



**UNIVERSITY
OF
LUSAKA**

SCHOOL OF POSTGRADUATE STUDIES

**The effects of Credit Risk Management practices on loan performance in
microfinance institutions in Zambia.**

**A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES,
UNIVERSITY OF LUSAKA IN PARTIAL FULFILLMENT OF THE AWARD OF THE
MASTER OF BUSINESS ADMINISTRATION IN FINANCE.**

BY

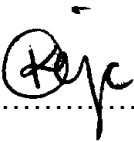
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DECLARATION

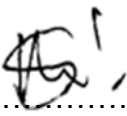
I KALONJE KAMANGA, hereby declare that the dissertation is in partial fulfilment for the award of a master Business Administration in Finance Degree and the work contained herein is my own except where especially stated otherwise in the text.

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Dedication

I dedicate this dissertation to my mother Mirriam Jere for your unwavering support, encouragement, and belief in my potential have been the cornerstone of my academic journey. Your sacrifices and endless love have fueled my determination to pursue knowledge and make a difference in the world

Acknowledgment

I would like to express my deepest gratitude and appreciation my supervisor Doc Isaac Mabhungu whose support and guidance was invaluable in the completion of this dissertation, I am also grateful to my colleagues for their insightful comments and suggestions. Special thanks to my family and friends for their encouragement and understanding during this academic journey.

Abstract

This aim of the study was to evaluate the impact of credit management practices on loan performance within microfinance institutions (MFIs) in Zambia. The study used a mixed methodology to collect data from 33 financial institutions'. All 33 financial institutions received questionnaires and interviews were held with 10 credit officers who did not answer questionnaires. Convenient sampling was used to select the 10 interviewees the data was analyzed using SPSS version 27 and the interviewees were chosen via convenient sampling. The findings revealed that evaluation of business plans, professionalism, and continuous monitoring reduces default rates and enhancing loan performance. The study conclusion was that there was a substantial correlation between lower default rates and scrutinizing business plans, professionalism considerations, and periodic monitoring of financed projects. Recommendations derived from the study include: Strengthening Business Plan Analysis: Advocating for comprehensive analysis and risk mitigation in business plans, alongside standardized training programs for staff, emphasizing Professionalism and Periodic Monitoring: Highlighting professionalism in borrower assessment and enhancing project monitoring mechanisms, enhancing Due Diligence and Screening Practices: Stressing the importance of comprehensive due diligence and standardized protocols for borrower assessments to ensure consistency and accuracy in loan applications.

Key Terms: Credit management, Credit Risk, Credit appraisal, Credit appraisal, Collection policies, Microfinance signifies, Microfinance Bank, Risk, Performing Loan, Non-performing Loan.

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CHAPTER 1: INTRODUCTION

1.0 Introduction

In the ever-evolving landscape of global finance, the intricate interplay between credit management practices and the performance of financial institutions holds paramount importance. This study delves into the complexity of microfinance institutions (MFIs) in Zambia, with a particular focus on those operating in the capital city of Lusaka. The background for this is the study serve the growth of banking challenges not only in developing nations but also in their developed counterparts. The persistent and growing concerns within the financial sector, specifically the impediments posed by poor loan performance, prompt a closer examination of credit management practices. Against this backdrop, the historical trajectory of credit, from its emergence post-World War II to its present-day prominence in Zambia, sets the stage for a comprehensive analysis. This study aims to fill a significant void in the existing literature by scrutinizing the dynamics of credit risk management within the microfinance sector of Lusaka, offering insights that can inform better practices, guide policymakers, empower financial institutions, and contribute to the academic understanding of this critical domain.

1.1 Background of the study

The core premise of the study is the observation of increasing and persistent banking challenges in both developed and developing nations over time (Cornett & Saunders, 2019). The central factor influencing the financial sector remains poor loan performance, which limits the ability of banking institutions to extend lending (World Bank, 2017).

The historical roots of the credit concept can be traced back, gaining more recognition after World War II. It initially gained traction in Europe and later in America (maimbo & avrotas, 2017). In the USA, banks offered credit to customers at high interest rates, sometimes deterring potential borrowers. The concept gained prominence during the economic boom of 1885 when banks had surplus liquidity and a desire to lend out excess funds (fan & zhang, 2017). In Africa, credit gained prominence in the 1950s, with banks establishing credit departments and sections, often targeting white settlers (Mordurch, 2018).

In 1991, the Zambian government, upon assuming power, faced the dual challenge of liberalizing the economy while simultaneously preventing any further increase in poverty and ensuring its political stability. As part of its response to these challenges, the government initiated the Credit Management Programme (CMP) in 1994. (James G coperskate, 2018). Microfinance in Zambia was limited in its early stages due to the scarcity of financial institutions in the country until the mid-1990s. This scarcity of institutions resulted in minimal interest in this field. (Veronica nyangwa phiri, 2020).

Musheta. N. F. (2022) contended that today, Microfinance Institutions (MFIs) have evolved into some of the largest non-banking financial intermediaries Zambia, where they maintain an extensive network of branches and agencies. Nevertheless, MFIs encounter various operational risks during their activities, with credit risk being among the foremost concerns. This is particularly significant because extending credit and advances constitutes a fundamental aspect of their core business and revenue generation. (Florence B. M. et el 2020)

Over the past five years, certain financial institutions in Zambia have seen their previously strong reputations eroded, while others, unable to effectively mitigate these challenges, have faced collapse. These issues stem from inadequate measures in managing credit risk, which can be classified into three main categories: an excessive volume of insider loans, instances of external fraud, and a lack of diversification in their loan portfolios. (Obae. G. J. 2022). Commercial banks and Microfinance Institutions (MFIs) play a critical role in a country's financial landscape, constituting a significant portion of its financial institutions. Consequently, any shifts in their performance can have adverse effects on the overall economy (Bohnstedt, 2020).

1.2 Statement of the Problem

An upsurge has been observed in the number of banks and micro financial institutions facing underperformance, leading to their acquisition by central banks due to insolvency concerns (Mburu et al., 2020). This regrettable scenario has been attributed to deficient loan performance.

According to the Central Bank Annual Supervision Report, there has been a significant rise in credit risk, evident through the escalating levels of non-performing loans within

Microfinance Institutions (MFI) over the last decade. This circumstance has negatively affected their financial performance. Notable instances of this include the takeover of Better Now Zambia on July 21, 2023 (BoZ 2023), Zam-post Micro financial Institution on July 19, 2020 (BoZ, 2020), Pan African Building Society, as well as Commercial Leasing Zambia, Genesis Finance (BoZ, 2018), and Cetzam Financing (BoZ, 2016).

The recent collapses of specific financial establishments underscore the fact that the effective implementation of credit management practices has yet to be fully realized (Kinyau, 2017). The persistent turmoil within the banking sector has been linked to inadequate credit management. Research indicates that the gradual increase in provisions for non-performing and uncertain debts, as evidenced in the banks' annual reports, highlights the suboptimal handling of the credit aspect within their asset portfolio (Ogulande Olamigi, 2018).

Numerous research endeavors have explored credit risk management and loan performance within microfinance banks. Nevertheless, a noteworthy void exists in Zambia's context, particularly regarding financial institutions operating in Lusaka. The specific dimensions of credit terms, client appraisal practices, collection policies, and credit risk control have not been thoroughly studied. This study aims to fill this significant gap in the existing literature by delving into the essential realm of credit risk management within microfinance banks operating in Lusaka, Zambia.

1.3 Research Objectives

The general objective of this study is to assess the effects of credit management practices on loan performance in microfinance institutions in Zambia.

1.3.1 Specific Objectives

- i. To identify the Credit Risk Management practices implemented by MFIs.
- ii. To determine the Credit Risk practices that have a greater effect on loan performance in MFIs.
- iii. To investigate the challenges MFIs have faced in implementing Credit Risk Management practices

- iv. To investigate the strengths MFIs possess in implementing Credit Risk Management practices

1.4 Research Questions

- i. Is there a significant relationship between credit risk practices and loan performance of MFIs in Zambia?
- ii. Is there a significant relationship between credit risk practices that have a greater effect on loan performance and loan performance in MFIs in Zambia?
- iii. Is there a significant relationship the challenges MFIs have faced in implementing credit risk management practices and loan performance of MFIs in Zambia?
- iv. Is there a significant relationship between strengths MFIs have faced in implementing credit risk management practices and loan performance of MFIs in Zambia?

1.5 Significance of the Study

The study holds substantial significance in several aspects. Its outcomes will play a pivotal role in guiding the management of Microfinance banks in Zambia by shedding light on the crucial nature of credit management practices and their direct impact on loan performance within these institutions. This knowledge will empower these banks to tailor credit management policies and strategies that are specifically attuned to their operational context, thereby fortifying their ability to effectively handle credit risk.

Furthermore, the empirical data generated by this study will prove invaluable to policymakers tasked with shaping the regulatory framework for microfinance institutions in Zambia. By offering insights into the intricacies of credit management's influence on loan performance, the study's findings can guide the formulation of well-informed policies that foster a conducive operational environment for these institutions.

Beyond the microfinance sector, the study's revelations about optimal credit management practices will have relevance for a broader range of financial institutions. These insights will serve as a practical guide for effectively navigating the intricacies of credit management, encompassing aspects such as loan assessment, recovery procedures, client appraisal, and loan performance evaluation. Consequently, the study's

recommendations will equip financial institutions with actionable strategies to enhance their credit management processes and overall financial stability.

Furthermore, the study's contributions extend to the academic realm. By synthesizing a comprehensive literature review and offering fresh insights into the intricate relationship between credit risk and loan performance, it will serve as a foundational resource for future researchers. The study's findings and methodologies will provide a springboard for further exploration and analysis in this critical field.

In essence, the study's significance reverberates across various sectors. It empowers microfinance bank management, informs policymakers, guides financial institutions, and sets the stage for future research endeavors. Through its multifaceted contributions, the study stands to elevate the understanding and implementation of effective credit management practices, ultimately bolstering the financial health of institutions and the economy at large.

1.6 Scope of the study

The study's scope is centered on Financial Institutions located in, Zambia focusing mainly on the head offices located in Lusaka. This selection encompasses all deposit and non-deposit taking financial institutions in Zambia like. The study's concentration narrows down to a specific set of internal factors, chiefly investigating the interplay among credit terms, credit appraisal, credit risk, and collection policies in relation to loan performance.

1.7 Definition of Key Terms and Concepts.

Credit management refers to the systematic process and strategies employed by financial institutions, businesses, and organizations to effectively assess, monitor, control, and mitigate risks associated with extending credit to customers or borrowers.

Credit Risk refers to the uncertainty linked with potential losses stemming from the decline or worthlessness of assets due to changes in the financial condition of the borrowers

Credit appraisal process denotes the systematic evaluation of various risks that could impact the repayment of a loan.

Credit Terms pertain to the specified conditions and agreements governing the lending and borrowing of funds.

Collection policies encompass the established strategies and procedures governing the retrieval of owed funds.

Microfinance signifies a specialized banking service aimed at serving unemployed or low-income individuals or groups who lack access to conventional financial services.

Microfinance Bank refers to a company authorized by the Central Bank of Zambia (CBZ) to provide microfinance services, including savings, loans, domestic funds transfer, and other related financial services.

Risk embodies the potential of an unforeseen event to occur, introducing unpredictability into cash flow dynamics

Performing Loan characterizes a loan in which both interest and principal payments are not more than 90 days overdue. Additionally, it incorporates instances where less than 90 days' worth of interest has been restructured, capitalized, or deferred by mutual agreement, with further timely payments expected.

Non-performing Loan designates a borrowed sum for which the debtor has failed to make scheduled payments for a minimum of 90 days. When a loan is classified as non-performing, the likelihood of it being fully repaid is considered substantially diminished.

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

This chapter focuses on examining literature relevant to the study, covering theoretical perspectives, factors influencing loan performance in microfinance, empirical evidence, and the conceptual framework. The chapter provides contributions of various authors regarding credit risk management practices and loan performance. The final section summarizes the literature, highlighting gaps in empirical studies conducted, paving the way for further research.

2.1 Empirical Review

2.2 Credit risk management practices

Credit management strategies are a sophisticated blend of tactics designed to guarantee the timely accumulation of loans granted to customers while cultivating their trust and dependence on the company (Myers and Berkley, 2016). A key component of this strategy is the careful review of a client's account to determine their ability to make timely payments. Setting up an appropriate credit timetable is therefore essential in order to provide consumers enough time to fully benefit from the credit without burdening the financial institution (Myers and Berkley, 2016).

The elements influencing a client encompass numerous dimensions, including personal, cultural, social, and economic components (Ouma, 1996). Personal characteristics include things like self-concept, personality, age, and occupation and money. For instance, older families in settled life cycle stages might provide lower default risks due to their established assets, facilitating easier collateralization (Ouma, 1996). Under social variables, lifestyles and reference groups indirectly effect a client's trustworthiness, influencing their borrowing behavior within microfinance institutions (MFIs) (Ouma, 1996). When it comes to credit management, factors go beyond characteristics of the client to include more general financial factors. Cash flow analysis, vital for establishing a borrower's repayment capabilities, entails complicated assessments of present statements and future forecasts (Anthony, 2006). Furthermore, analyzing financial ratios makes it easier to assess how well a borrower would be able to pay back new loans as

well as existing ones (Orlando, 1990).behavior among microfinance institutions (MFIs) (Ouma, 1996).

Sindani (2016) enumerates character, capacity, commitment, and collateral as crucial credit management strategies. Microfinance firms can maintain their financial integrity and make wise lending judgments by adhering to these protocols. According to Coyle (2017), credit risk recognition, appraisal, follow-ups, and regulation are critical for identifying loan risks and optimizing loan performance through comprehensive client assessments (Nawaz et al, 2018).

In the context of credit risk management, collateral is important since it is an asset that is pledged as security against debt. It varies from hard assets like real estate and equipment to accounts receivable or inventories, acting as an alternative repayment source (Lawrence & Charles, 1995). Additionally, the borrower's capital investment in the business, together external variables effecting the borrower's vulnerability, forms crucial elements in determining creditworthiness (Weston & Eugene, 1966).

Sindani (2016) enumerates character, capacity, commitment, and collateral as crucial credit management strategies. Microfinance firms can maintain their financial integrity and make wise lending judgments by adhering to these protocols. According to (Coyle 2017), credit risk recognition, appraisal, follow-ups, and regulation are critical for identifying loan risks and optimizing loan performance through comprehensive client assessments (Nawaz et al, 2018).Character, capacity, commitment, and collateral are listed by (Sindani 2016) as essential credit management techniques. By following these procedures, microfinance companies can preserve their financial integrity and make prudent loan decisions. In order to detect risks associated with loans and maximize loan performance through in-depth client assessments, (Coyle 2017) highlights the significance of credit risk recognition, appraisal, follow-ups, and regulation (Nawaz et al, 2018).

According to (Myers & Berkley 2016), credit management strategies are the skillful blending of credit policy elements to ensure the accumulation of advances granted to clients and to uphold their faith and dependence on the company. Examining the client's

account is the main component. It verifies the client's ability to make timely payments. Setting a credit time schedule is the next factor. Therefore, the financial institution ought to allow enough time for the consumer to fully profit from the credit.

2.3 Credit Management Practices that have a greater effect on loan performance.

The role of credit risk management in microfinance is expected to have a significant impact on loan performance (Pykhtin, 2005). The corporate finance literature has linked the importance of risk management with the shareholder value maximization hypothesis, implying that microfinance will pursue risk management policies if doing so increases shareholder value (Ali and Luft, 2002). That is to say, efficient credit risk management in both banking and non-banking firms is expected to increase the value of the firm and shareholder wealth.

A number of factors, including the appropriate use of the best risk management documents, staff caliber, credit culture, committed top management bodies, an adequate training program, an appropriate organizational structure, a high enough level of internal control, and the performance of the intermediation function, affect how effective the credit risk management process is. This suggests that credit risk management involves a variety of tasks, including creating and putting into practice an appropriate credit risk strategy, policy, and procedure, accurately identifying risks, selecting the best process for granting credit, administering credit, monitoring and reporting credit, deciding how frequently to review credit policy and procedure, and clearly defining authority and responsibility. Additionally, he stated that credit performance is developed by creating an environment that is appropriate for credit risk, a level of credit limit that is acceptable, the best procedure for granting credit, appropriate monitoring and controlling credit risk, and maximizing risk return for a bank.

Credit terms, credit strategies, and credit measures are all part of credit administration agreements. This policy serves as a norm by which all personnel entrusted with the task of issuing credit are expected to conduct themselves, and it also serves as a baseline for comparing performance to predetermined standards. All of a business's efforts to guarantee that clients pay their invoices according to the specified terms and conditions

are included in the Credit Management function. The goal of effective credit management is to avoid late or nonpayment. Achieving this is crucial for any organization since it reinforces the company's liquidity or financial position. Significant progress has been made in the theoretical understanding of how credit markets function in recent decades.

These achievements have evolved from a framework that emphasizes the difficulties of imperfect knowledge and imperfect enforcement (Hoff and Stiglitz, 1990). They made the point that lenders and borrowers can have varying access to information about a project's risk, which could lead to differing assessments of the risk. Asymmetric information is evident in the credit market, where the borrower is aware of the projected return and risk of his project while the lender is simply aware of the expected return and risk of the typical project in the economy.

2.4 Challenges MFIs have faced in implementing Credit Risk Management Practices.

Lending institutions are faced with four major problems in the course of undertaking credit activity:

- i To ascertain what kind of risk the potential borrower is (adverse selection),
- ii To make sure the borrower will utilize the loan properly once made, so that he will be able to repay it (moral hazard).
- iii To learn how the project really did in case the borrower declares his inability to repay and d) To find methods to force the borrower to repay the loan if the borrower is reluctant to do so (enforcement) (Ghatak & Guinnane, 2017).

These issues with incomplete information and enforcement cause the credit market to become inefficient, which ultimately results in default. If they want to reduce credit risk, a thorough credit evaluation that considers the borrowers' character, collateral, capacity, capital, and condition—also known as the "5Cs" in the banking industry—should be carried out. (Mensah 1999) emphasized the significance of credit management in the following ways: Because effective credit management has a significant impact on the success or failure of financial organizations, the credit management process merits

particular attention. Knowledge of an MFI's credit risk management procedure is a prescient sign of how well a bank's loan portfolio is performing.

Therefore, well-developed credit policies and procedures, robust portfolio management, efficient credit controls, and—most importantly—well-trained personnel who are qualified to administer the system are the essential components of effective credit management (Tenishu, 2014). For financial institutions to continue operating efficiently and providing credit to promoters, they need to uphold fundamental credit standards. These requirements include the officer in charge having a complete understanding of the borrowers' business, a suitable debt-to-equity ratio, and the investment project's marketability and viability.

2.5 STRENGTHS MFIS POSSESS IN IMPLEMENTING CREDIT RISK MANAGEMENT PRACTICES

The availability and provision of funding has a significant impact on microfinance policy. According to (Abimiku 2000), the banking industry's primary focus is money, which mobilizes the factors of production—land, labor, and entrepreneurs—into activity. The establishment and supervision of a prudent lending policy by the board of directors is a positive reflection on the board and management. Management is better equipped to manage loan risks, guarantee the stability and soundness of the institution, and carry out supervision duties when a board lays out its expectations in writing.

It is described as the policies and procedures established by upper management that supervise the company's credit department and look into how well credit advantages are being added while adhering to established protocols (Franklin, 2010). It is essentially a strategically placed set of guidelines designed to reduce costs associated with credit while increasing benefits from it. The government's promotion of microfinance as a means of facilitating poor people's access to loans and savings services is currently being pushed as a crucial development tool to advance both economic development and the eradication of poverty (Shreiner, 2005)..

The possibility that real loan documentation and underwriting procedures will meet the board's expectations is increased by an efficient and current loan policy. A well-crafted policy also aids examiners in prioritizing and allocating examination time, helps them

identify high-risk areas, and outlines management's system of controls in clear and comprehensive terms. Credit terms, credit strategies, and credit measures are all part of credit administration agreements. This policy serves as a norm by which all personnel entrusted with the task of issuing credit are expected to conduct themselves, and it also serves as a baseline for comparing performance to predetermined standards.

All of a business's efforts to guarantee that clients pay their invoices according to the specified terms and conditions are included in the Credit Management function. The goal of effective credit management is to avoid late or nonpayment. Achieving the correct outcome is crucial for every business as it impacts the financial and liquidity situation of the organization. Significant progress has been made in the theoretical understanding of how credit markets function in recent decades. These achievements have evolved from a framework that emphasizes the difficulties of imperfect knowledge and imperfect enforcement (Hoff and Stiglitz, 1990). They made the point that lenders and borrowers can have varying access to information about a project's risk, which could lead to differing assessments of the risk.

What is clearly observed in credit market is asymmetric information where the borrower knows the expected return and risk of his project, whereas the lender knows only the expected return and risk of the average project in the economy

2.5.1 Theoretical Review

In this section, various theories established by researchers, authors, and scholars pertinent to financial innovations are explored. The study reviews agency theory, transaction cost theory, portfolio theory, and capital asset pricing theory, reviewing their relevance and contributions to the field.

2.5.1.1 Agency theory

The Agency Theory, a fundamental framework in economics and organizational behavior, analyzes the dynamics between principals and agents within delegative relationships. In this model, the principal entrusts tasks or decision-making authority to the agent, establishing a principal-agent relationship (Eisenhardt, 1989). These relationships are pervasive in various settings, such as corporations, financial institutions, or partnerships.

Central to the theory are the conflicts that arise due to differing objectives, risk preferences, and information imbalances between principals and agents (Jensen & Meckling, 1976). Information asymmetry often characterizes these relationships, with agents possessing superior or more accurate information about their actions or the situation, leading to opacity for principals. Conflicts of interest are common, wherein agents might prioritize their own interests over the principal's goals (Fama & Jensen, 1983). Additionally, divergent risk preferences can create tension in decision-making processes.

To address these principal-agent problems, several mitigation strategies exist. Principals employ monitoring and control mechanisms, such as performance evaluations and audits, to oversee agent actions (Eisenhardt, 1985). Contractual arrangements are crucial, aiming to align incentives, specify duties, and counter information asymmetry (Gibbons, 2005). Effective incentive structures are pivotal, incentivizing agents to act in ways that serve the principal's objectives, thereby aligning their goals with the organization's interests (Holmström, 1979).

The Agency Theory's significance lies in its utility for understanding how organizations manage these intricate relationships and navigate conflicts to optimize efficiency and effectiveness. It serves as a cornerstone in examining corporate governance mechanisms and evaluating their efficacy in mitigating agency problems (Jensen, 1993). This framework remains pivotal in economics, management, and finance, shaping decision-making processes and governance structures within various institutions and industries.

2.5.1.2 Transactional cost theory

Transaction costs, as elucidated by Williamson (2000), encapsulate the expenses entailed in the division of work and the exchange of goods or services across technologically separable interfaces. These transactions are characterized by various defining variables, notably specificity, uncertainty, and frequency, delineating the nature of assets or services involved in the transaction (Williamson, 1981). Specifically, the level

of specificity in human capital, assets, and location significantly impacts transaction dynamics (Reddy, 2002).

Human capital specificity pertains to the uniqueness and expertise of managers involved in executing a transaction. Asset specificity, observed at both the loan and real estate levels, determines the extent to which an asset or service holds value within the context of a particular transaction (Reddy, 2002). Additionally, site specificity, relating to the location of collateral, plays a pivotal role in transaction considerations.

The degree of specificity in goods and services is crucial in discerning transaction characteristics. High specificity arises when the supply of goods or services is limited, unique, and lacks comparability, thereby rendering alternatives scarce. In such scenarios, the threat of contract breach can be perceived as untrustworthy, as there's a lack of viable alternatives, resulting in a potential hold-up situation (Williamson, 1985).

Conversely, low specificity prevails in situations where a range of homogeneous goods or services is available, ensuring a secured supply. When goods or services are comparable, and competition exists, pricing problems are mitigated. Moreover, high levels of competition can serve as a catalyst for motivation and quality enhancement within transactions (Yousaiken, 2001).

These distinctions in specificity and the ensuing implications for transaction dynamics shed light on the intricacies involved in evaluating transaction costs. They underscore the importance of understanding asset, human capital, and site specificity in gauging transaction complexities, potential risks, and the nature of relationships between involved parties.

2.5.1.3 Portfolio theory

The Portfolio Theory, originating from the 1950s to the early 1970s, marked a significant leap in the mathematical modeling of finance, heralded for its conceptual advancements. However, its journey has been punctuated by numerous theoretical and practical criticisms over time. One such critique, highlighted by (Michael and Sproul 1998), revolves around the deviation of financial returns from a Gaussian or symmetric

distribution, underscoring the inadequacy of assuming a specific distribution model for returns and the correlations between asset classes.

Technically, Portfolio Theory models asset returns following a normally distributed or elliptically distributed random variable, defining risk as the standard deviation of return. It conceptualizes a portfolio as a weighted combination of assets, aiming to minimize the total variance of the portfolio return by amalgamating assets with less-than-perfectly positively correlated returns (Markowitz, 1952). Moreover, the theory operates under the assumption of investor rationality and market efficiency, as articulated by Sharpe (1964).

The crux of Portfolio Theory lies in attempting to maximize the expected return of a portfolio for a specified portfolio risk or, conversely, minimize risk for a given expected return level. Achieving this involves tactically selecting the proportions of various assets within the portfolio. Despite its widespread utilization in the financial industry and the recognition of its creators with a Nobel Prize, Portfolio Theory faces formidable challenges in contemporary times, notably from disciplines like behavioral economics (Markowitz, 1952).

The growing body of criticism from fields such as behavioral economics casts doubt on the fundamental principles of Portfolio Theory. As behavioral economics sheds light on human behavioral patterns and deviations from traditional rationality assumptions, it calls into question the efficacy and applicability of Portfolio Theory in capturing real-world investment dynamics.

This ongoing discourse emphasizes the evolving landscape of financial theory, where the once-celebrated Portfolio Theory faces reevaluation and critique in light of contemporary insights and empirical observations, challenging its foundational assumptions and applications.

2.5.1.4 Capital asset pricing model.

William Sharpe's groundbreaking publication of the Capital Asset Pricing Model (CAPM) in 1964 marked a pivotal moment in financial theory. This work was complemented by parallel efforts from (Treyner 1961) & (Lintner 1965), extending Harry Markowitz's

portfolio theory by introducing the concepts of systematic and specific risk. The CAPM framework earned Sharpe the 1990 Nobel Prize in Economics, shared with Markowitz and Merton Miller, highlighting its significance in financial academia (Sharpe, 1964).

In the CAPM paradigm, (Tobin's 1958) concept of the super-efficient portfolio points towards the market portfolio in an idealized setting. In this simplified world, all investors would hold the market portfolio, adjusting it with positions in the risk-free asset to achieve desired risk levels. CAPM breaks down a portfolio's risk into systematic and specific components (Lintner, 1965).

Systematic risk, or market risk, emanates from holding the market portfolio itself. As the market fluctuates, each asset is influenced to varying degrees. Any asset affected by these general market movements embodies systematic risk. On the other hand, specific risk is intrinsic to individual assets, representing returns unrelated to broader market shifts (Lintner, 1965).

Despite attempts to diversify, complete risk elimination remains unattainable for investors. Consequently, investors require a rate of return that compensates for assuming risk. CAPM aids in quantifying investment risk and predicting anticipated returns. Examining the formula and scrutinizing evidence both supporting and challenging CAPM's accuracy is crucial for investors seeking guidance (Sharpe, 1964).

The model's core premise revolves around segregating an asset's risk into two distinct categories. Unsystematic or company-specific risk, according to CAPM, should yield zero long-term average returns. Conversely, systematic risk stems from general economic uncertainties. CAPM posits that asset returns should mirror the yield of a risk-free bond, augmented by a premium relative to the asset's systematic risk (Markowitz, 1952).

The CAPM's treatment of risk refines Markowitz's earlier work by delineating unsystematic risk linked to company-specific factors like managerial decisions or product lines from systematic risk arising due to broader economic fluctuations. Unsystematic risk manifests uniquely within each company, influenced by diverse assets, ideas, and personnel that collectively impact productivity variations (Markowitz, 1952).

2.6 Conceptual Framework.

This conceptual model's objective is to help the researcher relate the suggested relationships. The study's independent variables include credit risk management techniques, practices that have a stronger impact on loan performance, obstacles MFIs have had to overcome in putting credit risk management policies into practice, and advantages MFIs have over other credit risk management strategies. The loan performance as determined by the loan performance index is the dependent variable. The macroeconomic climate as expressed in terms of inflation serves as the moderating variable. It is predicted that when micro financial institutions effectively manage their credit risks, loans will perform well and generate more revenue for an enhanced loan advance cycle.



Figure 2.1: The Conceptual Framework.

Source: (Own Conceptualization, 2023)

TABLE 2.1: Operationalization of variables

VARIABLES	SOURCE
Independent variable: Credit Risk Management Practices	
Analysis of client's business plan	Alfred (2011), Emenike & Bashabe (2018), Mersland & Strøm (2009)
Consideration of loan applicants' capacity and long-term planning	Kothari & Chatterjee (2015), Johnson (2010)
Consideration of economic and political conditions	Berger & Udell (1998), Hall et al. (2012)
Relevance of a business's net worth	Opposes Myers and Berkley (2016), Cole (1998)
Assessment of past repayment records	Gunawan & Hossain (2014), Karlan & Zinman (2010)
Evaluation of loan applicants' character traits	Saravia (2013), Lusardi & Tufano (2015)
Meticulous screening and due diligence	Yadav & Varshney (2016), Ledgerwood (2006)
Dependent Variable	
Loan performance of Micro financial	
How often Individuals default on their loan	Florence B. M. et el 2020), Lawrence & Charles, (1995).
We look at the credit trustworthiness of loan applicants	Ghatak & Guinnane, (2017), Nawaz et al, (2018).

Source: Primary data

2.7 Conclusion

Chapter Two provides an in-depth exploration of literature review to the study, covering theoretical perspectives, credit risk management practices, and loan performance factors in microfinance. Theoretical insights encompass Agency Theory, delineating conflicts in principal-agent relationships and strategies to address them, Transaction Cost Theory examining specificity in transactions, Portfolio Theory's challenges amidst criticisms and Capital Asset Pricing Theory (CAPM) in evaluating systematic and specific risks. Additionally, credit risk management practices are outlined, emphasizing client attributes' influence, financial aspects, such as cash flow analysis and collateralization, and fundamental practices for maintaining microfinance firm integrity. This comprehensive review sets the stage for understanding the intricacies of microfinance, identifying gaps for further empirical research

3.0 CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter provides an in-depth exploration of diverse methodologies essential for data gathering and analysis important to the research at hand. Encompassing critical areas such as the study's location, research design, sampling techniques and sample size determination, types of data, data collection methodologies, and their subsequent management, it thoroughly covers the research settings, design matrix, pragmatic population considerations, as well as data collection and analysis processes.

3.2 Research Design

This research employs a mixed-method study, integrating both quantitative and qualitative approaches within a singular investigation. Quantitative study is adopted because of empirical investigation we conduct in this phenomenon. Data for this section is acquired through the administering of questionnaires to be answered by firms and their employees. Data obtained from this survey was used to test the hypothesis by SPSS software. While the descriptive research design is to offer a comprehensive depiction of the current state of affairs. (Mugenda & Mugenda 2003) define descriptive research as a methodical data collection process aimed at testing hypotheses or addressing inquiries concerning the present status of the study subjects.

3.2.1 Experimental design

The traditional method for quantitative research involves conducting experiments to examine how a concept, practice, or procedure impacts a specific outcome, known as the dependent variable. This approach aims to establish a potential cause-and-effect relationship between the independent and dependent variables. To achieve this, researchers strive to manage and regulate all variables, except the independent one, that might affect the final outcome.

3.2.2 Correlation design

In correlation research design, the focus lies in understanding relationships between variables rather than altering them. This approach offers a chance to predict scores and

elucidate the connections among these variables. Researchers employ correlation statistical tests to quantify the extent of association or relationship between two or more variables or sets of scores, describing and measuring the degree of their correlation.

3.2.3 Survey design

Survey research stands as a prominent framework within education. It entails employing specific strategies within quantitative research, wherein researchers administer surveys to a sample or the entire population to depict the attitudes, emotions, behaviors, or characteristics prevalent within that population.

3.2.4 Grounded theory

This research design allows for the creation of a brand theory that emerges directly from the qualitative data collected. Grounded theory methodology involves developing theories based on the data itself, rooted deeply in the information gathered. It's particularly useful when a researcher aims to establish a comprehensive theory or explanation for a specific process.

3.2.5 Ethnographic theory

"Ethnographic" refers to documenting communities or social groups. This qualitative research approach involves describing, analyzing, and interpreting the collective behavior, beliefs, language, and evolving patterns within a culture-sharing group over time.

3.2.6 Narrative research design.

In this research design, researchers describe the lives of individuals, collect and tell stories about people's lives, and write narratives of individual experiences.

3.2.7 Mixed method research design

This research design collects analyses and mixes both quantitative and qualitative methods in a single study or a series of studies to understand a research problem (Creswell and Plano Clark, 2011). An understanding on both qualitative and quantitative research designs is key when using this research design.

3.2.8 Action research design

This research designs when compared to the others is the most applied practical design. Action researchers explore a practical problem with an aim toward developing a solution to a problem. Similar to mixed method research, action research uses data collection based on either quantitative or qualitative methods or both. However, it differs in that action research addresses a specific, practical issue to obtain solutions to a problem.

3.2.9 Selected research design and justification.

The study employed a mixed method research design which employs both qualitative and quantitative research designs.

3.3 Study Population.

A population, as defined by (Saunders 2003), is a collective of individuals, entities, events, objects, or items from which samples are extracted for the purpose of measurement. It represents the entire group from which the researcher aims to draw conclusions and make inferences. The study employed a census approach, encompassing all 27 non-deposit-taking financial institutions and 7 deposit-taking financial institutions in the investigation.

3.4 Sample Size

The sample for this study consisted of 33 respondents, drawn from the credit risk officers of head offices of the Micro financial institutions.

3.5 Sampling Technique

The sample size was determined following the methodology outlined by Tao Yemanis (1964). From the entire population, a total of 33 respondents were chosen, distributed evenly across each defined category within the population. We arrived at the sample size by selecting the total population size of 33 registered micro financial institutions registered with BOZ of which 27 are non-deposit taking and 7 are non-deposit taking financial institutions.

3.6 Data Collection Instrument

The collection of primary data involved the use of structured questionnaires containing closed-ended inquiries, administered through Google Forms using an email-based strategy. Complementing this quantitative approach, qualitative data was gathered

through structured interviews conducted either virtually or in-person, based on the interviewee's preference. Coordination for these interviews was arranged through email correspondence, phone calls, and physical meetings as necessary.

3.6.1 Validity and Reliability

The questionnaire's validity was confirmed by providing it to the supervisor and other research experts to identify and resolve any uncertainties. Expert judgment bolstered the questionnaire's validity further. Addressing reliability concerns involved ensuring consistent responses from respondents. To achieve reliability, the researcher employed either a pretest or test-retest method. Comparing responses between the pretest and the main study was crucial to ascertain similarity. Consistency between these sets of results indicated the reliability of the data.

3.7 Data Analysis

The data gathered from the annual reports of the financial institutions underwent analysis through multiple regression analysis, which examines the relationship between one dependent variable and several independent variables. The regression results were generated using the Statistical Package for Social Sciences (SPSS), specifically version

3.8 Ethical Consideration

Kombo and Tromp (2013) stress the ethical responsibility of researchers to treat individuals with fairness and respect, refraining from causing harm or using research findings in a detrimental manner. In contemporary academia, most universities adhere to research ethics codes and have established Research Ethics Committees to oversee ethical considerations.

It is plausible that this research project necessitated formal ethical approval or adherence to a prescribed protocol to ensure alignment with ethical standards. This preemptive consideration is essential to affirm that the research is conducted in an ethically sound manner. Addressing ethical issues throughout the various stages of the research process was rooted in the fundamental principle of doing no harm.

Right to privacy: There is no obligation on anyone to assist this research.

Confidentiality Agreements: A principle of all academic research, including that done by students like this one, is that the research is published, or otherwise made available to the public, so that others can learn from and criticize the work. This research might involve organizationally or commercially confidential information being made public as such the researcher signed a confidentiality agreement.

Informed Consent, Freely Given: Obtaining informed consent stands as a fundamental element in research ethics. No individual should partake as a participant or information source in a research endeavor unless they have willingly agreed, fully comprehending the nature of their involvement, the research's objectives, and the use of their contribution. Additionally, it's imperative to ensure participants understand their right to withdraw from the study or request the removal of their provided information at any point, at least until the data has been processed and documented.

CHAPTER FOUR: PRESENTATION AND ANALYSIS OF RESULTS

4.0 Introduction

This chapter provides a comprehensive data analysis and presentation based on the data that was gathered with the aim of understanding how Credit Risk Management affect Loan Performance in most Micro Finance Institutions in Zambia.

4.1 Response rate

The total population size was 33 MFIs, of which 26 were non deposit taking and 7 were deposit raking. The research used a census were the entire population was studied. A response rate of 50% is considered suitable for the purpose of data analysis in research whereas 60% and above is considered good. The study's response rate was high, out of 33 questionnaires that were distributed to 33 microfinance institutions, 33 were answered representing a response rate of 100% and out of the 12 interview requests made 10 were interviewed representing a response rate of 83.3%.

4.2. Demographic Variables

4.2.1 Gender

The following figure shows that the distribution of gender of individuals who participated in the study. The chart shows that male slightly dominated the study representing 51.5% of the total sample. Female represented 48.5% of the total respondents. This shows that the study was gender balanced.

GENDER

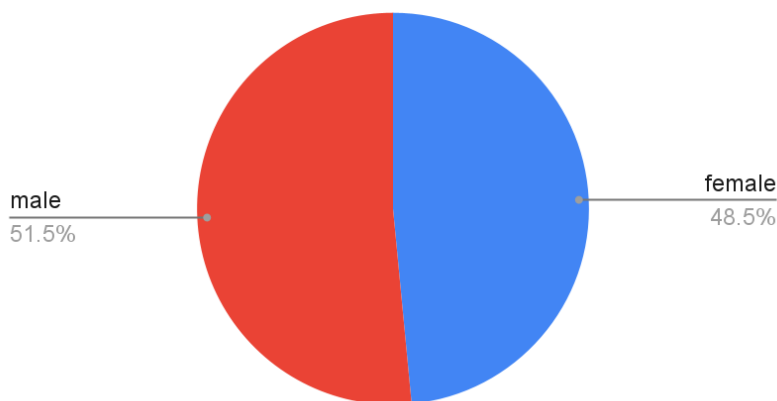


Figure 4.1: Gender

Source: Author's Illustrations (2023)

4.2.2 Educational background

An Individual was asked to indicate their highest level of education. Their responses were summarized and have been presented below.

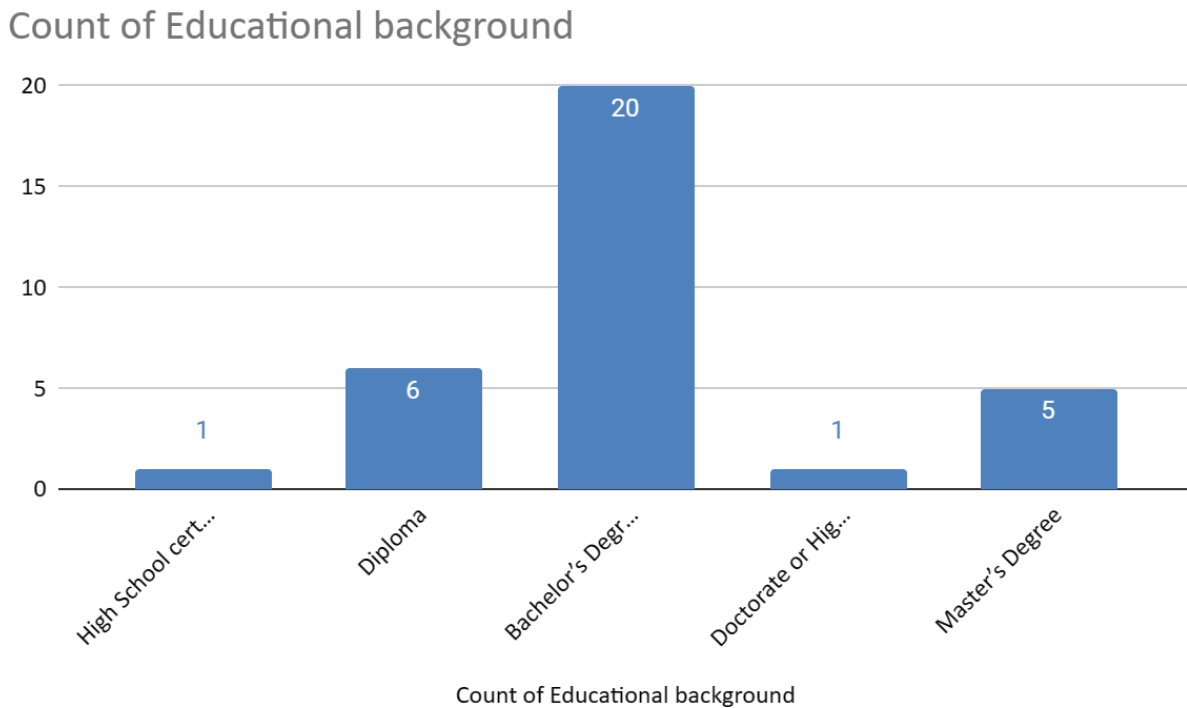


Figure 4.2: Education Background

Source: Author's Computations (2023)

The chart above shows that the highest category was Bachelor's Degree with 20 individuals. This was followed by Diploma holders were 6 respondents. Other categories were high school certificate 1, Master's Degree 5 and PhD 1. This information shows that the majority of the respondents at least possessed tertiary education and were knowledgeable enough participate in the study.

4.2.3 Work Experience

Respondents showed diversity in the work experience in the micro finance institutions. During the study, the majority of the respondents 1 to 5 years that represented 48.5%, followed by 6 to 10 years, 24% and those who worked for more than 10 years were 4. The minority had less than 1 year of work experience. This shows that the study had respondents who had enough work experience in the credit department which means they have experience long enough to participate in the study.

Count of How many years' experience do you have the credit department?

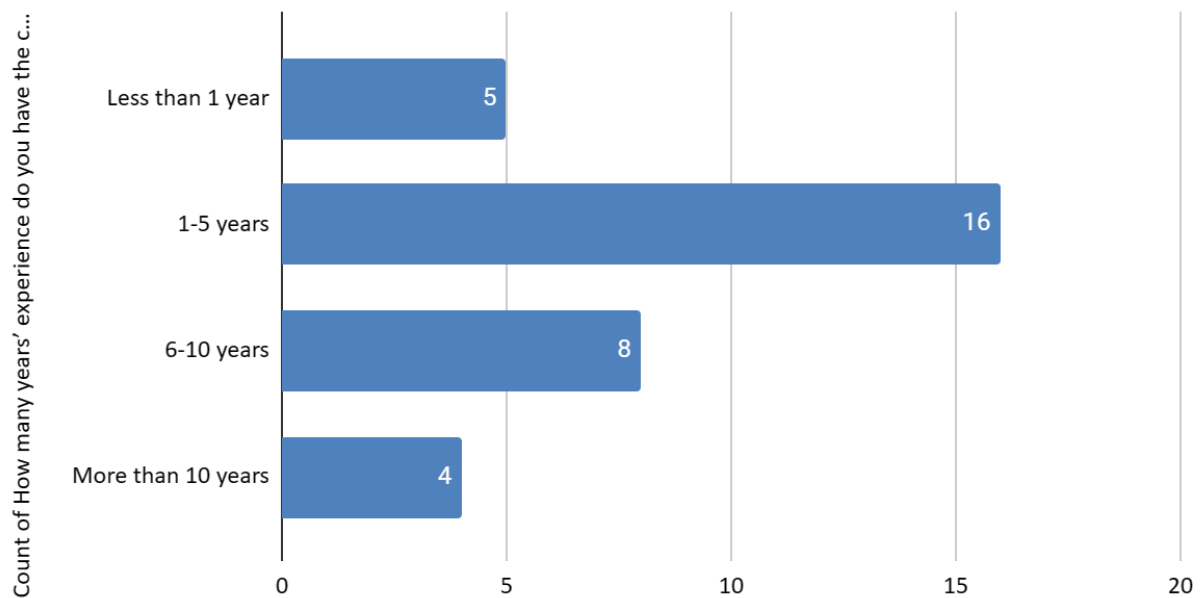


Figure 1.3: Work Experience

Source: Author's Computations (2023)

4.3 Reliability Test

Reliability is the measure of internal consistency of the constructs in the study. A construct is reliable if the Alpha (α) value is greater than .70 (Hair et al., 2013). Construct reliability

was assessed using Cronbach's Alpha. The results revealed that the Credit Risk Management scale with ten items ($\alpha = .938$) were found reliable. Reliability results are summarized in table below.

Table 4.1: Reliability Statistics

Reliability Statistics			
Cronbach's Alpha	Cronbach's Alpha Based on		N of Items
	Standardized Items		
.937	.938		10

4.4 RESPONSES ON QUESTIONS.

4.4.1 Credit Risk Management Practices Implemented by MFIs in Zambia

4.4.1.1 Business Plan Evaluation of Micro Financial Institutions.

As revealed in literature, some Micro Finance leading institutions review and evaluate the business plan of the borrower in order to determine the ability of the borrower to repay the loan

Table 4.1: Business Plan Evaluation in Micro Financial Institutions.

To what extent do microfinance institutions evaluate business plans?

Responses	Frequency	Percent
Very Little Extent	2	6.1
Little Extent	7	21.2
No Extent	4	12.1
Large Extent	15	45.5
Very Large Extent	5	15.2
Total	33	100.0

Source: Author's Computations (2023)

For most cases a sound business plan and the ability of the lender to scrutinize the plan gives a lender the ability to hedge against default risks. According to the study, the majority of respondents indicated that their MFI analyze their client's business plan to identify risks. Only 27.3% of the respondents indicated that do not evaluate business plans before extending loans to avoid risks and improve loan performance. This analysis shows that most MFIs with 60.7% in Zambia scrutinize the business plan to identify risks.

4.4.2 Analysis of Professionalism in Business

Professionalism in business is another strong indicator for risks. Usually businesses with a relatively higher professionalism and organization tend to have lower default rate

Table 4.2: Analysis of Professionalism in Business

To what extent is professionalism in business analyzed before giving a loan?

Responses	Frequency	Percent
Very Little Extent	1	2.9
Little Extent	1	2.9
No Extent	11	32.4
Large Extent	11	32.4
Very Large Extent	9	29.4
Total	33	100.0

Source: Author's Computations (2023)

The majority of the respondents indicated that they apply professionalism to a large Extent and Very Large Extent in the respective business with 61.8%. A very small percentage of 5.8% indicates that they apply professionalism to a very small extent while 32.4% were neutral with the statement.

4.4.3 Analysis of Capacity Loan Applicants

The capacity of loan applicants refers to their ability to repay a loan based on their available cash flow. The following shows a responses of respondents when they were asked to indicate the extent to which they analyze the capacity of loan applicants before giving the loan.

Table 4.4: Analysis of Capacity of the Loan Applicants to pay

To what extent is the capacity of loan applicants to pay analyzed?

Responses	Frequency	Percent
Very Little Extent	2	5.9
Little Extent	2	5.9
No Extent	10	29.4
Large Extent	10	29.4
Very Large Extent	9	27.3
Total	33	100.0

Source: Author's Computations (2023)

When evaluating this element of credit, lenders consider whether the borrower can cover new loan payments on top of their existing debt service. The study assessed the capacity of the loan applicants to repay the loan and found that only 11.8% indicated that their MFI consider the capacity of loan applicants by little to very little extent while 29.4% were neutral and 56.7% consider capacity of loan applicants to a large extent and to a very large extent. This means more about half of micro financial institutions in Zambia consider capacity of loan applicants.

4.4.4 Planning Horizon of every loan applicant

Furthermore, the study asked the respondents whether they look at the long planning horizon of every applicant. The results showed that the majority of the MFI agreed with the statement that they consider long term planning horizon of every loan applicant.

Table 4.5: Planning Horizon of every loan applicant

To what extent is the planning horizon of every loan applicant considered?

Responses	Frequency	Percent
Very Little Extent	3	8.8
Little Extent	3	8.8

No Extent	10	29.4
Large Extent	9	26.5
Very Large Extent	8	25.5
Total	33	100.0

Source: Author's Computations (2023)

A combined percentage 52% of respondents indicated that they consider Horizon of every loan applicant by both large extent and very large extent. However, 17.6% indicated that they considered it to a little and very little extent while an additional 29.4% remained neutral on this matter. This entails that half of the MFI institutions consider long term horizon planning of every loan applicant.

4.4.5 Analysis of Economic and Political Conditions

The survey conducted on perspectives regarding the consideration of economic and political conditions before project financing revealed varied opinions among respondents and is represented below.

Table 4.6: Analysis of Economic and Political Conditions

To what extent are economic and political conditions considered in loan evaluation?

Responses	Frequency	Percent
Very Little Extent	4	11.8
Little Extent	4	11.8
No Extent	10	29.4
Large Extent	8	23.5
Very Large Extent	7	24.8
Total	34	100.0

Source: Author's Computations (2023)

A combined percentage 48.3%, indicated that they consider economic and political conditions before financing projects by a large extent and a very large extent, 23.6% indicated that they consider economic and political conditions before financing projects

by a little extent and a very little extent expressed disagreement while an additional 29.4% remained neutral on this matter, highlighting a diverse range of viewpoints regarding the assessment of economic and political factors prior to project funding.

4.4.6 Analysis of Net Worth of the business

The survey on considering a business's net worth for decision-making revealed a balanced distribution of opinions among respondents

Table 4.7: Analysis of Net Worth of the business

To what extent is the analysis of the net worth of the business considered in loan evaluation?

Responses	Frequency	Percent
Very Little Extent	5	14.7
Little Extent	5	14.7
No Extent	10	29.4
Large Extent	7	20.6
Very Large Extent	7	20.6
Total	34	100.0

Source: Author's Computations (2023)

Approximately 29.4% indicated that they consider net worth of the business by little to very little extent. While 41.2% indicated that they consider net worth of the business on a large to very a very large extent agreement. Notably, 29.4% of respondents remained neutral, this indicates that a larger number of MFIs in consider a business net worth before extending finance to a loan applicant.

4.4.7 Analysis of Past track record

The survey on considering the past track record for decision-making revealed a balanced distribution of opinions among respondents which has been presented below

Table 4.3: Analysis of Past track record

To what extent is the analysis of the past track record considered?

Responses	Frequency	Percent
Very Little Extent	6	17.6
Little Extent	6	17.6
No Extent	10	29.4
Large Extent	6	17.6
Very Large Extent	6	17.6
Total	33	100.0

Source: Author's Computations (2023)

The table above illustrates diverse perspectives regarding the consideration of past repayment track records, with 35.2% indicated that they consider net worth of the business on a large to and a very large extent agreement. A significant portion, 29.4% remain neutral or unsure about the importance of past repayment history, indicating a notable level of uncertainty or indecision among respondents regarding its significance in decision-making processes. 35.2% indicated that they consider net worth from a large extent and a very large extent. This entails that there is an equal distribution between the MFIs that consider Analysis of past repayment track records and those that do not analyze past records.

4.4.8 Analysis of Character of loan applicants

The table below represents respondents' viewpoints on the consideration of loan applicants' character, segmented by levels of agreement or disagreement with this practice. In the responses, categorized as very Little Extent, Little Extent Neutral, Large Extent and very Large Extent distinct patterns emerge.

Table 4.9: Analysis of Character of loan applicants

To what extent is the analysis of the character of loan applicants considered?

Responses	Frequency	Percent
Very Little Extent	7	20.6
Little Extent	7	20.6

No Extent	10	29.4
Large Extent	5	14.7
Very Large Extent	5	14.7
Total	33	100.0

Source: Author's Computations (2023)

Notably, 41.2% of respondents indicate that MFIs consider analysis of character on a little extent and a very little extent. Conversely, 29.4% consider analysis of character of loan applicant from a large extent and a very large extent. Meanwhile, 29.4% of respondents hold a neutral stance or express uncertainty about the relevance of character assessment in the evaluation process, suggesting a notable level of indecision or ambiguity among participants regarding the significance of character in assessing loan applicants.

4.4.9 Analysis of Monitoring of Projects

The table below represents respondents' viewpoints on the consideration analysis of monitoring of projects. In the responses, categorized as very Little Extent, Little Extent Neutral, Large Extent and very Large Extent distinct patterns emerge.

Table 4.10: Analysis of Monitoring of Projects

To what extent is the analysis of monitoring of projects considered?

Responses	Frequency	Percent
Very Little Extent	9	26.5
Little Extent	9	26.5
No Extent	10	29.4
Large Extent	3	8.8
Very Large Extent	3	8.8
Total	33	100.0

Source: Author's Computations (2023)

The provided data reflects respondents' perspectives on the practice of periodically monitoring projects financed. Notably, 53% of respondents indicate consider that they consider the idea of periodically monitoring financed projects from a little extent and a very little extent conversely 17.6% indicate that they consider the idea of periodically monitoring financed projects on a large extent and a very large extent. Conversely express that they consider the idea of periodically monitoring financed projects on a large extent and a very large extent. Meanwhile, 29.4% of respondents remain neutral or uncertain about the significance of periodically monitoring financed projects, showcasing a notable level of indecision or ambiguity among participants regarding the importance of such monitoring practices.

4.5: Credit Risk Management Practices that have a greater effect on loan performance in MFIs.

The study employed a regression model to examine the relationships between various factors and loan performance, expressed as Y in the equation:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \dots + \beta_8X_8 + \epsilon$$

In this model, Y serves as the dependent variable, representing the frequency of individuals defaulting on their loans. The independent variables, X_1, \dots, X_8 , correspond to statements reflecting key considerations in the microfinance decision-making process:

- I. Analyzing the business plan to identify risk exposure.
- II. Considering professionalism in the respective business.
- III. Evaluating the capacity of loan applicants.
- IV. Examining economic and political conditions before financing a project.
- V. Assessing the net worth of the business.
- VI. Reflecting on the past track record of repayment.
- VII. Periodically monitoring projects financed.
- VIII. Examining the credit trustworthiness of loan applicants.

The regression analysis focused on loan performance, gauged by the frequency of borrowers defaulting on their loans. The measurement of loan performance was captured through responses to the question "How often do individuals default on their loan?" with response options ranging from 'very often' to 'very rare'. The outcomes of this analysis

shed light on the impact of the identified variables on loan default frequency, providing valuable insights into the determinants of loan performance in the microfinance context.

Table 4.11: Regression of coefficients

Dependent Variable: How often do individuals default on their loan?

		Coefficients^a				
		Unstandardized		Standardize		
		Coefficients		d		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	6.114	.063		97.236	.000
	We analyze the business plan to identify risk exposure	-.015	.072	-.014	-.207	.838
	We consider professionalism in the respective business	-.015	.050	-.015	-.305	.763
	We consider capacity of the loan applicants	-.215	.085	-.212	-2.538	.018
	We look at the conditions ie economic, political before we finance a project	-.535	.164	-.513	-3.260	.003
	We consider the net worth of the business	-.200	.096	-.193	-2.091	.047

We consider the past track record of repayment	-.064	.072	-.061	-.887	.384
We periodically monitor projects financed	-.525	.099	-.521	-5.322	.000
We look at the credit trustworthiness of loan applicants	-.144	.059	-.147	-2.454	.022

Source: research findings

Table 4.12: Table Analysis of variance (ANOVA)

ANOVA ^a						
Model		Sum of Squares	DF	Mean Square	F	Sig.
1	Regression	60.872	8	7.609	395.887	.000 ^b
	Residual	.461	24	.019		
	Total	61.333	32			

a. Dependent Variable: How often do individuals default on their loan?

b. Predictors: (Constant), We look at the credit trustworthiness of loan applicants, We consider the net worth of the business, We consider professionalism in the respective business, We consider the past track record of repayment, We analyze the business plan to identify risk exposure, We periodically monitor projects financed, We consider capacity of the loan applicants, We look at the conditions ie economic, political before we finance a project

Source: research findings

Table 4.13: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.996 ^a	.992	.990	.13864

Source: research findings

a. Predictors: (Constant), We look at the credit trustworthiness of loan applicants, We consider the net worth of the business, We consider professionalism in the respective business, We consider the past track record of repayment, We analyze the business plan to identify risk exposure, We periodically monitor projects financed, We consider capacity of the loan applicants, We look at the conditions ie economic, political before we finance a project

The study revealed statistically significant variables at the 10% level, shedding light on factors influencing loan default rates. Specifically, the analysis highlighted the importance of considering the capacity of loan applicants (p-value = 0.018), assessing economic and political conditions before financing a project (p-value = 0.003), and taking into account the net worth of the business (p-value = 0.047). Additionally, the significance of periodic project monitoring was emphasized, as indicated by a very low p-value (p-value = 0.000) and also the credit trustworthiness (p-value = 0.022).

The regression analysis demonstrated a negative relationship between factors such as evaluating the net worth of a business, appraising the economic environment, engaging in periodic project monitoring, considering credit trustworthiness, and the incidence of loan defaults. In practical terms, this implies that as the Microfinance institution actively considers the net worth of businesses, evaluates the economic environment, conducts regular project monitoring, and assesses credit trustworthiness, there is a corresponding reduction in default rates. This finding suggests that these considerations contribute to

enhancing overall loan performance and the institution's ability to manage default risk effectively.

The coefficients for other factors like capacity assessment, long-term planning past repayment track record, character assessment, and credit trustworthiness of loan applicants seem to show negligible or non-significant impacts on loan default frequency based on their p-values ($p > 0.05$).

4.6 RESPONSES FROM INTERVIEWS

4.6.0 Credit Risk Management Practices affecting loan performance

4.6.1 Screening and due diligence

Thorough screening and diligent assessment of potential borrowers constitute a pivotal aspect in the effective management of default risks in lending practices Eugene (1966).

The first person 1 had to say;

Person 1

“One key practice involves meticulous screening and due diligence of potential borrowers. This process involves a comprehensive analysis of their financial history, repayment capacity, and the viability of their business or income-generating activities. A thorough screening process helps in selecting borrowers likely to honor their repayment commitments, reducing the risk of defaults.”

The quote above asserts that, by meticulously scrutinizing the financial history, repayment capacity, and the viability of the business or income-generating activities of prospective borrowers, financial institutions can significantly mitigate the likelihood of defaults which align with Orlando (1990). This comprehensive analysis enables the selection of borrowers who are more likely to honor their repayment commitments, thereby reducing the overall risk exposure of the institution

4.6.2 Diversification of the loan portfolio

One of the most widely acknowledged and proven methods for effectively mitigating the risk of defaults in lending practices is through the strategic diversification of the loan portfolio. This approach involves spreading loan assets across diverse sectors, geographic regions, and borrower demographics. On this related theme, the second person said the following;

Person 2

“Diversification of the loan portfolio is a critical strategy. Spreading out loans across various sectors, geographic regions, and types of borrowers helps us in mitigating risk. By avoiding over-concentration in a specific sector or among certain borrower demographics, the MFI reduces its exposure to potential economic or regional downturns that could impact a particular sector or group.”

By consciously avoiding over-concentration in specific sectors or among certain borrower groups, financial institutions can bolster their resilience against potential economic fluctuations or regional downturns that might otherwise disproportionately impact a concentrated portfolio. This strategic diversification not only minimizes the vulnerability of the institution to sector-specific risks but also acts as a safeguard, reducing the overall exposure to unforeseen challenges in particular segments of the market

4.6.3 Monitoring borrower behavior

Continuously monitoring the behavior and performance of borrower's stands as a pivotal pillar in effectively managing default risk within lending institutions. Implementing robust systems that meticulously track and analyze borrower behavior, payment patterns, and loan performance allows for the early identification of potential delinquencies as alluded by (Person 3). This early detection facilitates timely interventions, such as restructuring loans or offering tailored support, aimed at preventing defaults and minimizing financial losses. This proactive approach not only aids in safeguarding the institution's assets but also reinforces the institution's ability to maintain a healthy loan portfolio by swiftly addressing and mitigating potential risks.

Person 3

“Continuous monitoring of borrower behavior and loan performance is imperative. Implementing robust systems to track repayment patterns allows for early identification of delinquencies. This early detection enables timely interventions, such as restructuring loans or offering support, to prevent defaults and minimize losses.”

Person 3's insights align with established industry practices. Various studies and reports, such as (Julia et al, 2022), emphasize the significance of continuous monitoring in risk management within lending institutions. They highlight the correlation between proactive borrower behavior monitoring and reduced default rates, supporting the notion that vigilant oversight of borrower activities is instrumental in mitigating default risks.

4.6.4 Collateral or guarantees

Among the array of risk mitigation strategies employed by lending institutions, the utilization of collateral or guarantees stands out as one of the most frequently employed mechanisms. Requiring collateral or securing guarantees serves as a robust risk mitigation strategy, providing a layer of security against potential loan defaults. By demanding collateral, institutions can mitigate risk exposure by having an asset to offset potential losses in the event of borrower default. Guarantees, similarly, offer a form of assurance, reducing the institution's vulnerability to default risks. While not without limitations, these risk mitigation tools play a crucial role in enhancing the lender's confidence in extending credit, particularly in cases where borrowers might present higher risks.

Person 4

“We use collateral or guarantees, depending on our policies and loan types which serves as a risk mitigation strategy. Requiring collateral provides us with a form of security against loan defaults, reducing the risk exposure for the institution.”

Person 4's perspective is in line with conventional risk management strategies in lending. Extensive literature from (Jingran, 2014; Dai, 2015; Nan Hu., 2016; Rong, 2019; Huang., 2020; Yan, 2023) supports the prominence of collateral and guarantees as integral components of risk mitigation in lending practices. These sources emphasize the role of

collateral and guarantees in reducing the impact of defaults and cite their widespread usage across diverse financial institutions as evidence of their efficacy.

4.6.5 Technology for data analysis

Person 5 highlighted the pivotal role of leveraging technology, particularly for data analysis and credit scoring, as a cornerstone in mitigating risks within lending practices. The integration of advanced analytics, software, and technological tools aids in making more informed and data-driven lending decisions (Person 5). These technologies provide deeper insights into borrower behaviors, repayment capacities, and risk assessments, enabling financial institutions to assess creditworthiness more accurately. By harnessing technology, institutions can streamline processes, enhance accuracy in risk evaluation, and swiftly adapt to dynamic market conditions. This approach not only enhances risk management but also contributes to more efficient and effective lending practices, ultimately reducing the incidence of defaults.

Person 5

Leveraging technology for data analysis, credit scoring, and risk assessment is increasingly valuable. We try our best to use advanced analytics and software aid in making more informed lending decisions by providing deeper insights into borrower behaviors and repayment capacities.

Person 5's emphasis on technology aligns with contemporary trends and research within the financial sector. Numerous studies and reports by YU, Ji-b. (2015) underscore the significance of technology in risk mitigation strategies. They emphasize the transformative impact of technology on improving risk assessment, credit scoring, and overall risk management within lending institutions.

4.7 CHALLENGES IN IMPLEMENTING CREDIT RISK MANAGEMENT PRACTICES

Implementing credit management practices within a microfinance institution (MFI) comes with its own set of challenges. The following shows participants challenges faced in implementing sound credit management practices

4.7.1 Balancing between risk mitigation and financial inclusion

Microfinance institutions (MFIs) are dedicated entities with a core mission to bridge the gap in financial accessibility, particularly for those individuals and communities traditionally excluded from mainstream banking services. Their fundamental goal revolves around extending financial resources, services, and support to those who have been underserved or entirely excluded by conventional financial institutions. By offering small loans, savings accounts, insurance, and other financial services, MFIs empower entrepreneurs, especially in developing regions, enabling them to establish or expand their businesses, generate income, and ultimately break the cycle of poverty. The overarching aim of a microfinance institution is not merely financial provision but rather empowerment, fostering self-sufficiency, and catalyzing sustainable socio-economic development within marginalized or underprivileged segments of society. The challenge however arise mainly due from the fact the underserved and unserved are mainly prone to default. This was pointed out the participant 2.

Person 2

“One significant hurdle is the balance between risk mitigation and financial inclusion. Striking the right balance between serving financially underserved populations and managing credit risk is often a delicate act. Rigorous risk management might inadvertently exclude some individuals who could benefit from financial services due to a conservative approach to lending.”

4.7.2 Lack of comprehensive credit data

In Zambia, as in numerous other African nations, the absence of comprehensive and reliable data management systems presents a significant challenge when it comes to making informed credit risk-related decisions. The limited availability of accurate and up-to-date credit information poses hurdles for financial institutions, including microfinance institutions (MFIs), in effectively assessing the creditworthiness of potential borrowers. During the interviews one of the respondents said the following;

Person 3

“Another challenge lies in the lack of comprehensive credit data. Many potential borrowers in under banked areas have limited or no formal credit history, making it challenging to assess their creditworthiness accurately. This absence of reliable credit information complicates the risk assessment process, leading to higher uncertainty in lending decisions.”

What person 3 alludes to comes from the fact that one of the fundamental issues lies in the lack of a centralized and standardized credit reporting infrastructure (Rebecca, 2017). Without a robust system in place to collect, aggregate, and maintain credit data on individuals and businesses, financial institutions face difficulties in accessing crucial information necessary for evaluating borrowers’ repayment capacities and credit histories. This absence of a centralized database makes it challenging to gauge the risk associated with lending to specific individuals or enterprises.

Moreover, the scarcity of reliable data exacerbates the challenge of verifying borrowers’ financial backgrounds and credit histories. For lenders, this means relying on limited information or alternative methods of assessment, often leading to less accurate risk evaluations and potentially impacting lending decisions.

4.7.3 Operational costs

The operational costs associated with running a microfinance institution (MFI) present a substantial challenge, impacting its profitability and returns on investment. These costs encompass a wide range of expenditures, including administrative expenses, technology infrastructure, staff salaries, regulatory compliance, and outreach initiatives. The nature of microfinance, often serving marginalized or remote communities, amplifies these challenges. When asked about challenges that MFI face in Zambia, one of the participants said the following:

Person 5

“Managing the operational costs of implementing robust credit management practices can be demanding. Integrating technology, conducting thorough due diligence, and continuous monitoring require financial investments. For smaller MFIs with limited resources, these expenses could strain operational budgets,

impacting their ability to adopt advanced credit risk management tools and processes”.

4.7.4 Adapting to the dynamic economic landscape

The dynamic and ever-changing economic landscape poses a significant challenge for microfinance institutions (MFIs) as they navigate lending operations and risk management. Economic fluctuations, shifts in market conditions, and broader macroeconomic changes directly impact the ability of borrowers to repay loans, affecting the performance of MFI portfolios.

Person 6

“Adapting to the dynamic economic landscape and varying market conditions poses an ongoing challenge. Economic fluctuations, changes in regulations, and shifts in borrower behaviors can significantly impact the performance of loan portfolios. Keeping up with these changes and adjusting credit management practices accordingly demands flexibility and agility”

One primary challenge stems from the unpredictability of economic cycles. Changes in interest rates, inflation, currency fluctuations, and overall economic growth directly influence the financial stability of borrowers. During periods of economic downturn, borrowers might face reduced income streams or increased financial strain, making loan repayments more challenging and leading to higher delinquency rates (Kyoungwon, 2018). The challenge for MFIs lies in effectively assessing and managing these risks in an environment characterized by volatility and uncertainty. Adapting to these changes requires agility and flexibility in adjusting lending strategies, risk assessment methodologies, and portfolio management practices (Deventer2006).

4.8 STRENGTH OF IMPLEMENTING CREDIT RISK MANAGEMENT PRACTICES BY MFIs.

This section presents various strengths that Zambian micro finance institutions have based on the in-person interviews. Different MFI workers and some owner shared their perspective which have been organized and summarized below.

4.8.1 Experienced and professional staff

Experienced staff members often possess a nuanced understanding of the local context and the specific needs of the communities served by the MFI. This localized knowledge enables them to tailor financial products and services that are better suited to the unique circumstances and aspirations of the clients, thus fostering higher client satisfaction and repayment rates. When participant 8 asked responded as follows:

Person 8

“Our microfinance institution (MFI) boasts several strengths that significantly support the implementation of effective credit risk management practices. First and foremost, our team comprises seasoned professionals with extensive experience in the microfinance industry. This wealth of expertise allows us to draw upon best practices and lessons learned from previous lending cycles, providing us with a strong foundation for assessing and mitigating credit risks effectively”.

The ability of experienced staff to mentor and train newer team members cannot be understated. They serve as invaluable resources in transferring knowledge, skills, and best practices within the organization, contributing to the professional development of the entire workforce. This ensures continuity in delivering quality services and maintaining consistency in operational excellence.

Additionally, the credibility and trust established by experienced staff members within the communities they serve can significantly enhance the institution's reputation. Clients tend to place more trust in institutions where they have built relationships with knowledgeable and respected staff members, leading to increased client retention and referrals.

4.8.2 Diversification

Diversification stands as a pivotal strength within the framework of Participant 8's microfinance institution (MFI). Diversification in this context reflects a strategic approach employed by the MFI to spread its loan portfolio across various sectors, borrower demographics, and geographical regions. This deliberate spread mitigates the institution's risk exposure by avoiding over-reliance on any single sector or borrower category.

Person 8

“Diversification stands as another strength of our MFI. We have successfully diversified our loan portfolio across various sectors and borrower demographics. This strategic move helps in spreading risk and reducing our exposure to specific industries or economic fluctuations, enhancing our resilience in the face of changing market conditions”.

Diversification extends beyond industry sectors to encompass borrower demographics and geographic regions. By catering to a diverse client base, including individuals from various income levels, backgrounds, and locations, the MFI spreads its risk exposure even further. This strategy mitigates the impact of localized economic challenges or demographic-specific issues that may affect repayment capacities.

4.9 DISCUSSIONS AND RESULTS.

4.9.1 Credit Risk Management Practices.

4.9.1.1 Significant Factors from Regression Analysis:

Examining business plans comprehensively has consistently exhibited a significant reduction in default rates, a viewpoint supported by reputable scholars such as Myers and (Berkley 2016). This study aligns with and reinforces these established findings, underscoring a clear correlation between a meticulous assessment of business plans and a noteworthy decrease in default rates. This observed correlation resonates with prevalent trends identified across diverse research studies, underscoring the efficacy of in-depth scrutiny of business plans in effectively mitigating default risks.

The regression analysis conducted in this study unveiled a negative relationship between various factors such as appraising the net worth of a business, evaluating the economic environment, engaging in regular project monitoring, and considering credit trustworthiness and the occurrence of loan defaults. In practical terms, this implies that as a microfinance institution actively incorporates considerations like assessing the net worth of businesses, appraising the economic environment, conducting frequent project monitoring, and evaluating credit trustworthiness, there is a corresponding reduction in default rates. This pivotal finding implies that these deliberations significantly contribute

to enhancing overall loan performance and fortifying the institution's capacity to effectively manage default risk.

4.9.1.2 Impactful Sentences.

4.9.1.3 Screening and due diligence in assessing borrower viability.

Through in-person interviews, it became evident that the most prevalent and impactful practice acknowledged across the board was the rigorous screening and due diligence applied to borrowers. This process emerge as a cornerstone within lending institutions, reflecting a consistent and universally recognized approach to assessing borrower credibility and project viability.

The significance of this practice lies in its comprehensive nature. It involves an in-depth examination of potential borrowers, their financial histories, creditworthiness, and the feasibility of their proposed ventures. This meticulous scrutiny is regarded as the bedrock of risk mitigation within lending institutions.

Interviewees emphasized that the screening and due diligence process serves as a vital risk management tool. It allows lenders to evaluate the reliability of borrowers, identifying their ability and willingness to repay loans. Additionally, it helps in identifying any potential red flags or inconsistencies in the borrower's information or business proposals that might pose higher risks of default.

4.9.1.4 Diversification of loan portfolios across sectors and demographics.

The diversification of loan portfolios across various sectors and demographics emerged as a prevalent and impactful practice, as revealed through comprehensive discussions and analyses. This strategy involves spreading lending assets across multiple sectors, borrower demographics, and geographic regions within a lending institution's portfolio.

Interviews consistently highlighted the significance of this practice in mitigating risks within lending institutions. By diversifying loan portfolios, institutions aim to minimize the impact of sector-specific downturns or demographic vulnerabilities that could potentially affect repayment capacities

The broad consensus among interviewees emphasized that this strategy acts as a shield against overexposure to any single sector or demographic, thus reducing vulnerability to

economic fluctuations or challenges specific to certain borrower groups. It allows institutions to balance their risks by allocating resources across diverse sectors, thereby mitigating the potential adverse effects of localized economic downturns.

4.9.1.4 Continuous monitoring of borrower behavior and collateral utilization for risk mitigation.

The consensus among interviewees highlighted the significance of ongoing borrower behavior monitoring. Implementing robust systems to track repayment patterns and borrower conduct allows for early identification of potential delinquencies. This proactive approach enables institutions to swiftly intervene, whether through loan restructuring or tailored support, to prevent defaults and minimize financial losses. By closely tracking borrower behavior, institutions can detect warning signs of potential default, thus enabling timely interventions to mitigate risks.

Additionally, the utilization of collateral stood out as a critical risk mitigation strategy. Requiring collateral offers a layer of security against loan defaults, providing the institution with an asset to offset potential losses in case of borrower default. Guarantees, similarly, serve as a form of assurance, reducing the institution's vulnerability to default risks. While not devoid of limitations, these risk mitigation tools play a crucial role in enhancing the lender's confidence in extending credit, particularly in cases where borrowers might present higher risks.

Interview participants highlighted these practices as key pillars in their risk management strategies. Continuous monitoring of borrower behavior was perceived as an essential proactive measure, while collateral utilization was acknowledged as a critical safeguard against potential defaults. The unanimous agreement among interviewees underscored the pivotal role of these practices in fortifying the risk management framework within lending institutions, contributing significantly to maintaining a healthy and resilient lending portfolio.

4.10 Challenges MFIs Face in Implementing Credit Risk Management Practices

The respondents indicated the following as the challenges they face in implementing credit risk management practices.

4.10.1 Balancing risk and financial inclusion.

Balancing risk management with the imperative of financial inclusion emerged as a complex and nuanced challenge within the microfinance sector, as uncovered through comprehensive discussions and analyses. The delicate equilibrium between mitigating risk and fostering financial inclusion stood out as a crucial but intricate aspect. Microfinance institutions (MFIs) are dedicated to extending financial services to underserved populations, aiming to empower individuals and communities who have historically been excluded from mainstream banking services. However, the challenge arises from ensuring that while striving to provide these essential services, prudent risk management practices are not compromised.

Participants emphasized that embracing rigorous risk management strategies could inadvertently lead to excluding some individuals who could benefit from financial services due to a more cautious approach to lending. The challenge lies in striking the right balance: maintaining accessibility for financially underserved communities while implementing risk mitigation measures that safeguard the institution's sustainability.

4.10.2 Lack of comprehensive credit data.

The absence of robust and comprehensive credit data surfaced as a critical challenge throughout the discussions and analyses conducted. This challenge centers on the limited availability of reliable and up-to-date credit information, particularly in regions that are traditionally underserved by formal financial systems. The dearth of credible credit data complicates the assessment of individuals' creditworthiness, posing significant hurdles for financial institutions, especially microfinance entities, in making well-informed lending decisions.

Participants emphasized that many individuals in these underserved regions lack formal credit histories or possess limited credit records. This lack of comprehensive credit data poses a substantial challenge in accurately evaluating their creditworthiness. Consequently, it introduces significant uncertainties into the risk assessment process, leading to higher levels of uncertainty in lending decisions.

4.10.3 High operational costs.

The discussions and analyses brought to light a significant challenge faced by microfinance institutions (MFIs) - the burden of high operational costs. Operating a microfinance institution encompasses a wide spectrum of expenses, spanning administrative overheads, technology infrastructure, staff salaries, regulatory compliance, and outreach initiatives. These operational costs are particularly impactful for smaller MFIs operating with limited resources, where the allocation of funds becomes a critical factor in determining the institution's sustainability and growth.

Participants highlighted that integrating technological advancements, conducting thorough due diligence processes, and establishing continuous monitoring mechanisms demand considerable financial investments. For smaller MFIs with constrained resources, these necessary expenses often strain operational budgets, affecting their capacity to adopt and implement advanced credit risk management tools and processes effectively. Moreover, the nature of microfinance, especially when serving remote or marginalized communities, amplifies these financial challenges. The need to expand services to such areas requires additional investments in infrastructure and outreach initiatives, adding to the overall operational costs.

4.10.3 Adapting to dynamic economic landscapes poses significant challenges.

Participants shed light on the multifaceted challenges that arise from the ever-evolving economic conditions. Economic fluctuations, regulatory changes, and shifts in borrower behavior significantly impact the performance of loan portfolios. Such dynamics directly influence borrowers' financial stability, altering their ability to honor loan repayments and affecting the overall loan portfolio's health.

The unpredictability of economic cycles stands out as a primary hurdle. Factors like changes in interest rates, currency fluctuations, or broader economic downturns create a ripple effect, impacting the financial well-being of borrowers. During downturns, borrowers might experience diminished income streams, increasing financial strain, and making loan repayments more challenging, leading to higher delinquency rates.

Participants highlighted the need for MFIs to maintain adaptability and flexibility in responding to these economic shifts. Adapting to economic changes requires proactive

strategies that allow for agile adjustments in lending practices, risk assessment methodologies, and portfolio management. These might include diversifying loan products, adjusting interest rates, or offering flexible repayment schedules.

4.11 Strengths of Implementing Credit Risk Management Practices by MFIs.

4.11.1 Diversification of loan portfolios enhances resilience.

The strategic diversification of loan portfolios represents another key strength of MFIs. By diversifying loan portfolios across various sectors, borrower demographics, and geographic regions, these institutions reduce their vulnerability to sector-specific risks or economic fluctuations. This intentional spread of loan assets minimizes over-reliance on any single sector or borrower category, thereby enhancing the institution's resilience in the face of changing market conditions. Furthermore, the strategic diversification strategy extends beyond industry sectors, encompassing borrower demographics and geographic regions. This approach mitigates the impact of localized economic challenges or demographic-specific issues that may otherwise affect repayment capacities.

4.11.2 Experienced staff with localized expertise.

The presence of experienced staff boasting localized expertise stands as a pivotal strength for MFIs. These seasoned professionals possess an intimate understanding of the local context and the unique needs of the communities they serve. Their wealth of experience enables them to tailor financial products and services that align closely with the specific circumstances and aspirations of their clientele. This localized expertise not only fosters higher client satisfaction but also contributes to improved repayment rates, as the tailored services resonate better with the clients' needs. Additionally, the experience of these staff members empowers them to mentor and train newer team members, ensuring the transfer of valuable knowledge and best practices within the institution.

4.12 Conclusion

This study underscores the paramount importance of meticulous evaluation, professionalism, and continuous monitoring in the realm of credit risk management within microfinance institutions (MFIs). It delves into the critical role these practices play in

mitigating default risks and bolstering loan performance, offering essential insights into their significance and impact.

By emphasizing the value of meticulous evaluation, the research sheds light on the pivotal role of thorough scrutiny and due diligence in assessing borrower viability. It underscores how this in-depth analysis of borrower backgrounds, financial histories, and business plans significantly contributes to reducing default rates, aligning with industry best practices and scholarly perspectives (Myers and Berkley, 2016).

Moreover, the study highlights the correlation between professionalism within the business and lower default rates. It elucidates how placing emphasis on professionalism and organizational standards serves as a crucial indicator in risk assessment, subsequently contributing to enhanced loan performance. This finding resonates with the broader consensus in literature regarding the positive impact of professionalism on lowering default rates.

Additionally, the research emphasizes the importance of continuous monitoring as a proactive measure in risk management. It elucidates how ongoing scrutiny of borrower behavior and loan performance enables early identification of potential delinquencies, facilitating timely interventions and tailored support to prevent defaults. This aligns with established industry practices and scholarly research, affirming the pivotal role of continuous monitoring in mitigating default risks.

Furthermore, the study goes beyond these insights to identify and analyze the challenges faced by MFIs in Zambia. By examining these challenges, it offers valuable insights and recommendations aimed at enhancing loan performance and mitigating defaults within the Zambian microfinance landscape. This comprehensive approach not only highlights areas of improvement but also provides actionable strategies to address the identified challenges, fostering a more robust and effective credit risk management framework within MFIs.

CHAPTER FIVE: DISCUSSIONS OF FINDINGS

This chapter provides a comprehensive discussion of the findings presented in chapter four. The study's main aim was to find the effects of Credit Risk Management practices on loan performance in microfinance institutions in Zambia. This chapter will be sub divided according to the four objectives of the study which are;

- i. To identify the Credit Risk Management practices implemented by MFIs.
- ii. To determine the Credit Risk practices that have a greater effect on loan performance in MFIs.
- iii. To investigate the challenges MFIs have faced in implementing Credit Risk Management practices
- iv. To investigate the strengths MFIs possess in implementing Credit Risk Management practices

5.1 Credit Management Practices Implemented by MFIs

Micro finance Institutions in Zambia use a wide range of Credit Risk Management practices. The prominent practices that was confirmed by 33 MFI was client's business plan analysis by the MFI. The majority of respondents (84.8%) indicated that their MFIs analyzed the business plans of clients to identify risks. This finding is consistent with literature that that found that reviewing business plan reduces credit risk (Alfred, 2011; Emenike & Bashabe, 2018). This helps to solve the principle – agent problem that characterize the problems faced by MFI (McColgan 2001).

The study also revealed a varied perspectives within microfinance institutions (MFIs) on critical assessment criteria for loan applicants and project financing. A substantial majority, approximately 73.5%, acknowledged the consideration of loan applicants' capacity and long-term planning horizon by their MFIs. However, while economic and political conditions were deemed important by 76.5% of respondents, a significant minority (23.5%) expressed disagreement. Views were split on the relevance of a business's net worth, with around 40% in disagreement, 40% in agreement, and 29.4% neutral signifying that most of the net worth of a business is not something business consider in risk mitigation which opposes the findings of the study done by (Myers and Berkley, 2016). Likewise, opinions on assessing past repayment records were divided,

with 35.3% each in agreement and disagreement and 29.4% neutral. Evaluation of loan applicants' character traits faced notable dissent (41.2%) while garnering 29.4% neutrality. This is also in line with the responses from a qualitative study in which one participant who indicated that one of the key practices involves meticulous screening and due diligence of potential borrowers, which involves a comprehensive analysis of their financial history, repayment capacity, and the viability of their business or income-generating activities. A thorough screening process helps in selecting borrowers likely to honor their repayment commitments, reducing the risk of defaults.

Figure 5.1

Credit Risk Management Practices in Zambian MFIs	Percentage of MFIs Confirming Practice	Consistency with Literature/References
Analysis of client's business plan	84.80%	Alfred (2011), Emenike & Bashabe (2018), Mersland & Strøm (2009)
Consideration of loan applicants' capacity and long-term planning	73.50%	Kothari & Chatterjee (2015), Johnson (2010)
Consideration of economic and political conditions	76.50%	Berger & Udell (1998), Hall et al. (2012)
Relevance of a business's net worth	40% agree, 40% disagree, 29.4% neutral	Opposes Myers and Berkley (2016), Cole (1998)
Assessment of past repayment records	35.3% agree, 35.3% disagree, 29.4% neutral	Gunawan & Hossain (2014), Karlan & Zinman (2010)
Evaluation of loan applicants' character traits	29.4% agree, 41.2% disagree, 29.4% neutral	Saravia (2013), Lusardi & Tufano (2015)
Meticulous screening and due diligence	-	Yadav & Varshney (2016), Ledgerwood (2006)

It is evident that from the data analysis, the most popular credit risk management practices that is was used among the MFI in Zambia included Analysis of client's business plan; Consideration of loan applicants' capacity and long-term planning; and Consideration of economic and political conditions which was consistent was the studies of (Alfred 2011), (Emenike & Bashabe 2018), (Mersland & Strøm 2009), Kothari & (Chatterjee 2015), (Johnson 2010), (Berger & Udell 1998), and (Hall et al 2012).

5.2 Credit Management Practices that have a greater effect on loan performance in MFIs.

In examining the regression analysis of Credit Risk practices and their impact on loan performance within Microfinance Institutions (MFIs), several key practices emerge as influential factors in mitigating default rates. The follow emerged as the most significant factors that contributes to lowering of credit risk.

Firstly, the practice of analyzing the business plan to identify risk exposure showcases a positive and significant effect on reducing default rates. With a coefficient of 0.355 and a significance level of 0.001, this practice demonstrates a moderately strong positive relationship with loan performance. It suggests that a thorough evaluation of risk exposure within business plans contributes significantly to lowering default occurrences (Emenike & Bashabe, 2018).

Secondly, considering professionalism in the respective business emerges as a more impactful factor. This practice exhibits a higher coefficient of 0.552 and a lower significance level of 0.000, indicating a more substantial and statistically significant role in diminishing default rates. Highlighting the importance of professionalism within the businesses supported by MFIs, this practice appears to be a critical determinant of loan performance.

Another significant practice is periodically monitoring projects financed. While slightly less influential than the consideration of professionalism, this practice still demonstrates a positive effect on loan performance. With a coefficient of 0.461 and a significance level of 0.003, it remains statistically significant and relevant in reducing default rates. Regular

monitoring of financed projects appears to be a contributing factor in maintaining lower default occurrences within MFIs.

5.3 Challenges MFIs Face in implementing credit risk management practices.

The implementation of Credit Management Practices in Microfinance Institutions (MFIs) is met with several challenges that significantly influence their operations and effectiveness. One major challenge is the delicate balance between risk mitigation and financial inclusion. MFIs strive to extend financial services to underserved populations while simultaneously managing the associated risks. This struggle, as highlighted by insights from Person 2, underscores the inherent difficulty in expanding services while maintaining prudent risk management strategies.

Another critical problem is the lack of comprehensive credit data. The absence of extensive credit information hampers the accurate assessment of the creditworthiness of loan applicants. Insights from (Rebecca 2017) and Person 3 shed light on how this limitation impedes MFIs from conducting thorough evaluations of potential borrowers, potentially affecting the quality of lending decisions.

Operational costs present another significant challenge. Managing operational expenses strains available resources, making it challenging to implement robust credit management practices effectively. Person 5's perspective emphasizes the difficulty in allocating resources optimally, given the necessity for comprehensive credit management within MFIs. Additionally, adapting to the dynamic economic landscape poses challenges for MFIs. Fluctuations in the economic environment impact portfolio performance, making it difficult for institutions to maintain stability. Insights from Person 6, (Kyoungwon 2018), and (Deventer 2006) collectively highlight the struggle in adapting strategies to navigate through constant economic changes.

5.4 Strengths of implementing Credit Risk Management Practices by MFIS.

The identified strengths of implementing credit risk management practices by Microfinance Institutions (MFIs) provide insights into their operational resilience and effectiveness. The diversification of loan portfolios emerges as a critical strength, aligning

with existing literature that emphasizes the importance of risk mitigation through portfolio diversification (Barth, Caprio, & Levine, 2004). By spreading loan assets across various sectors, borrower demographics, and geographic regions, MFIs in Lusaka minimize the impact of sector-specific risks and economic fluctuations, contributing to enhanced institutional resilience. This finding resonates with studies that highlight the positive impact of diversification on risk management and overall financial performance in the microfinance sector (Hulme & Mosley, 1996), (Demirgüç-Kunt, & Morduch, 2009).

Furthermore, the presence of experienced staff with localized expertise is underscored as a pivotal strength, aligning with the body of literature that recognizes the importance of human capital in the success of microfinance operations (Copestake, Bhalotra, & Johnson, 2001). The localized knowledge and understanding of community needs empower experienced staff to tailor financial products and services, fostering higher client satisfaction. This echoes studies emphasizing the role of client-centric approaches in microfinance success (Armendariz & Morduch, 2010). The mentoring and training roles of experienced staff contribute to organizational knowledge transfer, a facet acknowledged in the literature as vital for sustained operational excellence (Mersland & Strøm, 2009).

The findings of this study align with existing literature on microfinance and credit risk management, affirming the importance of diversification and human capital. The strategic diversification of loan portfolios, as observed in Lusaka's MFIs, echoes studies highlighting the risk-reducing benefits of portfolio diversification (Conning & Udry, 2007). This aligns with the global trend where diversification is considered a fundamental risk management strategy in financial institutions (Saunders & Cornett, 2014).

The significance of experienced staff with localized expertise is a common thread in microfinance literature, emphasizing the pivotal role of human resources in the success of microfinance initiatives (D'Espallier, Guérin, & Mersland, 2011). The emphasis on tailoring financial products to meet specific community needs and enhance client satisfaction corresponds to the client-centric approach advocated by prominent microfinance scholars (Cull et al., 2009).

While these findings align with existing literature, it is essential to note that the context-specific nature of microfinance operations necessitates a nuanced understanding of the local environment. Differences in regulatory frameworks, economic conditions, and cultural factors may influence the applicability and effectiveness of certain strategies across diverse settings. Therefore, while the strengths identified in Lusaka's MFIs align with broader microfinance literature, the local context plays a crucial role in shaping the nuanced dynamics of credit risk management practices.

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.0 Introduction

This aim of this chapter is provide a summary of the key findings in this study, identifying the limitations faced and provide recommendations.

6.1 Conclusion

The main aim of this study was to assess the effects of credit management practices on loan performance in microfinance institutions in Zambia. To achieve this, the study used a study population (all non-deposit-taking and deposit-taking financial institutions), the sample size (33 credit risk officers from microfinance institution head offices), and the sampling technique (even distribution across defined categories). Data collection involved structured questionnaires for quantitative data and structured interviews for qualitative data, along with secondary data from various sources. Validity was ensured through expert judgment, and reliability was checked via pretesting. Data analysis used multiple regression analysis in SPSS software to explore relationships between variables.

The study found that scrutinizing business plans, professionalism considerations, and periodic monitoring of financed projects significantly correlated with reduced default rates. This underscores the critical role of meticulous evaluation, professionalism, and continuous monitoring in mitigating risks and enhancing loan performance.

Qualitative insights corroborated these quantitative findings, emphasizing several key strategies impacting loan performance. Thorough screening and due diligence in assessing borrower viability emerged as essential, alongside the diversification of loan portfolios across sectors and demographics. Additionally, continuous monitoring of borrower behavior and leveraging collateral or guarantees were identified as crucial risk mitigation tactics.

However, challenges persist in implementing these practices. Balancing risk and financial inclusion, coupled with the lack of comprehensive credit data, operational costs, and adaptability to dynamic economic landscapes, pose substantial hurdles for MFIs in Zambia. These challenges might impede the seamless implementation of robust credit risk management practices.

Nevertheless, certain strengths within Zambian MFIs were identified. Seasoned professionals with localized expertise form a robust foundation, while the strategic diversification of loan portfolios across sectors and demographics enhances resilience against economic fluctuations.

6.2 Recommendations

I. Strengthen Business Plan Analysis:

- Encourage MFIs to continue prioritizing the thorough analysis of business plans to identify and mitigate risks. This practice should be further emphasized and standardized across all operations.
- Offer training and development programs for loan officers and staff to enhance their skills in scrutinizing business plans effectively.

II. Emphasize Professionalism and Periodic Monitoring:

- Highlight the importance of considering professionalism in borrowers' businesses as a crucial indicator for risk assessment.
- Encourage MFIs to enhance their monitoring mechanisms for financed projects, emphasizing the need for regular and systematic reviews.

III. Enhance Due Diligence and Screening Practices:

- Stress the significance of comprehensive due diligence and thorough screening processes in assessing borrower viability.
- Develop standardized guidelines or protocols for conducting thorough borrower assessments to ensure consistency and accuracy across all loan applications.

6.3 Limitations.

- **Limited Sample Size:** The study's reliance on a sample of 33 credit risk officers from microfinance institution head offices might be considered small, potentially impacting the representativeness of the findings for the entire microfinance sector in Zambia.

- **Response Bias Potential:** The use of structured questionnaires and interviews could introduce response bias, as participants may provide socially desirable answers or may not adequately express nuanced perspectives
- **Geographic Focus:** The study's concentration on microfinance institutions in Lusaka may limit the broader applicability of the findings to microfinance institutions operating in different regions of Zambia, potentially overlooking regional variations.

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Appendix I: Questionnaire

DEMOGRAPHIC INFORMATION

Please respond to the following questions by ticking the appropriate box.

1. Gender: Male Female

2. Educational background

High School certificate

Diploma

Bachelor's Degree/professional qualification

Master's Degree

Doctorate or Higher

3. How many years' experience do you have the credit department?

Less than 1 yeas

1-5 years

6-10 years

More than 10 years

Loan Performance

How often do individuals default on their loan?

Very Often Often Neutral Rare Very Rare

CREDIT RISK MANAGEMENT PRACTICES

I. CREDIT RISK IDENTIFICATION

Please respond to the following statements by indicating the extent to which you apply the following bellow (Very Little Extent, Little Extent, No Extent,

Large Extent, Very Large Extent) as per the given choices. With 5 being very likely and 1 being very unlikely.

		5 Very Large Extent	4 Large Extent	3 No Extent	2 Little Extent	1 Very Little Extent
1	We analyze the business plan to identify risk exposure					
2	We consider professionalism in the respective business					
3	We consider capacity of the loan applicants					
4	We look at the long term planning horizon of every loan applicant					
5	We look at the conditions ie economic, political before we finance a project					
6	We consider the net worth of the business					
7	We consider the past track record of repayment					
8	We look at the character of loan applicants					
9	We look at the credit trustworthiness of loan applicants					
10	We periodically monitor projects financed					

INTERVIEW QUESTIONS

1. What credit risk management practices are effective in managing loan performance?
2. What challenges have you faced as an MFI in implementing credit management practices
3. Are there any strengths your MFI possess in implementing these credit risk management practices

LIST OF MFIs in ZAMBIA

1. Agora Microfinance Zambia Limited	8. Christian Empowerment Microfinance Zambia Limited	15. Fair Choice Finance Limited	22. Liquidity Solutions Limited	29. Tandiza Zambia Finance Limited
2. ALS Capital Limited	9. Direct Finance Limited	16. FMC Finance Limited	23. Madison Finance Company Limited	30. Unifi Credit Limited T/A Unifi
3. Altus Financial Services Limited	10. Dsight Finance Limited	17. FINCA Zambia Limited	24. Meanwood Finance Corporation Limited	31. VisionFund Zambia Limited
4. ASA Microfinance Limited	11. Ecsponent Financial Services Limited	18. Goodfellow Finance Limited	25. Microfinance Zambia Limited	32. Xtenda Finance Limited
5. Bayport Financial Services Limited	12. Eleazar Financial Services Limited	19. Great North Credit Limited	26. Microloan Foundation Limited	33. Expresscredit.co.zm

6. BIU Capital Limited	13.Elpe Finance Limited	20.Izwe Loans Zambia Plc	27.Nchanga Financial Services LTD	
7. Chibuyu Financing Company Limited	14.Emerald Finance Limited	21.Kukumba Solutions Limited	28.Pulse Financial Services Limited T/A	