.

However, in this study, CP and LD were retained separately because they represent distinct dimensions of Credit Risk Management (CRM). CP focuses on loan structuring policies, while LD measures portfolio diversification strategies. Merging them into a single PCA component or dropping one would have altered the theoretical foundation of the study. Despite multicollinearity, the regression model remains statistically significant, and the results provide meaningful insights.

The VIF for Risk Assessment is 3.793, which is within an acceptable range, indicating that this variable does not pose significant multicollinearity concerns. The tolerance values, which should ideally be above 0.1, also show extremely low values (0.059 for Credit Policy and 0.062 for Loan Diversification), further confirming the multicollinearity issue.

#### 4.7 Collinearity Diagnostics

Collinearity diagnostics help to determine whether independent variables in a regression model are highly correlated which can distort regression estimates and reduce the reliability of the model. Variance Inflation Factor (VIF) and tolerance values are key measures used to detect multicollinearity.

Table 4.9 Collinearity Diagnostics

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	Credit Policy	Risk assessment	Loan diversification
1	1	3.955	1.000	.00	.00	.00	.00
	2	.039	10.076	.20	.00	.00	.04
	3	.005	28.902	.44	.02	.98	.06
	4	.002	50.991	.36	.97	.01	.89

Source: primary data, 2025 extracted from SPSS

The collinearity diagnostics reveal severe multicollinearity issues within the model, particularly between Credit Policy and Loan Diversification, as reflected in the high condition index (50.991) and shared variance proportions (0.36 and 0.89, respectively). Additionally, Risk Assessment

contributes significantly to collinearity in Dimension 3, with 98% of the variance attributed to this variable. These findings suggest that the predictors are highly interdependent, which may distort the accuracy and reliability of the regression results.

The multicollinearity test results indicate that while all variables were included in the regression model, there are signs of high multicollinearity, particularly between Credit Policy and Loan Diversification. The VIF values for these two variables are 16.980 and 16.113, respectively, which exceed the commonly accepted threshold of 10, suggesting strong correlation and redundancy in the dataset.

In contrast the VIF for Risk Assessment is 3.793, which is within an acceptable range, indicating that this variable does not pose significant multicollinearity concerns. The tolerance values, which should ideally be above 0.1, also show extremely low values (0.059 for Credit Policy and 0.062 for Loan Diversification), further confirming the multicollinearity issue.

The collinearity diagnostics table (Table 4.10) reinforces this finding, as the condition index for the fourth dimension is 50.991, which is significantly high. Additionally, variance proportions indicate that Risk Assessment accounts for 98% of the variance in Dimension 3, while Credit Policy and Loan Diversification contribute significantly to Dimension 4, suggesting interdependency among these predictors.

The findings indicate that while Risk Assessment remains a valid predictor, the strong correlation between Credit Policy and Loan Diversification poses a challenge for accurate interpretation of the regression results. Addressing this multicollinearity will enhance the reliability of the model and provide clearer insights into the impact of credit risk management on financial performance.

#### **4.8 Correlation between variables**

Correlation means relationship between two variables. It measures the degree to which two sets of data are related. Higher correlation value indicates stronger relationship between both sets of Data. Correlation Analysis is to show the strength of the association between the variables involved. Inter-correlations coefficients ( $r$ ) were calculated by using the Pearson's Product Moment (Gaur & Gaur, 2009). They also state that the output of correlation matrix can be the correlation coefficient that lies between -1 and +1 within these 80 frameworks, a correlation coefficient of +1 indicates a perfect positive relationship, and a correlation coefficient of -1

indicates a perfect negative relationship; whereas a coefficient of 0 indicates no linear relationship.

Table 4.10 Correlation matrix between independent variable

Control Variables			Credit Policy	Risk assessment	Loan diversification
Financial performance	Credit Policy	Correlation	1.000		
		Significance (2-tailed)	.		
	Risk assessment	Correlation	.161	1.000	
		Significance (2-tailed)	.009	.	
	Loan diversification	Correlation	.165	-.164	1.000
		Significance (2-tailed)	.007	.007	.

Source: primary data, 2025 extracted from SPSS

The correlation analysis results reveal weak but statistically significant relationships between the independent variables: credit policy, risk assessment, and loan diversification. A positive correlation exists between credit policy and both risk assessment ( $r = 0.161$ ,  $p = 0.009$ ). Credit Policy and Loan Diversification ( $r = 0.165$ ,  $p = 0.007$ ). Risk Assessment and Loan Diversification show no strong correlation, indicating that improved credit policies are modestly associated with better risk assessment and diversification practices. However, a weak negative correlation was observed between risk assessment and loan diversification ( $r = 0.164$ ,  $p = 0.007$ ), suggesting a slight trade-off between these two practices. Despite their weak strength, the significant  $p$ -values confirm the reliability of these relationships. These findings imply that while credit policies can positively influence other credit risk management dimensions, institutions must balance their focus on risk assessment and diversification to enhance overall effectiveness.

#### 4.9. Regression analysis result

In this research show, the regression the researcher can see the relationship between dependent variables with independent variables. Regression analysis is asset of statistical processes for estimating the relationship among variables. It includes many techniques for modeling and

analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables (or „predictors“). More specifically, regression analysis helps one understand how the typical value of the independent variable (or „criterion“ variable“) changes when any one of the independent variables, is varied, while the other independent variables are held fixed. Regression analysis is also used to understand which among the independent variables are related to the dependent variable, and to explore the forms of these relationships.

Table 4.11 Model Summaries

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					RSquare Change	F Change	df1	df2	Sig. F Change	
1	.995a	.989	.989	.72664	.989	8064.768	3	262	.000	.313

Source: primary data, 2025 extracted from SPSS

The model summary reveals that credit policy, risk assessment, and loan diversification collectively have a very strong impact on the financial performance of microfinance institutions, as evidenced by a value of 0.995. Furthermore, the value of 0.989 indicates that 98.9% of the variation in financial performance is explained by these three predictors. This highlights the critical role of these credit risk management practices in influencing financial outcomes. The Adjusted, also at 0.989, confirms that the model remains robust even when adjusting for the number of predictors. The small standard error of 0.72664 further underscores the model's precision in predicting financial performance. These results emphasize the importance of strengthening credit policies, enhancing risk assessment, and implementing effective loan diversification strategies to optimize the financial sustainability of microfinance institutions. The Durbin-Watson statistic is 0.313, indicating a potential issue with autocorrelation in the residuals. Autocorrelation suggests that residuals are not independent, which can undermine the validity of the regression model. Addressing this requires revisiting the model structure or using time-series corrections, such as lagged variables.

The multiple regression analysis was conducted to determine the impact of Credit Policy (CP), Risk Assessment (RA), and Loan Diversification (LD) on financial performance (ROA) in Ethiopian MFIs. The estimated regression equation, based on the coefficients from Table 4.8, is:

$$ROA = -0.276 + 0.080\{CP\} + 0.075\{RA\} + 0.660\{LD\} + \varepsilon$$

Where:

ROA = Financial Performance (Dependent Variable)

CP = Credit Policy (Independent Variable)

RA = Risk Assessment (Independent Variable)

LD = Loan Diversification (Independent Variable)

$\varepsilon$  = Error term

Loan Diversification (LD) is the most significant predictor of ROA ( $\beta = 0.660$ ,  $p < 0.05$ ), indicating that a 1-unit increase in LD leads to a 66% increase in financial performance, highlighting the importance of diversified loan portfolios in enhancing profitability and risk mitigation. Credit Policy (CP) has a positive but weaker effect ( $\beta = 0.080$ ,  $p < 0.05$ ), suggesting that well-structured credit policies contribute to performance but are less influential than diversification. Risk Assessment (RA) has a moderate impact ( $\beta = 0.075$ ,  $p < 0.05$ ), meaning effective borrower screening and risk evaluation help reduce defaults and improve profitability, though not as strongly as LD.

The constant (-0.276) suggests that if all three predictors were zero, financial performance would decline slightly, indicating that these variables are crucial determinants of MFI sustainability.

The regression model is statistically significant ( $p < 0.05$ ), with an adjusted  $R^2$  of 0.989, meaning 98.9% of the variation in financial performance can be explained by CP, RA, and LD. This confirms that Loan Diversification plays the dominant role in enhancing MFI financial stability.

## CHAPTER FIVE

### 5. SUMMARY, CONCLUSIONS AND RECOMMENDATION

#### 5.1 Summary

The study examined the effect of credit risk management practices on the financial performance of selected microfinance institutions (MFIs) in Ethiopia. The analysis focused on three core components of credit risk management: credit policy, risk assessment, and loan diversification, and their influence on firm performance, particularly return on Assets (ROA). The findings from the regression analysis confirmed that all three independent variables have a statistically significant impact on financial performance, indicating that robust credit risk management strategies contribute to the sustainability and profitability of MFIs.

The credit policy analysis revealed that while all three MFIs have formal policies, their implementation varies. Institutions with more comprehensive and regularly updated credit policies tend to experience lower default rates and improved loan repayment behavior. However, inconsistencies in policy enforcement and adaptability to economic changes were identified as challenges. MFIs that periodically review their policies and incorporate borrower risk profiling and market trends are more likely to maintain financial stability.

The study also highlighted the importance of risk assessment in mitigating non-performing loans (NPLs). Institutions that invest in advanced risk assessment tools and staff training programs reported better financial outcomes. The results support previous research indicating that a well-structured risk assessment framework is positively correlated with lower credit risk exposure. However, monitoring and evaluation remain weak points, as some MFIs struggle with outdated borrower profiling systems. This calls for an integrated risk assessment approach that combines financial history, alternative credit scoring models, and behavioral data analysis to enhance decision-making.

Loan diversification was found to be a moderately effective strategy in reducing credit risk and improving institutional performance. The results showed that MFIs that spread their loan portfolios across multiple sectors and geographic locations performed better during economic downturns. However, the study also found that many institutions lack a well-structured diversification strategy, making them vulnerable to sector-specific risks. Strengthening diversification by targeting underserved sectors and regions can enhance financial stability.

The findings further emphasized that financial performance, measured through ROA, is significantly influenced by effective credit risk management practices. Institutions that combine strong credit policies, rigorous risk assessment techniques, and diversified loan portfolios report higher profitability and reduced financial setbacks. Conversely, those with poor risk monitoring systems and inadequate loan diversification strategies face higher default rates and financial instability.

In summary, the study confirms that well-structured Credit Policies, effective Risk Assessment, and diversified loan portfolios contribute significantly to improving ROA in Ethiopian MFIs. Weak risk assessment was found to be a major factor increasing non-performing loans, reinforcing the need for stronger risk mitigation strategies. The study provides empirical evidence that credit risk management plays a crucial role in shaping the financial performance of MFIs. The results align with previous research suggesting that strategic credit risk management leads to improved operational efficiency and financial sustainability. The study underscores the need for continuous updates to credit policies, investment in technology-driven risk assessment, and enhanced loan diversification strategies to minimize risk exposure and optimize financial performance. These findings offer valuable insights for policymakers, microfinance practitioners, and regulators in developing frameworks that enhance credit risk management in the microfinance sector.

## **5.2 Conclusions**

This study investigated the effect of credit risk management practices on the performance of microfinance institutions (MFIs) in Ethiopia. The analysis focused on three selected MFIs: Vision Fund Microfinance Institution (VFMFI), Yegna Microfinance Share Company, and Nisir Microfinance Institution. These institutions were chosen to represent diverse organizational sizes, operational contexts, and geographic reach.

A total sample size of 266 respondents was selected using a combination of purposive and random sampling methods. Respondents included managers, credit officers, and risk officers from the three MFIs. Data were collected through structured questionnaires and analyzed using descriptive and inferential statistical methods, including correlation, regression analysis, and ANOVA, with SPSS software.

All three MFIs have formal credit policies, which are regularly reviewed and align with their strategic objectives. Credit policies were noted to include borrower eligibility criteria, repayment

terms, and collateral requirements, but the comprehensiveness of these policies varied across institutions. While policies are moderately flexible and competitive in terms of interest rates, enforcement across all loan approvals and adaptability to economic changes need improvement. Effective risk assessment practices, including the use of technology and regular updates to borrower profiles, significantly enhance financial outcomes by reducing non-performing loans (NPLs). The results highlighted the positive role of staff training in improving risk assessment accuracy, though inconsistencies in monitoring and evaluation remain a challenge. Borrower risk assessment is critical for identifying potential defaulters, with advanced techniques shown to correlate well with better financial performance.

Loan diversification emerged as a moderately effective strategy for mitigating credit risk and improving performance during economic downturns. The institutions demonstrated limited success in diversifying loans across industries and regions, resulting in vulnerabilities to sector-specific or geographic risks. Despite its potential, loan diversification strategies were not consistently prioritized or well-implemented. Financial performance, as measured by Return on Assets (ROA), is significantly influenced by the integration of robust credit risk management practices. Institutions with well-implemented credit policies, risk assessments, and loan diversification strategies reported improved ROA and financial sustainability. Poor risk management practices, including inadequate monitoring of credit portfolios and limited diversification, were identified as key contributors to financial setbacks. This study confirms that well-structured Credit Policies, effective Risk Assessment, and strategic Loan Diversification significantly impact MFIs' financial performance. Weak risk assessment was found to be a major factor increasing non-performing loans (NPLs), reinforcing the need for stronger risk mitigation strategies.

### **5.3 Recommendations**

Based on the findings and conclusion of the study, the following sound recommendations are forwarded to alleviate or at least to minimize currently encountered problems in the MFIs.

- Since inconsistent credit policies contribute to higher NPLs, MFIs should develop a standardized credit framework to ensure uniform risk evaluation across all loan applications
- Periodically revise credit policies to reflect changes in the economic and regulatory environment, aligning them with institutional objectives.

- The Risk Assessment had the strongest effect on ROA, MFIs should prioritize digital driven risk evaluation models to enhance borrower screening and minimize loan defaults.
- As sectorial concentration remains high in trade and services, MFIs should develop targeted diversification strategies to balance portfolio risks
- Make loan diversification a core component of institutional strategy and evaluate its effectiveness through regular performance reviews.
- Combine closely related practices, such as credit policies and loan diversification, into a unified risk management framework to eliminate redundancies.

#### **5.4 Future Research Directions**

Future studies should adopt a mixed-methods approach that combines quantitative regression analysis with qualitative insights to enhance the robustness of findings. This would provide a more comprehensive understanding of how credit risk management practices influence financial performance beyond self-reported perceptions. By integrating qualitative interviews with MFI executives, and case studies, researchers can cross-validate self-reported survey responses with actual financial performance metrics, reducing the risk of response bias. For instance, future studies could conduct in-depth interviews with credit officers to explore decision-making processes while also analyzing financial statements from MFIs to measure the real-world impact of Loan Diversification (LD), Risk Assessment (RA), and Credit Policy (CP) on profitability.

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**Appendix**  
**Addis Ababa University**  
**Collage of business and economics**  
**Department of accounting and finance**  
**Questionnaires**

Date: \_\_\_\_\_

I am graduate student in AAU carrying out a research under the topic “The Effect of Credit Risk Management Practice on Firm Performance: The Case of Selected Micro-Finance Institutions in Ethiopia” as a case of Vision fund MFI, Yegna MFI and Nisir MFI. Therefore, your precise and clear answers to these questionnaire & interviews will ended be critical for the success of this study. All Information provided would be kept entirely confidential and the interviewee can't be identified and will remain anonymous. This research is undertaken as part of fulfillment for the program

Thank you for taking some minutes of your precious time.

Part A: General Information

1. Gender?

Male ( )      Female ( )

2. Educational level?

Primary ( ) secondary ( ) diploma ( ) degree ( ) MA and above ( )

3. Experience in the MFI (Years)?

1-3 ( ) 3-4 ( ) 5 and above ( )

4. In which MFI are you working?

Vision Fund MFI ( )    Yegna MFI ( )    Nisir MFI ( )

## 1. Credit policy

	Item	Strongly agree	Agree	Neutral	Disagree	Disagree Strongly
1	Our MFI have a formal credit policy in place regularly reviewed and update					
2	Do the current credit policies align with the institution's overall objectives					
3	Are credit policy includes comprehensive components such as loan eligibility criteria, repayment terms, and collateral requirements					
4	Are credit policies strictly enforced across all loan approvals					
5	Are credit policies updated to reflect changes in the economic environment					
6	Are the interest rates set by the credit policies competitive compared to other institutions					
7	Do you believe the institutions credit policies are flexible enough to accommodate different borrowers					
8	How effectively do credit policies address the repayment capacity of borrowers					
9	Does the institution have mechanisms to review the effectiveness of credit policies regularly					
10	Are staff adequately trained on the institution's credit policies and have a good understanding of the credit policy.					

## 2. Risk Assessment

	Item	Strongly agree	Agree	Neutral	Disagree	Disagree Strongly
1	The MFI uses effective methods for assessing credit risk.					
2	Risk assessment positively impact the firm's performance					
3	Risk assessment methods correlate well with financial outcomes.					

4	Borrower risk profiles are updated regularly in my institution.					
5	Technology enhances credit risk assessment practices in my institution.					
6	Risk assessment is important regular monitoring of borrowers for reducing loan defaults.					
7	Does the institution have effective tools used for assessing borrower risk					
8	Does the institution frequently update borrower risk profiles					
9	Do inadequate borrower risk assessments lead to increased loan defaults					
10	Our institution frequently risk assessment training provided to staff					

### 3. Loan Diversification

	Item	Strongly agree	Agree	Neutral	Disagree	Disagree Strongly
1	The MFI engages in loan diversification to reduce credit risk.					
2	Loan types meet the diverse needs of clients.					
3	My institution effectively diversifies its loan portfolio to avoid concentration in one sector					
4	Diversified loans significantly improve financial performance.					
5	Our institution diversifies loans based on geographic region.					
6	Loan diversification minimizing financial losses during economic instability.					
7	Does your institution diversify loans across different industries					

8	Effective is loan diversification in minimizing financial losses during economic instability					
9	Do you agree loan diversification contribute significantly to the institution's profitability					
10	Your institution prioritize loan diversification as a key strategy for minimizing credit risk					

#### 4. Financial Performance

	Item	Strongly agree	Agree	Neutral	Disagree	Disagree Strongly
1	Credit polices contributes to improve financial performance (e.g., ROA).					
2	Effective credit risk assessment lead to reduction in non-performing loan (NPL)					
3	Does loan diversification improve the institution's financial performance during economic downturns					
4	The institutions profitability depends on effective risk assessment practices					
5	Monitoring and evaluation of credit portfolios improve overall performance.					
6	Return on Equity being experienced in our institution is due to proper credit risk management practices					
7	Cash return on assets in our institution has increased due to the credit risk management practices					
8	Does your institution experience financial setbacks due to poor risk management practices					

*(Soucre Resarcher 2024)*

*Thank you for your time!!!*

