EFFECT OF DEBT MANAGEMENT PRACTISES ON LOAN PERFORMANCE AMONG DEPOSIT TAKING MICROFINANCE INSTITUTIONS IN KENYA

BY

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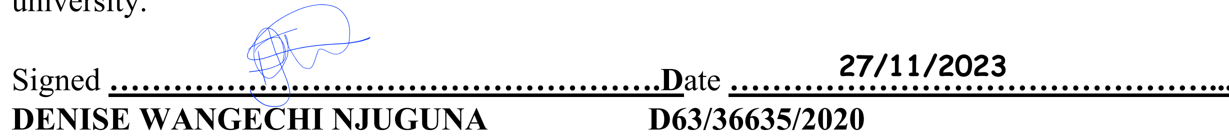
A RESEARCH PROJECT PRESENTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE FINANCE, FACULTY OF BUSINESS AND MANAGEMENT SCIENCES, UNIVERSITY OF NAIROBI

2023

DECLARATION

I declare that this is my original work and has not been presented for any award in any university.



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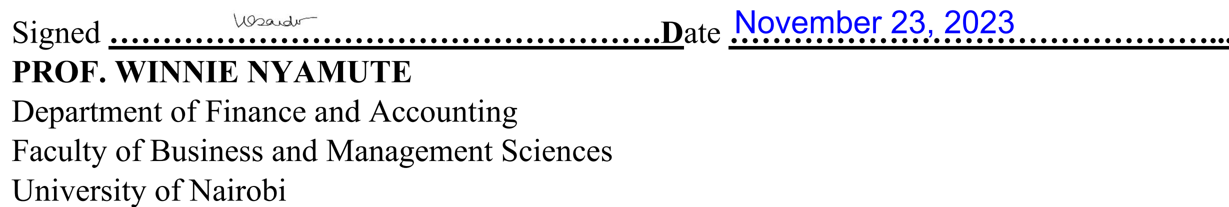
This research project has been submitted for examination with my approval as university supervisor.



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DEDICATION

I dedicate this to my family and parents. Their belief in me, even during the moments of self-doubt, have been the foundation upon which I built this achievement. To my esteemed Supervisor, thank you for your invaluable guidance, unwavering belief in my potential, and patient encouragement throughout this process. Your expertise and insights have been instrumental in shaping the direction and quality of this research. Additionally, I thank the lecturers at the University of Nairobi, my classmates, the administrative team, and the entire university community for their constant encouragement and support.

To the participants who generously contributed their time and knowledge to this research, I am deeply grateful for your willingness to be a part of this study. Their valuable insights have added depth and significance to the findings. To the countless late nights, the hours of analyzing data, and the pursuit of academic excellence. I value the energy and time during the moments of inspiration and the unexpected sparks of creativity that reinvigorated me in undertaking this project and made it possible to work on this study in my pursuit of academic excellence. This research project is not only an academic accomplishment but a testament to the power of curiosity, resilience, and the pursuit of knowledge. As I take this step forward, I carry with me the invaluable lessons learned during this journey of growth, learning, and self-discovery, and I am humbled by all the support received and inspiration that have guided me along the way.

ACKNOWLEDGEMENT

I extend my deepest gratitude to the Almighty God for His boundless love, unconditional favor, undeserved mercies, and the inspiration that propelled the successful completion of this research project. It is with a heart full of thanks that I acknowledge His divine presence, without which this achievement would not have been possible.

A special acknowledgment goes to my honorable supervisor, Prof Winnie Nyamute, whose superior guidance, constant corrections, and unwavering support were instrumental in the successful completion of my project work. I express my sincerest thanks, and I pray that the Almighty Lord rewards you abundantly and grants you all your heart's desires.

I am equally thankful to Dr. Okiro for his analytical skills and generosity of knowledge, which significantly contributed to the successful completion of my academic journey. Your guidance and expertise have been invaluable.

To my wonderful and loving parents, I express my heartfelt appreciation for your boundless love, care, prayers, and immeasurable sacrifices. May the Almighty bless you with long life to witness and enjoy the fruits of your labor. To my siblings, thank you for your constant words of encouragement, inspiration, and advice. Your unwavering support and willingness to lend a listening ear have been a source of strength. I also appreciate your significant contributions that played a crucial role in the successful completion of my project work.

In this moment of accomplishment, I am reminded of the collective effort and support that has shaped this journey. To each individual who played a role, no matter how small, in this endeavor, I extend my heartfelt gratitude. This achievement stands as a testament to the power of collaboration, encouragement, and unwavering support.

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ABBREVIATIONS

BFIs	Banks and financial institutions
CBK	Central Bank of Kenya
CBR	Central Bank rate
DTM	Deposit Taking Microfinance
DTMFIs	Deposit-taking Microfinance Finance Institutions
GDP	Gross Domestic Products
MFIs	Microfinance Institutions
MSX	Muscat Stock Exchange
NPLs	Non-Performing Loans
PLS	Partial Least Square
ROA	Return on Assets
ROE	Return on Equity
SACCO	Savings and Credit Cooperatives Societies
SASRA	Sacco Societies Regulatory Authority
SEM	Structural Equation Modelling
SME	Small and Medium Enterprise
SPSS	Statistical Package for Social Science

ABSTRACT

It is worth emphasizing that debt management strategies perform a cardinal part in navigating challenges presented by the evolving global economy. Companies must carefully analyze their financial obligations and develop comprehensive plans to effectively manage their debts. This entails assessing the types of debt incurred, such as loans, credit lines, or bonds, and understanding the associated terms, interest rates, and repayment schedules. Subsequently, gaining a thorough understanding of their debt profile, companies can make informed decisions on how to allocate resources and prioritize debt repayment. They can explore options such as debt consolidation, renegotiating repayment terms with creditors, or refinancing to lower interest rates. These strategic moves not only help in reducing debt burdens but also enhance cash flow management and improve overall financial health. The study thus sought to determine the effect of debt management practices on loan performance of deposit taking microfinance institutions in Kenya. Specifically, the study sought to determine the effect of credit rationing, debt budgeting, debt structure, credit monitoring and debt analysis on loan performance of deposit taking microfinance institutions in Kenya. The study was guided by the theory of deb management, loanable funds theory and credit rationing theory. The study adopted a descriptive research design and a questionnaire as the main data collection instrument. The analysis of data was done using SPSS. Based on the findings, the study concluded that credit rationing, debt budgeting, debt structure, credit monitoring, and debt analysis all exhibit a significant positive relationship with loan performance. The study recommended that the deposit taking micro financial institutions in Kenya ought to analyze the debt of every borrower in relation to the existing interest rates in the market. The deposit taking micro financial institutions in Kenya ought to have a clear budget of the amounts of money to be advanced as loans. The study further recommended that the deposit taking micro financial institutions in Kenya ought to have regularly review its structure to match with the dynamic debt risks. The deposit taking micro financial institutions in Kenya ought to periodically monitor its loans to check on the loans that are due or that are almost due. The study finally recommends that the deposit taking micro financial institutions in Kenya ought to regularly analyze its existing debts.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Global economy has been subject to constant transformation, driven by numerous changes occurring across various sectors. These changes have created an environment of unpredictability and unprecedented circumstances, necessitating companies to adopt a visionary approach with the purpose of surviving and thriving. In this shifting scenery and transformative backdrop, it is paramount for firms to recognize the significance of formulating effective strategies to manage debt and optimize loan performance. By doing so, they can maintain their competitiveness in the market and ensure the sustainability of their operations in the long term. According to Wokeh (2023), Debt management is a crucial aspect of financial responsibility and prudent decision-making. It involves the careful and strategic handling of one's debts to ensure they are properly managed and controlled. At its core, debt management aims to strike a balance between fulfilling financial obligations while maintaining a healthy financial position. It requires individuals or organizations to assess their debts, create a structured plan, and implement effective strategies to reduce debt burdens and minimize associated risks.

Building upon theoretical paradigm, the theory put forth by Markowitz and Tobin (1958) underscores the significance of employing strategies and principles by state, firms, and individuals to proficiently govern and manage their debts. This theory provides a basis for comprehending the inter-correlation in the midst of debt management and loan performance. Moreover, the loan funds theory, established by Robertson and Ohlin (1930), contributes to this evaluation by examining the principles that govern the allocation and utilization of loan funds. Additionally, the credit rationing theory, also referred to as the credit market imperfections theory, formulated by Stiglitz

and Weiss (1981), offers valuable insights into the economic theory that investigates the probability of credit constraints within financial markets. Consequently, integrating these established theories and conceptual models, the theoretical framework strengthens the rigor and coherence of the research, enabling the researcher to make informed interpretations and draw meaningful conclusions regarding the interplay between debt management and loan performance.

It is worth emphasizing that debt management strategies perform a cardinal part in navigating challenges presented by the evolving global economy (Ekinci & Poyraz, 2019). Companies must carefully analyze their financial obligations and develop comprehensive plans to effectively manage their debts. This entails assessing the types of debt incurred, such as loans, credit lines, or bonds, and understanding the associated terms, interest rates, and repayment schedules. Subsequently, gaining a thorough understanding of their debt profile, companies can make informed decisions on how to allocate resources and prioritize debt repayment. They can explore options such as debt consolidation, renegotiating repayment terms with creditors, or refinancing to lower interest rates. These strategic moves not only help in reducing debt burdens but also enhance cash flow management and improve overall financial health.

1.1.1 Debt Management Practices

Debt management postulates the prudent strategies, policies, and practices adopted by governments, businesses, and individuals to effectively handle and oversee their debt obligations. It encompasses the careful management of borrowing, repayment, and financial risk to ensure sustainable debt levels and optimal utilization of borrowed funds (Mwangi, Makau & Kosimbei, 2014). According to Mwangi, Makau and Kosimbei (2014); Koskei, 2020), debt management is of utmost imperative as it guarantees fiscal discipline, governs budget deficits, and safeguards

economic stability. Similarly, effective debt control and governance is indispensable for maintaining financial health, meeting financial obligations, and securing capital for growth ((Mwangi, Makau & Kosimbei, 2014). Meanwhile, debt management entails responsible borrowing, budgeting, and timely repayment to evade financial stress and bolster creditworthiness.

Debt management is a fundamental epicenter warrantying fiscal soundness and longevity stability of various entities (Mwangi, Makau & Kosimbei, 2014). Prudent debt management is vital for business productivity as grants access to essential capital for growth, and prevents burdensome interest. Through vigilant debt monitoring and optimization, businesses can mitigate financial risk, enhance creditworthiness, and seize improved borrowing terms and investment prospects. Nevertheless, fluctuating interest rates, economic uncertainties, and insufficient cash flow pose obstacles to debt management, potentially resulting in elevated debt expenses, constrained expansion, and reduced productivity (Obae & Jagongo, 2022). Therefore, businesses must actively tackle these challenges via sound financial planning and strong risk management approaches to ensure ongoing success and growth (Mburu, Mwangi & Muathe, 2020). For businesses, successful debt management is imperative to optimize capital structures, minimize financing costs, and support growth and investment ventures. Striking a balance between equity and debt financing through effective debt management mitigates financial risks and enhances profitability.

Similarly, for individuals, debt management is of paramount importance for maintaining financial well-being. As per Mburu, Mwangi and Muathe (2020), embracing responsible borrowing, timely repayments, and prudent budgeting enables individuals to evade excessive debt burdens and improve credit scores, leading to more favorable credit terms and access to credit. Debt management companies possess specialized knowledge in creditor negotiations and the

complexities of debt repayment. They offer guidance on budgeting, financial planning, and negotiating with creditors on behalf of debtors, empowering them to regain control over their finances and develop sustainable repayment strategies (Jerono & Olweny, 2023). Consequently, integral objective is to maximize financial relief and enhance debt manageability. Through collaboration with creditors, debtors can establish revised payment plans that align better with their financial capabilities and objectives. This study maximizes; credit rationing, debt budgeting, debt structure, credit monitoring in addition to debt analysis.

1.1.2 Loan Performance

Loan performance involves a comprehensive assessment of how borrowers effectively meet their financial obligations and repay their loans (Nkwodimmah, Ikpefan, Osuma, Ndigwe, Okunade, & Ogabi, 2019). This evaluation encompasses various aspects, including the borrower's capacity to make timely payments, adhere to the agreed loan terms, and ultimately fulfill their repayment responsibilities. Through analyzing loan performance, lenders can gauge the borrower's creditworthiness and evaluate the overall soundness of their loan portfolio (Obae & Jagongo, 2022). A robust loan performance indicates a trustworthy borrower who fulfills their commitments, thus establishing a positive credit standing and reducing the likelihood of defaults or delinquencies (Karanja & Simiyu, (2022). In contrast, inadequate loan performance raises concern about the borrower's financial stability and poses risks to the lender's portfolio.

Consequently, the evaluation of loan performance assumes great importance for lenders as it enables them to make informed decisions and effectively manage their lending operations. Assessment of loan performance carries essential mantle in preserving the financial stability and profitability of lenders as per Mburu, Mwangi and Muathe (2020). By closely monitoring loan

performance, lenders can identify and address potential risks, ensuring the health of their lending operations. A strong loan performance contributes to a steady and reliable stream of interest income, while reducing the likelihood of loan defaults (Koskei, 2020). This, in turn, safeguards the lender's assets and maintains a robust and well-structured loan portfolio. As consequence, prioritizing the evaluation of loan performance, lenders can effectively manage risks, protect their financial stability, and maximize their profitability.

Loan performance is assessed using various metrics and operationalization. These include delinquency rates, which indicate the proportion of loans with overdue payments, and default rates, which track the percentage of loans that remain unpaid (Owich & Mutswenje, 2021). Furthermore, loan-to-value ratios, as well as debt service coverage ratios, and borrowers' credit scores are analyzed to provide additional insights into loan performance (Kabede, Tegegn, & Tafese, 2016; Omino, 2019). These quantitative measures enable lenders to evaluate loan performance, identify potential issues, and make informed decisions related to risk management, loan pricing, and portfolio management strategies. By utilizing these metrics, lenders can effectively assess and monitor the performance of their loan portfolios.

1.1.3 Debt Management Practices and Financial Performance

According to Oriloye, Adebogun and Oni (2023), debt has a profound impact on pecuniary performance, impacting various aspects of stability and success. Interest expenses reduce profitability, and debt servicing can strain cash flow, potentially leading to financial distress. Excessive debt increases financial risk, limits flexibility and growth opportunities, and affects creditworthiness and borrowing costs (Owich & Mutswenje, 2021). The structure of debt, industry dynamics, and economic conditions further shape its impact. Prudent management, evaluation of

debt levels, and finding a balance between leveraging and stability are crucial for optimizing financial performance.

Oriloye, Adebogun and Oni (2023) emphasize that despite the loans obtained over time, there is a noticeable discrepancy between the accumulated debt and the level of infrastructural development attained. In relation to credit management practices, Owich and Mutswenje (2021) discovered that factors such as character, capacity, capital, conditions, and collateral had limited effectiveness in ensuring loan performance compared to the utilization of third-party security. The study also highlighted the efficacy of periodic loan reviews in enhancing loan performance, with a positive and significant impact, in addition to the impact of collateral on loan performance.

Debt management involves the collaborative efforts of creditors and debtors to effectively handle debt. In contrast, debt performance signifies to the timely payment of loan interest and principal under a period of less than 90 days since the intended repayment date. While debt management focuses on ensuring timely debt clearance, debt performance adheres to banking regulations that specify the 90-day timeframe (Margaritis & Psillaki, 2010). Strategies employed in debt management include loan collateral, early identification of delinquency indicators, and periodic loan reviews to assess debtor's repayment capacity. Debt performance, in turn, relies on the implementation of effective debt management techniques within or after the 90-day period to recover the borrowed amount. The Kenya National Bureau of Statistics reported a positive trend in loan payment by commercial banks in Kenya, with a non-performing loan rate of 12.4% in 2019.

1.1.4 Deposit Taking Microfinance Institutions

DTMFIs in Kenya partake essential duty in offering financial services to those who lack access, particularly in rural and low-income areas. These institutions mobilize deposits from individuals

and offer various financial products, including loans, to meet the credit needs of micro-entrepreneurs and small business owners (Gatimu, Muturi, & Oluoch, 2018). In the context of loan performance and debt management practices, deposit-taking MFIs face unique challenges and opportunities. DTMFIs have a diverse and extensive history that can be traced back to the origins of the broader microfinance movement. The concept of microfinance emerged during the mid-20th century as a response to the limited access low-income individuals and micro-entrepreneurs had to formal financial services in developing nations. Early initiatives primarily focused on providing small loans to empower individuals and foster economic development at the grassroots level.

Over time, MFIs underwent a significant transformation, evolving into deposit-taking institutions to further enhance financial inclusion and address the varied needs of their clients. Traditionally, MFIs relied on external funding sources, such as donor grants or commercial borrowings, to finance their lending activities (Mutua, Jagongo & Simiyu, E, 2022). However, the introduction of savings mobilization and the ability to accept deposits from clients brought about a noteworthy shift in their operational framework. Several factors contributed to the evolution of deposit-taking MFIs. Firstly, it enabled them to reduce their dependence on external funding sources and establish sustainable financing by mobilizing savings from their clients. This enhanced their financial sustainability and diminished their vulnerability to external shocks. Secondly, this transformation facilitated greater financial intermediation, as deposit-taking MFIs were able to offer a broader range of financial products and services beyond microcredit. These offerings included savings accounts, insurance, and remittance services, resulting in a more diversified product portfolio that catered to the financial inclusion needs of underserved populations.

The transition of MFIs into deposit-taking institutions also necessitated regulatory changes. Governments and regulatory authorities acknowledged the importance of microfinance in promoting inclusive finance and economic development (Fundi & Wamugo, 2023). As a result, specific regulations and frameworks were established to govern the operations of deposit-taking MFIs, ensuring their soundness, transparency, and safeguarding the interests of consumers. While these regulations may vary across countries, they typically encompass requirements related to capital adequacy, risk management, reporting and disclosure, and prudential norms.

The impact of deposit-taking MFIs has been substantial in advancing financial inclusion and reducing poverty levels. By offering savings services, these institutions facilitate the accumulation of assets and the development of a financial safety net for individuals. Access to credit empowers micro-entrepreneurs to invest in their businesses, create employment opportunities, and improve their livelihoods. Furthermore, deposit-taking MFIs contribute to the formalization of the informal economy by channeling savings and investments into the formal financial system, thereby fostering economic growth and stability (Mutua, Jagongo & Simiyu, 2020). In the case of deposit-taking MFIs in Kenya, loan performance and debt governance practices are impacted by various factors. These include the socio-economic characteristics of the target clientele, the magnitude of financial literacy among borrowers, the quality of loan portfolio management systems, and the regulatory environment. Moreover, given the unique nature of microfinance lending, which often involves smaller loan sizes and higher transaction costs, deposit-taking MFIs need to employ innovative approaches to mitigate risks and ensure loan repayment.

1. 2 Research Problem

In the swiftly changing global economy of today, it's crucial for firms to enhance a forward-thinking mindset and develop robust strategies for effective debt management (Gatimu, Muturi & Oluoch, 2018). By doing so, organizations can navigate unpredictable circumstances, preserve their competitive advantage, and ensure their long-term viability. Actively monitoring loan performance and implementing sound borrowing practices are key to optimizing financial well-being and positioning companies for sustained success in a dynamic global marketplace. Additionally, it is crucial for firms to proactively assess their debt management strategies and loan performance. According to Scott-Clayton and Zafar (2019), regular evaluation enables companies to identify potential risks or inefficiencies in their approach and take prompt corrective actions. Therefore, maintaining vigilance and adaptability, companies can effectively respond to changing economic conditions and mitigate any adverse impacts on their financial stability.

According to Li, Chen, and Lin (2023), the long-term sustainability of an organization relies on maintaining a balanced and manageable level of debt. Excessive debt can strain cash flow, restrict investment opportunities, and impede growth prospects. Hence, it is fundamental for companies to assimilate rational borrowing practices, avoiding unnecessary debt accumulation and ensuring that borrowed funds are utilized efficiently for productive purposes. Alshatti (2015) emphasized the significance of implementing effective strategies for debt management in achieving established goals. This may involve negotiating with creditors to secure lower interest rates, extending repayment periods, or exploring debt consolidation options. Making consistent and timely payments is another crucial strategy to prevent additional penalties and late fees, which can further compound financial burdens.

Mamari, Al Ghassani, and Ahmed (2022) expedited an inquiry investigating kinship in the midst of risk management and fiscal activities of banks. Their findings revealed that risk plays a crucial role in determining the return on assets (ROA). In a separate study conducted in Italy, Branzoli and Fringuellotti (2020) examined the impact of credit monitoring on loan repayment. Their research demonstrated that monitoring significantly reduces the likelihood of delinquency, especially for loans subject to bank oversight, such as term loans. In another study conducted by Idris and Nayan (2016) in Southeast Asian countries, the authors concluded that debt monitoring has a noteworthy positive moderating significant on the correlation between NPLs and macroeconomic variables. Nevertheless, it's important to highlight that their research did not specifically focus on a particular deposit-taking microfinance sector, highlighting a research gap that needs to be addressed in the current assessment.

Based on Umar, Tanveer, and Aslam's (2012) findings, there is an inverse correlation between debt and company performance. Addae-Korankye (2014) pointed out that the factors cited by clientele as responsible for payment default may not be the primary rationales, suggesting that loan officers should prioritize these factors to reduce loan defaults. Nawai and Shariff (2013) concluded that; loan type, aggregate loan obtained, and scheduled repayment significantly impact loan characteristics. Their study revealed a strong association between defaulting borrowers and those who received larger total loans, indicating a higher likelihood of default. Omino (2019) coined that loan repayment behavior is influenced by borrower, lender, and loan traits, leading to loan delinquency or default. Koskei (2020) emphasized the adverse effect of NPLs in SACCOs and banks on financial stability, underscoring the importance of appropriate measures from perturbed firms to effectively govern and curtail their impact.

Previous international research and studies have primarily focused on countries other than Kenya, presenting different contexts compared to the Kenyan banking industry. These variations arise from differences in economic size and market concentration. As a result, implication from these inquiries may not be directly applicable to the Kenyan deposit-taking microfinance sector. Additionally, the local studies conducted in Kenya encompass a wide range of variables, making it challenging to establish a clear and direct interrelationship between the main variable of interest, debt management, and its impact on microfinance loan performance. Consequently, significant contextual, conceptual, and methodological gaps exist in our understanding of this relationship. Preceding analyses have predominantly concentrated on general capital structure of financial firms, rather than specifically examining the correlation between debt management practices and loan performance. Empirically, these gaps in knowledge and understanding serve as the foundation for the researcher's study, hence this study seeks to grant a resolution on what is the effect of debt management practices on loan performance of DTMIs in Kenya?

1.3 Objective of the Study

To examine the effect of debt management practices on loan performance of deposit taking microfinance institutions in Kenya.

1.4 Value of the Study

This assessment on debt management and loan performance holds immense significance for microfinance that operate in industries reliant on credit and lending. By examining the factors influencing debt management and loan performance, the study provides valuable insights that can directly impact the financial health and stability of these companies. The findings can help businesses optimize their debt management strategies, improve loan repayment rates, and mitigate

the risk of default. Furthermore, the study enables companies to make informed decisions regarding borrowing, interest rates, and creditworthiness. By leveraging the knowledge gained from this research, companies can enhance their financial resilience, reduce financial distress, and ultimately, achieve sustainable growth and profitability.

Findings of this assessment have significant repercussions for policy markets and regulatory bodies concerned with maintaining a stable and robust financial system. Policymakers can utilize the insights and recommendations provided by this research to develop and implement effective policies and regulations related to debt management and loan performance. The study's analysis of factors influencing loan defaults, debt restructuring, and financial distress can inform policy decisions aimed at promoting responsible lending practices, protecting consumers, and safeguarding the overall financial system. By incorporating evidence-based research into policy formulation, policymakers can foster a more resilient and sustainable lending environment, reduce systemic risks, and enhance economic stability.

This study holds substantial importance to the theoretical foundation of debt management and loan performance research. By investigating the factors that influence debt repayment behavior, loan default rates, and financial outcomes, this inquiry contributes to the prevailing corpus of knowledge under this domain. The findings expand upon and refine existing theories, models, and frameworks, offering a deeper understanding of the dynamics at play. The study's theoretical contributions may include new insights into behavioral finance, risk management, and credit evaluation. By advancing the theoretical foundation, this study paves the way for future research endeavors, encourages scholarly debate, and facilitates the development of more robust and comprehensive frameworks for analyzing debt management and loan performance.

This study holds significant importance as a reference for future research on debt management and loan performance. The research methodology, data analysis techniques, and findings presented in this scrutiny can serve as a benchmark for academicians seeking to explore similar topics or replicate the study in different contexts. Additionally, the study's comprehensive literature review and extensive referencing provide a valuable compilation of existing research and scholarly works on debt management and loan performance. Researchers can use these references to deepen their understanding of the subject, identify gaps in the current knowledge, and build upon the existing body of literature. The study's importance in referencing lies in its ability to guide and inspire future research endeavors, fostering the advancement of proficiency and acumen in the sphere of debt management and loan performance.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section is vital for conducting examination by contrasting prior presumptions, providing critical analysis, and deriving unique deductions through the theoretical framework. The study centers around the predictor variable that governs loan performance. Furthermore, a conceptual diagram is depicted to visually illustrate the anticipated associations. The model substantially contributes to enriching comprehension and broadening theoretical knowledge. Finally, the summary addresses critiques, identifies gaps in knowledge, and delivers a succinct synopsis.

2.2 Theoretical Framework

The theoretical framework serves as a lens through which the researcher examines the research problem, identifies relevant variables, and establishes connections and relationships between them. Within the theoretical framework, the theory proposed by Markowitz and Tobin (1959) highlights the importance of strategies and principles employed by governments, businesses, and individuals to effectively manage and control their debts. This theory acknowledges the significance of debt management in achieving optimal financial outcomes. Another relevant concept is the loan funds theory, established by Robertson and Ohlin (1930), which further explores the interrelationship between debt management and loan performance. Additionally, credit rationing theory, also known as the credit market imperfections theory, developed by Stiglitz and Weiss (1981), addresses economic concept that examines the likelihood of credit constraints in financial markets. Consequently, incorporating these theories into the theoretical framework, the study aims to

analyze and understand the influence of debt management strategies and credit market imperfections on loan performance.

2.2.1 Theory of Debt Management

This concept was advance by Markowitz and Tobin (1959). It asserts that both governments and businesses, along with individuals, adopt strategies and principles to efficiently control and handle their debts. The setting of this principle, different assumptions has been derived to give a background for developing and knowing strategies. Some of these assumptions are; The theory assumes that government, firms and even individual are rational when it comes to verdict making procedures. In addition, the theory assumes that business have access perfect information when it comes to rates of interest, terms of loans among others. In top of that, the concept of this theory assumes that the state of economic remains constant at the time of debt management.

Debt management theory has some limitations. Firstly, the theory faces setback on the individual variability since the theory assumes that businesses with individuals are homogenous as well as rational when it comes to verdict making but businesses with individuals differs in regards to financial status (Guo & Seaman, 2011). Moreover, human characters can importantly alter debt management verdicts. Additionally, the theory faces a challenged as a result of events are not predictable as well as unexpected that may include medical urgency. The assumption of perfect information in regard to options of borrowing is unrealistic.

Despite this theory having above limitations, it has merits also more so when it come to this investigation. Foremost, this theory grants strategies with guidelines that assist businesses,

government together with individuals to attain financial stability. Moreover, the theory also enhances borrowers to come up with healthy strategic decisions in respect to borrowing, repayment and fiscal planning (Faraglia, Marcet & Scott, 2010). Further, utilization of this theory can result to reduction of cost on debts. This theory also aids in enhancing creditworthiness through effective debt governance.

2.2.2 Loanable Funds Theory

It is imperative to state that loan funds theory is another concept employed this assessment. The doctrine of this principle was established by Robertson and Ohlin (1930). The concept of this theory elaborates the responsibilities of financial firms in the phases of developing and supplying funds in economy. The setting of this theory is based on a number of assumptions that grants basis for knowing the activities of creation of money and banks' role. The loanable funds theory assumes that financial firms are willing and able to gives loans to borrowers. This theory further assumes that the business, individuals and governments borrowing money are able and willing to repay the loaned amount. Furthermore, this theory always has assumption of stable economic status.

The loan funds concept has particular setback that are need to be taken into account. This theory assumes that central banks have full control on funds supply by their impact on bank lending and reserve needs. However, other attributes such as non- bank fiscal institution together with worldwide financial flow, can affect overall funds supply. Further, the theory assumes existence of sufficient loan demand by borrowers, but in reality, loan demand varies depending on economic status (Bertocco & Kalajzić, 2023). The loanable fund theory assumes that banking institution

effectively examine borrowers' worthiness and come up with prudent lending verdicts, yet, imperfect information and conflict of interest can influence the credit examination accuracy.

In spite of above challenges face by the loanable fund theory it has merits. The loan fund theory assists in explaining how rate of interest play a vital duty in coordinating allocation of saving and investment in economy (Bertocco, 2013). This theory further aids in determination of interest rates through demand and supply of loanable money. In addition, the concept of this theory assists in allocation of resources effectively in a state of economy. the cost of borrowing. In top of that the loan fund theory grants insights for makers of policies through insisting the significance of rate of interest stability together with facilitation of saving and investments in enhancing growth of economic.

2.2.3 Credit Rationing Theory

Credit rationing theory is also called credit market imperfections theory. This a theory of economic which shows the probability of credit constraints in financial market. This theory was established by Stiglitz and Weiss (1981). This principle is found based on different assumptions. The theory is established on grounded supposition of asymmetric information amid borrowers and lenders. Moreover, the theory assumes that borrowers have different class of creditworthiness as well as risk. Furthermore, the theory has assumption that credit markets are not perfect and do not work perfectly efficiently. In top of that the concept of this theory assumes that borrowers together with lenders makes decisions rationally and strategically.

This theory has several limitations. Foremost, the theory depends on oversimplified assumptions regarding to credit market and attributes of borrowers and lenders. Furthermore, the theory presumes that lenders have imperfect data around borrower's creditworthiness, yet it does not take into account for possibility of improvement in data sharing in credit scoring approach. In addition, this theory cannot fully take into account the adaptive of credit market (Del Angel & Xu, 2023). Moreover, the theory assumes that lenders of funds can accurately examine the credit risk of business or individual borrowing but in reality, it is not possible.

In spite of the above challenges, credit rationing is crucial to this study in regards to below merits. The setting of this theory gives an explanation on states where credit market fails to efficiently share credit as a result of frictions. This logic is of big merit as result of showing the need of intervention to attend credit market friction as well as imperfections through policy implication. This theory goes along with various empirical observation in real world economic setting. This theory further recognizes the variety of borrowers in terms of risks and creditworthiness degree (Antoine, Stanislas & Gustave, 2021). Lastly, this theory complements other theories that include loanable funds theory, by giving distinguish lens to examine credit markets.

2.3 Determinants of Loan Performance

The ability to generate increased returns for shareholders is mirrored in the loan performance of microfinance institutions and banks. Attaining a high-quality loan performance is achievable through effective and extensive utilization of investments, loan repayment, assets, human capital, innovation, and research. Overcoming various challenges is essential in order to attain exceptional product quality, establish a positive reputation, and achieve outstanding loan performance. The

business operates within a framework of diverse standards, policies, and strategies that aim to improve its overall functioning. Loans play a pivotal role as they serve as a vital metric for measuring efficiency, sustainability, and dependable repayment, thereby significantly contributing to the overall financial well-being of the organization. Arbitrarily, this research considers debt management practices as a critical factor in achieving high-quality loan performance. Specifically, credit rationing, debt budgeting, debt structure, credit monitoring, and debt analysis are explored.

2.3.1 Credit Rationing

Credit Rationing is one of the fundamental elements in this investigation. Credit rationing is state in which lenders are not willing to advance more funds to borrowers at usual market rate of interest. Obae and Jagongo (2022) explored credit governance activities and loan performance particularly on commercial banks. As a consequence, outcomes from the exploration portrayed that credit rationing has positive effect on loan performance. Moreover, the rise in unitary loan rationing results in the improved loan performance. Jerono and Olweny (2023) investigated fiscal hazard management activities on performance of MFIs in Kiambu County. As a subsequent, assessment discovered that liquidity risk administration tasks have important and positive significant on the pecuniary performance. In addition, Beck (2019) explored Small and Medium Entities in Ghana. From this evaluation, it was uncovered that undeforming credit ratio for the medium sized entities is greater in Africa more than other continents.

2.3.2 Debt Budgeting

Debt budgeting is another significant determinant in this assessment. Debt budgeting is the phases of planning and governing debt- associated costs within the total budget framework. This activity included setting and controlling debt- associated objectives, computing relevant level of debt and

coming up with strategies to effectively administer and repay loan. Karanja and Simiyu (2022) explored the credit management acts and microfinance entities loans' performance in Kenya. The assessment found out that client assessment and credit hazard administration have great influence on the microfinance banks.

Performance of loans imply to earnings return rate in various advances. In this case, it examines the number of clients is seeking for credit, amount loaned, loan product amount on chain and arrear rate recovery (Chernykh and Theodossiou, 2015). In addition, good quality credit is the one that gives the satisfaction to the bank's quest to fully utilized profit and has lower default risk also (Asiamah and Osei, 2016). As per above empirical observations it shows that debt budgeting is key to the debt management practices and loan performance.

2.3.3 Debt Structure

Debt structure is the content and attributes of firm's debt obligation. This entails different aspects that includes the kind of debt instruments utilized, profile of maturity, rates of interest and collateralization. Stiglitz (2018) examined SMEs with chances to capitalize in positive NPV projects. However, moral risks setbacks are linked with the capacity of SMEs diversifying money available to them to fund alternative activities to greater risk as result of pervasive incentive structure in the network.

Furthermore, Karabulut and Bilgin (2020) executed an examination on the influence of the non-limited deposit insurance on NPLs together with market discipline. Therefore, it uncovered that government in various advanced together with improving economies demonstrated deposit

insurance schemes for lowering risk of systematic failure of commercial banks. Furthermore, Nawai and Shariff (2012) investigated the element influencing the repayment behavior in microfinance entities. This assessment was built on regards to four elements; firms' factors, loan factors, individual forces and lender factors. The findings from this investigation showed that loan type, total loan received and repayment time are loans attributes factor that statistically important.

2.3.4 Credit Monitoring

Credit monitoring is the process of checking and managing the loans. A number of studies has been executed on this and various outcomes has been revealed. Foremost, Owizy (2015) explored the results of terms of credits on loan performance of Nigerian banks. This was in particular respect to UBA bank, in Nigeria. Implications from this investigation showed that credit terms have a crucial and significant impact on loan performance. Gizaw (2016) executed investigation also on influence of credit terms on banks' loan performance.

Utilizing data amid 2014 and 2015 from annual fiscal statements from particular commercial entities together with Ethiopian National bank, Kabede, Tegegn and Tafese (2016) aimed to delineate critical knowledge to enhance understanding loan performance. The data collected was evaluated and findings showed that credit loss provision, non-performing credit, adequacy capital with credit terms have important effect on loan performance of the banks. Additionally, Karanja and Simiyu (2022) executed an evaluation on the credit management acts and loan performance. This assessment aimed at microfinance banks in Kenya. From the assessment it was established that credit status and credit risk management is of great importance to loan performance.

2.3.5 Debt Analysis

Debt analysis and loan performance are interconnected aspects within the realm of financial evaluation and management. Debt analysis involves a comprehensive assessment of an entity's borrowing activities, including the amount of debt incurred, the terms and conditions of the loans, and the overall debt structure. Moreover, loan performance is evaluation of how well loans are being managed and repaid by borrowers. Interconnection between debt analysis and loan performance is symbiotic and mutually influential. Debt analysis provides insights into the borrowing practices and financial health of borrowers, which can impact loan performance (Scott-Clayton, & Zafar, 2019). By conducting a thorough debt analysis, lenders and financial institutions can assess the creditworthiness of borrowers, determine the risk associated with lending, and make informed decisions regarding loan approval and interest rates.

Debt analysis helps identify potential red flags and risk factors that may affect loan performance. It enables lenders to evaluate the borrower's ability to service the debt, including assessing their income, cash flow, collateral, and credit history. This analysis allows lenders to make informed judgments about the likelihood of timely loan repayments and the overall financial stability of the borrower. Furthermore, ongoing debt analysis plays a vital role in monitoring loan performance over time (Mutua, Jagongo & Simiyu, 2020). By tracking key financial indicators and metrics, such as debt-to-income ratios, debt service coverage ratios, and payment histories, lenders can assess the borrower's capability to attain loan duties. This analysis provides valuable information to identify early signs of financial distress or default risk, allowing lenders to take proactive measures to mitigate potential losses.

Conversely, loan performance data contributes to debt analysis by providing real-world insights and empirical evidence. By analyzing the performance of existing loans, lenders can refine their debt analysis models and criteria, identify trends, and make adjustments to lending practices. Loan performance data helps lenders understand the factors that contribute to successful loan outcomes and those that lead to defaults or delinquencies.

2.4 Literature Review

Karanja and Simiyu (2022) conducted an assessment on credit management activities and microfinance Banks' loan performance. The main focus on this scrutiny was to determine manner credit management activities impact loan performance of banks in Kenya. Furthermore, the research aimed at 13 microfinance institutions. As a consequence, primary data in addition to secondary data were engaged. Collection of primary information was gathered using questionnaires whereas secondary data was sampled from banks and CBK fiscals' statements. The collected information was examined by statistical mean together with standard deviation, moreover as well as linear regression approach was also engaged. Inquiry established that policies of credit, client examination, collection policies, credit status and credit risk management were all large proceed exhibition of banks in republic of Kenya. The examination targeted Microfinance Banks in Kenya whereas the current assessment only targets Deposit taking Microfinance entities in Kenya.

Obae and Jagongo (2022) examined the credit governance activities and loan performance in Kenya. The research majored on commercial banks between 2018 and 2020. The center point of this assessment was to verify how credit management practices impacting the banks' loan performance. The assessment engaged 38 commercial banks using descriptive survey as research

design. Primary plus secondary entails were collected by questionnaire and document review respectively. The collected information was scrutinized by maximization of SPSS. As result of examination of gathered information, the research established that performance of commercial Bank's loan was firmly connected with the efficiency in Credit Management activities.

Jerono and Olweny (2023) conducted an assessment on the financial hazard management acts and fiscal performance of microfinance entities. The investigation aimed at firms in Kiambu County, Kenya. The assessors used descriptive survey as design of the research and an aggregate number of 31 quoted microfinance firms operating the County of Kiambu. A total number of 155 respondents were sampled from units such as; Hazard and Compliance, Finance, Operations unit, Credit unit plus Business Development unit. In addition, secondary and primary information were employed in the investigation where by 5-point Likert Scale questionnaire was maximized to collect primary dataset. Furthermore, comprehensive information from historical dataset was collected using secondary data gathering sheets. Both inferential and descriptive data were analyzed by usage of SPSS. The outcomes showed that risk management acts have important effect on pecuniary performance of the microfinance's enterprises in Kiambu, Kenya. The study only focuses on a single county in Kenya and thus discoveries cannot be fully maximized to remain 46 counties in Kenya and thus there is need of the current assessment which cut across the nation.

In their quantitative research, Mamari, Al Ghassani, and Ahmed (2022) conducted an investigation into the association between practices related to the management of risks and the pecuriary performance of banks. The scholars sourced secondary data from yearly reports of 8 banks listed on the Muscat Stock Exchange (MSX) and employed SEM with PLS Software to examine data. The outcomes of the computation unearthened a positive and noteworthy correlation between risk

management practices and the capacity to mitigate risks. Moreover, they emphasized a substantial connection amid risk management and ROA, unveiling that the adoption of effective risk management techniques significantly impacts the overall performance of banks. However, research did not uncover a statistical material interrelationship in the midst of risk management and ROE.

In their research study, Muthoni, Mwangi, and Muathe (2020) examined the correlation amid credit management activities and loan performance. The epicenter of the investigation was commercial banks operating in Kenya. Importantly, primary objective was to evaluate the influence of debt gathering terms, customer assessment, as well as credit terms on loan performance of these banks. Additionally, assessment was guided by the well-known 5Cs model for credit evaluation. Adopting a positivist research philosophy, the researchers employed an explanatory research design to collect and analyze dataset. Scrutiny made valuable utilization of census population by concentrating on 44 commercial banks in Kenya. Dataset were garnered empirically through structured questionnaires while historical data was generated from bank loan registers and archives spanning a four-year period from 2015 to 2018. Descriptive and inferential statistics, supported by SPSS version 22, were employed to scrutinize data. The discoveries demonstrated that debt collection policy in addition to lending policy recorded favorable and substantive impact on loan performance in commercial banks. However, the assessment did not identify a significant influence on client appraisal on loan performance. Consequently, analysis finalized that the effectiveness of credit management practices implemented by commercial banks played a critical role in determining their loan performance.

Nkwodimmah, Ikpefan, Osuna, Ndigwe, Okunade and Ogabi (2019) examined the management of loan together performance of sampled microfinance institution in Nigeria. The key reason for this assessment was to determine how loan management acts influence the performance of the Banks. The study took into account 5 institution between 2012 and 2016 using panel data. Further, the evaluation used the panel fixed impact, ordinary least square regress with panel random influence to evaluate the level of influence. The outcome from the analysis showed that loan administration has noteworthy influence on performance of the sample MFIs in Nigeria. The assessment was expedited in Nigeria whereas the present assessment is in context of Kenya.

Further, Olunuga and Akinrodoye (2022) spearheaded an exploration on financial management acts and performance of banks. In addition, it aimed at Deposit Taking Banks in Nigeria, the main focused on this evaluation was to establish how fiscal administration acts affect the performance of deposit money banks. The assessment used panel data and sector analysis to check the financial performance with sustainability. The panel data was explored by statistical technique and it uncovered that financial management has impacts on the banks' performance. The study was conducted in Nigeria; thus, findings cannot be fully engaged in Kenyan economic settings due to difference in economy status.

Kabede, Tegegn and Tafese (2016) conducted an inspection in Ethiopia. Therefore, review aimed at analyzing and outlining the main element that determine loan repayment performance of SME and establish setbacks of MFIs in Dawuro and Wolaita region. The assessors used descriptive research approach with both quantitative and qualitative models. Additionally, the evaluation employed multiple stage probability sampling approach. Around 300 sample participants were highlighted by maximizing simple random sampling approach. Assessment uncovered that most

of the defaulters were offer lower loan that their request in association to those of non-defaulters. This assessment took place outside Kenya thus findings cannot be generalized.

Nawai and Shariff (2013) examined the performance of repayment in microfinance activities. The evaluation used both techniques comprising the quantitative mechanisms together with qualitative data by questionnaire survey, interviews, unpublished and published statements. The information for the research were collected from 401 respondents by multiple stage random sampling in Peninsular Malaysia. Furthermore, the dataset was examined using descriptive analysis with multinomial logit approach. The outcome from the investigation showed strong influence in the association amid default and good borrower in which the larger amount loan received by borrowers, the bigger probability of default by the borrowers. This research was conducted in Malaysia a developed country thus findings cannot be fully used in developing nation like Kenya.

Mendoza and Rivera (2017) did an investigation seeking to established association amid credit risk with capital adequacy and profitability. Further, it targets at Rural Banks in Philippines. This assessment conducted an investigation on 28 Philippines' rural banks and further the research employed ROE and ROA to evaluate bank's performance. The outcomes showed that credit hazard has adverse on ROE and ROA which were statistically not relevant. However, there was negative but mathematically crucial impact on final profit after tax. The outcome from the investigation cannot be used for the fiscal firms in other nations, more so in Kenya.

Addae- Korankye (2014) studied sources and management of loan default, defiance in microfinance firms in Ghana. The investigation examined 25 Microfinance firms in Accra, Ghana. Moreover, the assessment maximized the multi-regression approach to explore collected data. The findings from the investigation showed that default in loan by customers are caused by different

factors. The customers have different elements whereas loan officers who were on field has different elements. This study focused on the causes of loan default whereas the current study aimed at researching the impacting debt management acts on loan performance amidst Deposit Taking Microfinance firms.

Darshan and Yogashree (2019) examined the effects of liability of asset management on fiscal performance. The research focused on Axis Bank in India. The study engaged secondary data with analytical research technique. Further, correlation together with regression analysis model were maximized to established association and findings of asset liability mix on fiscal performance of the Bank. The findings showed that axis bank is stripped to changing rates of interest, facing liquidity setbacks for short-term. This study was conducted in India whereas the current assessment in carried out in Kenya.

Mburu, Mwangi and Muathe (2020) carried out a study on credit management acts and loan performance. The period of the study was between 2015 and 2018, a span 4 of years. The primary focused of the assessment was to pinpoint impacts of credit management exercises on performance of banks in Kenya. Accordingly, research optimized census population to reach conclusive outcome. Subsequently, 44 banks were analyzed via utilization of primary and past-recorded data. Primary data was generated via well-structured questionnaires with the credit management acts in the other side secondary data was sourced from bank loans reports. The collected data was scrutinized by SPSS. The study established that performance of commercial banks' loan was greatly accredited to efficacy of credit management acts install by firms. This assessment was passed on commercial banks in Kenya conversely, the present engagement is in regard of microfinances organization in Kenya, specifically deposit taking entities.

2.5 Conceptual Framework

The conceptual model plays a pivotal role in elucidating the objective. It serves as a unique analytical tool with various iterations. Notably, it elucidates the holistic view, organization of ideas, and facilitates understanding. This visual representation provides a detailed explanation of the cause-effect relationship. Typically, it offers a snapshot of the link amid the explanatory and explained elements before undergoing multiple calculations and data analysis to validate or challenge the hypothesis. The framework is indispensable for providing accurate descriptions. Moreover, it outlines a step-by-step process that assists in examining and reaching conclusive results. Hence, the criteria are pre-established to ensure verifiable outcomes. In summary, it encapsulates the coherence with the objective, impact, and significance. By integrating the predictor with the predicted variable, it narrows down concepts to address the research problem.

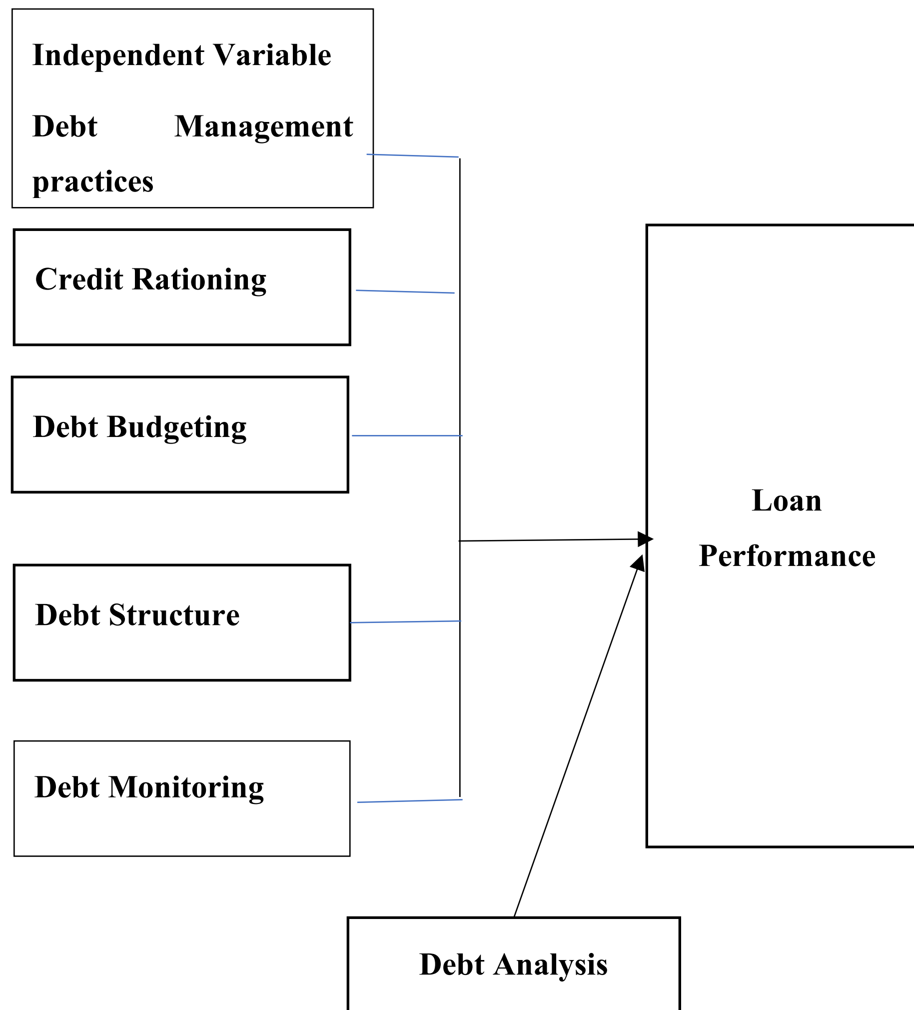

Figure 2.1: Conceptual Model   Source: Author, 2023

2.6 Literature Review, Critique and Research Gaps

Empirical reviews indicated the outcome that is mixed and inconclusive. This is because of different context, concept and techniques of assessment. Building of this study is prompted by the preceding assessment. The regional, global and localized studies have heightened debt

management practices and loan performance. However, multiple concepts have been assessed hence diverting from the debt management practices and performance. It is worthwhile exemplifying that contradicting outcomes calls for special examination of debt management practices to delineate new knowledge under the local context. Globally and Regionally, Mamari, Al Ghassani, and Ahmed (2022) concentrated risk management banks operational under stewardship and quoted in Muscat Stock Exchange. Assessment concluded a material connection in the midst of risk management and the ROA in Nigeria. On top, Olunuga and Akinrodoye (2022) spearheaded a study on financial management with interrelation to the banks' performance while Kabede, Tegegn and Tafese (2016) expedited a scrutiny on determinants of loan repayment performance. Conversely, Nawai and Shariff (2013) scrutinized degree of repayment in Malaysia while utilizing multiple stage random sampling. However, examination concluded on a strong interrelationship between loan default and performance. In Philippines, Mendoza and Rivera (2017) concluded that credit hazard has adverse on ROE and ROA which were statistically irrelevant.

Karanja and Simiyu (2022) delved into credit management practices hence dissimilar to the current examination. Moreover, Obae and Jagongo (2022) scrutinized credit management techniques in conjunction to the loan performance under commercial banks' set up while the prevailing examination is concentrating on deposit taking microfinance institutions. On the other part, Jerono and Olweny (2023) concentrated extensively on financial hazards among the microfinance entities in Kiambu County which cannot be generalized to represent deposit taking microfinance due to their differing characteristics, policies and mode of operations. Localized examination has delved immensely on credit management with minimal assessment of debt management under the context of deposit taking microfinance. This ongoing and sparking debate on connection emanating from

the loan performance and debt management practices calls for more studies to reach a conclusive outcome. Additionally, different methodologies have been applied previously relating to the population chosen, timeframe and data analysis methods hence causing mixed outcome.

In addition to facilitating topic refinement and examining the knowledge gap, it is crucial to possess up-to-date knowledge that keeps pace with the rapid developments in debt management practices. The summary highlights the deficiencies in existing literature, critiques empirical findings, explores patterns and trends, identifies areas where this study contributes new frameworks and theories, and underscores the significance of analyzing loan performance. The summary of findings and organizational structure varies, and a comprehensive examination of DTMIs is highly valuable.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This segment offers a comprehensive elucidation of the employed research methodologies. It delineates the selected research design, whether it is experimental, observational, qualitative, or quantitative, and substantiates its appropriateness in addressing the research aims. The chapter specifies the study population implemented, further expounding on the utilized data collection techniques, such as surveys, interviews, or document analysis, while highlighting the measures taken to guarantee data quality and ethical considerations. Additionally, the chapter delineates the employed data analysis methodologies and tools, encompassing statistical or qualitative analysis techniques, and accentuates their alignment with the research objectives. Finally, it explicates the presentation of data, encompassing the format, organization, and accompanying supplementary materials.

3.2 Research Design

As per Singh, Misra, Kumar and Tiwari, (2019) research design in essential for explaining causal-interrelation. As a consequence, research design denotes the overarching plan or approach that is a roadmap for this assessment. It provides a framework for assembling, analyzing, and construing data with objective to address evaluation aims and answer research inquiries. The chosen research design determines whether the study was experimental, observational, qualitative, or quantitative, and establishes a systematic and rigorous methodology. For this evaluation, a descriptive research design was optimized, as it seeks to reveal common features within a specific population or subjects, in accordance with the guidance provided by Bryman and Bell (2015). This chosen methodology is relevant to this assessment as it enables the exploration of individual viewpoints

and beliefs, allowing for an examination of the relationship between the situation and the target population.

Therefore, employing this approach, a comprehensive understanding of the population's attributes and their correlation with the research topic was achieved. A well-defined and appropriate research design is crucial as it ensures reliability, validity, and generalizability of the investigation’s outcome (Mugenda & Mugenda, 2013). It allows researchers to address their research questions effectively and draw meaningful conclusions from the data. Moreover, a clear research design facilitates transparency, replication, and the advancement of knowledge in respective field of study.

A quantitative descriptive research design focuses on observing and measuring objectively observable phenomena to provide a detailed understanding of their characteristics. Researchers collect numerical data from a representative sample using standardized measures and analyze it using statistical methods to generate descriptive statistics. This design allows for the objective description and identification of patterns or trends within the phenomena. It is valuable for obtaining a comprehensive understanding of variables' prevalence, distribution, and relationships within the target population.

3.3 Target Population

The research scrutiny places substantial importance on the study population, recognizing its crucial role in both data assemblage and computation. The selection and inclusion of the population are critical to ensure the relevance and generalizability of the findings (Gatimu, Muturi, & Oluoch, 2018). In this research, a comprehensive survey was conducted using a census method, targeting

fourteen DTMFIs in Kenya in 2022. By including the entire population of DTMFIs, the study aims to offer an extensive and representative understanding of the phenomena under investigation.

To ensure the accuracy and appropriateness of measurement, the research conducted a rigorous calibration of the elements involved. This calibration process involves determining the most suitable operationalization metrics that align with the research objectives. In this context, the research drew upon various sources of data. Secondary data from the CBK was effectively utilized, providing a valuable foundation for the analysis. Additionally, the research handed questionnaires to staff members of the microfinance organizations to gather additional pertinent information. Hence, by employing these data compilation techniques, the experimentation aims to achieve a comprehensive and multi-faceted apprehension of the research subject, enabling meaningful analysis and interpretation of the findings.

3.4 Data Collection

Data collection is a vital component of the present study, as it enables the acquisition of crucial information through various methods and procedures. The scope of data collection is comprehensive, encompassing multiple facets such as debt management and loan performance. This inclusive approach ensures a holistic understanding of the subject matter, allowing for informed decision-making and effective problem-solving (Alam, 2021). The primary methods employed in this study, including surveys and questionnaires, served as the principal sources of data. Additionally, secondary information was obtained from published financial records of carefully selected MFIs in Kenya. These diverse sources of data provide a robust foundation for analysis and facilitate a comprehensive exploration of debt management practices and related factors.

Questionnaires play a crucial role in gathering critical information related to debt management practices (Nobanee & Dilshad, 2021). By utilizing questionnaires, the study can directly obtain insights from individuals and organizations involved in debt management and loan performance. This method allows for the aggregation of quantitative and qualitative dataset, enabling a deeper understanding of factors influencing debt management strategies, challenges faced by borrowers, and the impact of loan performance on financial institutions. The use of questionnaires ensures standardized data collection across respondents, enhancing the reliability and comparability of the findings. Accordingly, combining primary and secondary data sources, the study can generate a comprehensive and well-rounded analysis of debt management practices, furnishing the existing knowhow base and providing invaluable landmark for stakeholders in the realm of microfinance in Kenya.

3.5 Data Analysis

The gathered data underwent vigorous evaluation to guarantee its comprehensiveness, after which it was edited, coded, and classified for the purpose of analysis. The investigation made use of the collected data to establish a linear correlation between debt management practices and loan performance. To examine whether there is a noteworthy impact of debt management activities on the performance of MFIs in Nairobi, a linear model was employed. The questionnaires served as essential tools in obtaining pertinent information, leading to definitive outcomes and findings. In order to derive a conclusive result, the dataset was computed using SPSS.

Data computation is a roadmap for exhaustive outcome. It converts the raw dataset to material and understandable insights. It maximizes the statistical and analytical techniques while uncovering the patterns, relationships, and trends within the data, enabling a deeper comprehension of the

phenomena being studied. It encompasses meticulous data cleaning, exploration, and modeling, followed by result interpretation to draw accurate inferences (Saunders, 2023. Through data analysis, researchers can make sound judgements, validate hypotheses, identify significant outcome, and furnish with knowledge and information in their respective fields. Whether in scientific research, business analytics, or social sciences, data analysis fundamentally unlocks hidden potential within data, guiding evidence-based decision-making and fostering progress (Resnik, 2023).

3.5.1 Diagnostic Tests

To ensure reliability and validity of the outcomes, this evaluation addressed several statistical considerations. Importantly, the measurement reliability was enhanced by carefully defining and operationalizing variables such as debt management practices and loan performance using standardized criteria. This approach reduces measurement errors and promotes consistency in data collection procedures. Furthermore, the study assessed multicollinearity among predictor variables to identify and address high correlations (Signh & Signh, 2022). Techniques like VIF examination was employed to determine the independent contribution of each predictor variable in the statistical models.

Furthermore, autocorrelation, which reflects the correlation between error terms in a time series analysis, was examined to assess the independence of observations. To detect and account for autocorrelation, methods such as Durbin-Watson tests or autocorrelation function (ACF) plots were utilized (Abeer, Abd & Youssef, 2022). Lastly, the normality of data distribution was evaluated to ensure the fulfillment of statistical model assumptions. This involved techniques such

as Shapiro-Wilk tests, as well as visual inspections of histograms and normal probability plots. If the data deviate from normality, appropriate transformations or non-parametric tests were considered.

Through the careful consideration of these statistical aspects, the study aims to enhance the reliability and validity of the findings while minimizing biases. By implementing robust statistical analyses, the research can provide reliable insights into the interconnection between debt management practices and loan performance. In this scrutiny, specific statistical considerations were addressed to ascertain validity as well as reliability of the inferences. When multicollinearity violates the predetermined criteria, the study dropped the most highly correlated variable to mitigate the issue (kosack, Page & Klatser, 2017). Moreover, if autocorrelation tests indicate a departure from the established assumptions, additional computations was conducted using Breausch Godfrey tests to account for this effect. Lastly, if there are indications of non-normality in the data distribution, further investigation was carried out using graphical techniques to assess the nature and extent of the deviation.

Consequently, attentively addressing these statistical considerations, the study aims to strengthen the trustworthiness and accuracy of the findings. Making appropriate adjustments based on multicollinearity, autocorrelation, and normality analyses ensured robustness in the statistical modeling and enhance the reliability of the results.

3.5.2 Empirical Analysis

In this exploration, assemblage of qualitative plus quantitative datasets were spearheaded. For that reason, analyzing the numerical data, the researcher employed descriptive statistics analysis. The quantitative data was input into the SPSS program for analysis. Therefore, exhaustive outcome through descriptive together with extensive inferences via inferential statistics were generated. The use of SPSS is deemed fitting as it provides a perceptible set of quantitative dataset computation procedures. In consequence, it heightens validity and reliability of the data while establishing correlation between the research variables. Descriptive analyses was used to calculate measures of central tendencies and variability, allowing for the examination of how predictor variables impact the regressed variables.

This process is particularly valuable when dealing with large datasets that contain numerous potential predictors. Multiple regression scrutiny was employed to quantify the strength of link amidst the elements and study the factors of debt management and their effect on loan performance in commercial banks. The regression model used followed a specific form. In consequence, employing these statistical analysis techniques, the study aims to provide a comprehensive understanding of the relationships between variables and effect of explanatory variables on the explained variable. The combination of descriptive and inferential statistics allowed for a thorough examination of the data, granting researchers to visualize consequential conclusions and reach profound proposals grounded on the findings. Therefore, it is summarized as;

$$Y=\alpha_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+\varepsilon$$

Whereby:

Y= Loan Performance

α_0= y Regression intercept (constant variable)

X_1= Credit Rationing (Likert Scale)

X_2= Debt Budgeting (Likert Scale)

X_3= Debt Structure (Likert Scale)

X_4= Credit Monitoring (Likert Scale)

X_5= Debt Analysis (Likert Scale)

ε= error term α

β_1, β_2, β_3 and β_4 = regression coefficients that are estimated

Ɛ = error term or disturbance term

3.5.3 Test of Significance

Researchers employ various statistical techniques for crucial tests, such as ANOVA, T-tests, and F-tests. These tests examine the directional movement, magnitude, and strength of the relationships being analyzed. A significanc extent of $P \leq 0.05$ is commonly used to define statistical significance, while $P > 0.05$ denotes statistical insignificance. Arbitrarily, utilizing significance tests, researchers can objectively evaluate the strength and reliability of their findings. These tests allow for the assessment of the statistical significance of observed effects or relationships, supporting or refuting research hypotheses and enabling meaningful conclusions to be drawn from the data.

Significance tests are crucial for statistical analysis in research studies. They help determine the statistical significance of observed differences or relationships in the data, indicating whether the outcomes are likely due to chance or portray a true effect or relationship in the population being studied. A p-value below a predetermined significance level (often 0.05) suggests statistically significant results, indicating that the observed data is unlikely to occur by chance alone. Conversely, a p-value above the significance level indicates statistically insignificant results, leading to the retention of the null hypothesis.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

The section presents an outline of the analysis of data sourced, the breaking down of the key results and finally the discussion of these results. Primary data was utilized by the study. The entails was sourced by structured questionnaires that were administer to the respondents and later collected, cleaned and coded ready for analysis. The results are outlined in terms of inferential and descriptive statistics. The inferential statistics entail model summary, ANOVA as well as the regression coefficients. The descriptive statistics are outlaid in approach of means, standard deviation and frequencies.

4.2 Response Rate

The assessment contacted a total of 98 respondents. Thus, 98 questionnaires were administered to the 14 firms out of which, 82 questionnaires were answer and received back. This reflect response rate of 83.7 percent. This rate of response is sufficient for a research study.

Table 4.1: Response Rate

	Frequency	Percent
Response	82	83.7
Non Response	16	16.3
Total	**98**	**100**

4.3 Demographic Information

Demographic information involves the information that relates to the respondents as well as the deposit taking SACCOs under study. This study sought to analyses the number of years the respondents had been working at their deposit taking SACCOs. The discoveries are outlined in Table 4.2.

Table 4.2: Years of Service at the SACCO

	Frequency	Percent
0 - 6	24	29.3
0 - 7	32	39
14 and more	26	31.7
Total	82	100

4.4 Descriptive Statistics

Descriptive statistics are significant as they provide the explanations of attributes of the dataset. The descriptive statistics entailed the means, standard deviation as well as percentages. Primary data was utilized in assessment and was collected using questionnaires as the main data collection instrument. A Likert scale was used to collect responses from closed ended questions. The values of the scale ranged from 1 to 5 with 1 representing Strongly Disagree (SD), 2 for Disagree (D), 3 for Neutral (N), 4 for Agree (A) and 5 for Strongly Agree (SA). In the interpretation of these responses, the study calculated the mean response of each of the statements. A mean of 1 implied that the responses were largely in strong disagreement, mean of 2 implying that the responses were largely in disagreement, mean of 3, responses were neither in agreement or disagreement, mean of 4, the responses were largely in agreement and finally mean of 5 implying that the responses were largely in strong agreement. The descriptive analysis was done according to the variables in the study.

4.4.1 Credit Rationing

The section outlines the descriptive results of credit rationing in attribute of frequencies, mean and standard deviations. From the results, the question, we have greater understanding of credit rationing in our firms, recorded responses as follows; 40.2% of the responses were in strongly in concurrence, 20.7% in tandem while 26.8% neutral with a mean of 3.9 and a corresponding SD of

1.1 implying that on average, the responses were in agreement. Furthermore, 24.4% of the respondents further agreed that the availability of credit is reliance on several thresholds for the client, 26.8% were undecided and 37.8% strongly agreeing with a mean and SD of 3.9 and 1.1 respectively.

Regarding the question, very risky loans are highly rationed based on expertise recommendations, 53.7% of those contacted did strongly agree, 19.5%, agreeing whereas 19.5% were undecided with a mean of 4.2 and an SD of 1.0. With an average of 4.1 and SD of 1.1, 22.0% of the responses were in agreement that extent of credit rationing experienced by borrowers influences the outcomes of their loans. Furthermore, 47.6% were strongly in tandem while 22.0% did not take sides. Finally, 41.5% of the responses were in strong agreement that continuous identification of the indicators of credit rationing helps assess the potential risks and benefits associated with loan performance. However, 14.6% were in agreement and 25.6% neutral with a mean of 3.8 and an SD of 1.2. As a consequence, the comprehensive findings are outline in Table 4.3. to shed more light on the study.

Table 4.3 Descriptive Results for Credit Rationing

	SD %	D %	UN %	A %	SA %	M	S Dev
We have greater understanding of credit rationing in our firms	0.0%	12.2%	26.8%	20.7%	40.2%	3.9	1.1
The availability of credit is reliance on several threshold for the client	2.4%	8.5%	26.8%	24.4%	37.8%	3.9	1.1
Very risky loans are highly rationed based on expertise recommendations	0.0%	7.3%	19.5%	19.5%	53.7%	4.2	1.0
Extent of credit rationing experienced by borrowers influences the outcomes of their loans	1.2%	7.3%	22.0%	22.0%	47.6%	4.1	1.1
Continuous Identification of the indicators of credit rationing helps assess the potential risks and benefits associated with loan performance	3.7%	14.6%	25.6%	14.6%	41.5%	3.8	1.2

4.4.2 Debt Budgeting

The section outlines the descriptive results of the debt budgeting in attribute of frequencies, mean and standard deviations. The statement, we plan and schedules for the effectiveness and efficiency of debts recorded responses as follows. 40.2% of the responses were in strongly in agreement, 23.2% in tandem while 26.8% neutral with a mean of 3.9 and a corresponding SD of 1.1 implying that on average, the responses were in agreement. 25.6% of the responses further agreed that expertize budgets for debts to avoid unpredicted risks, 18.3% being undecided and 41.5% strongly agreeing with a mean and SD of 3.9 and 1.1 respectively.

Regarding the question, the organization employees are trained periodically on the current trends of issues on debts and their implications, 37.8% of those contacted did strongly agreed, 20.7%, agreeing whereas 17.1% did not take sides with a mean of 3.7 and an SD of 1.2. With an average of 4.0 and SD of 1.1, 26.8% of the responses were in agreement that their firm is cognizance of debt budgeting techniques which usually for greater loan performance and stability. In addition, 40.2% were in strong concurrence while 23.2% were undecided. Finally, 45.1% of the responses were in strong agreement that the repayment timeframe and cost is periodically evaluated and monitored. However, 14.6% were in agreement and 24.4% neutral with a mean of 3.9 and an SD of 1.2. The outcomes are highlighted in Table 4.4.

Table 4.4: Descriptive Results for Debt Budgeting

	SD %	**D %**	**UN %**	**A %**	**SA %**	**M**	**S Dev**
We plan and schedules for the effectiveness and efficiency of debts	1.2%	8.5%	26.8%	23.2%	40.2%	3.9	1.1
Expertize budgets for debts to avoid unpredicted risks	2.4%	12.2%	18.3%	25.6%	41.5%	3.9	1.1
The organization employees are trained periodically on the current trends of issues on debts and their implications	0.0%	24.4%	17.1%	20.7%	37.8%	3.7	1.2
Our firm is cognizance of debt budgeting techniques which usually for greater loan performance and stability	2.4%	7.3%	23.2%	26.8%	40.2%	4.0	1.1
The repayment timeframe and cost is periodically evaluated and monitored	2.4%	13.4%	24.4%	14.6%	45.1%	3.9	1.2

4.4.3 Debt Structure

The section outlines the descriptive results of debt structure in the form of frequencies, mean and standard deviations. It can be noted from the results that, the question, there are organizational

instruments for managing debts structure attracted responses as follows. 46.3% of the responses were in strongly in agreement, 17.1% in tandem while 23.2% neutral with a mean of 4.0 and a corresponding SD of 1.1 meaning that on average, the responses were in agreement. 19.5% of the responses further agreed that their firm optimizes debt structure for better financial performance and sustainability of loan repayment, 28.0% being undecided and 40.2% strongly agreeing with a mean and SD of 3.9 and 1.1 in that order.

With regards to the question, there are organizational targets that shows effectiveness of the debt structure, 41.5% of those contacted did strongly concurred, 23.2%, concurred whereas 20.7% did not take sides with a mean of 3.9 and an SD of 1.1.

With an average of 3.9 and SD of 1.2, 14.6% of the responses were in agreement that the risk demonstrated by the degree of debt structure is well calculated and predicted by the firm. In addition, 47.6% were in strong concurrence while 25.6% being undecided. Finally, 51.2% of the responses were in strong agreement that there is timely communication and monitoring of debt structure and loan performance. However, 13.4% were in agreement and 18.3% neutral with a mean of 4.0 and an SD of 1.3. The results are highlighted in Table 4.5.

Table 4.5: Descriptive Results for Debt Structure

	SD %	D %	UN %	A %	SA %	M	S Dev
There are organizational instruments for managing debts structure	1.2%	12.2%	23.2%	17.1%	46.3%	4.0	1.1
Our firm optimizes debt structure for better financial performance and sustainability of loan repayment	1.2%	11.0%	28.0%	19.5%	40.2%	3.9	1.1
There are organizational targets that shows effectiveness of the debt structure	0.0%	14.6%	20.7%	23.2%	41.5%	3.9	1.1
The risk demonstrated by the degree of debt structure is well calculated and predicted by the firm	4.9%	7.3%	25.6%	14.6%	47.6%	3.9	1.2
There is timely communication and monitoring of debt structure and loan performance	3.7%	13.4%	18.3%	13.4%	51.2%	4.0	1.3

4.4.4 Credit Monitoring

The section outlines the descriptive results of the credit monitoring in the form of frequencies, mean and standard deviations. The statement, our firm keep track of the repayment pattern recorded responses as follows. 42.7% of the responses were in strongly in agreement, 13.4% in tandem while 34.1% being undecided with a mean of 3.9 and a corresponding SD of 1.1 implying that on average, the responses were in agreement. 22.0% of the responses further agreed that their employees are well-informed about the of cost monitoring on loan performance, and what areas to improve, 25.6% being undecided and 36.6% strongly agreeing with a mean and SD of 3.8 and 1.2 respectively.

Regarding the question, our cost monitoring techniques have been particularly successful in positively impacting loan, 34.1% of those contacted did strongly agreed, 23.2%, agreeing whereas 25.6% did not take sides with a mean of 3.7 and an SD of 1.2. With an average of 3.9 and SD of 1.1, 18.3% of the responses were in agreement that they have proactive monitoring techniques specifically for early detection and resolution of potential loan issues or defaults. Additionally, 41.5% were in strong concurrence while 31.7% were undecided. Finally, 45.1% of the responses were in strong agreement that their organization monitor and assess the performance of loans, including metrics used to measure repayment rates and overall loan quality. However, 18.3% were in agreement and 18.3% neutral with a mean of 3.9 and an SD of 1.2. The discoveries are outlined in Table 4.6.

Table 4.6: Descriptive Results for Credit Monitoring

Our firm keep track of the repayment pattern	2.4%	7.3%	34.1%	13.4%	42.7%	3.9	1.1
Our employees are well-informed about the of cost monitoring on loan performance, and what areas to improve	2.4%	13.4%	25.6%	22.0%	36.6%	3.8	1.2
Our cost monitoring techniques have been particularly successful in positively impacting loan performance in our organization	2.4%	14.6%	25.6%	23.2%	34.1%	3.7	1.2
We have proactive monitoring techniques specifically for early detection and resolution of potential loan issues or defaults	1.2%	7.3%	31.7%	18.3%	41.5%	3.9	1.1
Our organization monitor and assess the performance of loans, including metrics used to measure repayment rates and overall loan quality	2.4%	15.9%	18.3%	18.3%	45.1%	3.9	1.2

4.4.5 Debt Analysis

The section outlines the descriptive results of debt analysis in the form of frequencies, mean and standard deviations. It can be noted from the results that, our firm does debt analysis to assess the overall financial health and stability of the organization attracted responses as follows. 45.1% of the responses were in strongly in agreement, 13.4% in tandem while 28.0% neutral with a mean of 3.9 and a corresponding SD of 1.2 meaning that on average, the responses were in agreement. 13.4% of the responses further agreed that their organization utilizes repayment pattern and its loan structure to evaluate its potential impact on loan productivity, 22.0% being undecided and 48.8% strongly agreeing with a mean and SD of 4.0 and 1.2 respectively.

With regards to the question, our firm projects and communicates the difficulties that may be experienced in future, 42.7% of those contacted did strongly concurred, 17.1%, concurred whereas 26.8% did not take sides with a mean of 3.9 and an SD of 1.1. With an average of 4.0 and SD of 1.1, 15.9% of the responses were in tandem that there are effective strategies allowing our firm to minimize financial stress and achieve long-term financial stability. In addition, 43.9% were in strong concurrence while 31.7% being undecided. Finally, 43.9% of the responses were in strong agreement that their firm take actions to address underperforming loans and mitigate the risk of loan defaults. However, 20.7% were in agreement and 23.2% neutral with a mean of 3.9 and an SD of 1.2. The outcomes are outlined in Table 4.7.

Table 4.7: Descriptive Results for Debt Analysis

	SD %	D %	UN %	A %	SA %	M	S Dev
Our firm does debt analysis to assess the overall financial health and stability of the organization	3.7%	9.8%	28.0%	13.4%	45.1%	3.9	1.2
Our organization utilizes repayment pattern and its loan structure to evaluate its potential impact on loan productivity	0.0%	15.9%	22.0%	13.4%	48.8%	4.0	1.2
Our firm projects and communicates the difficulties that may be experienced in future	1.2%	12.2%	26.8%	17.1%	42.7%	3.9	1.1
There are effective strategies allowing our firm to minimize financial stress and achieve long-term financial stability	0.0%	8.5%	31.7%	15.9%	43.9%	4.0	1.1
Our firm take actions to address underperforming loans and mitigate the risk of loan defaults	3.7%	8.5%	23.2%	20.7%	43.9%	3.9	1.2

4.4.6 Loan Performance

The dependent element of the assessment was loan performance of the deposit taking SACCOs in Kenya. The descriptive outcomes of the loan performance entailed percentages, mean and standard deviation. It is worth noting from the results, the question; proper debt management helps businesses optimize their financial performance received responses as follows. 28.0% of the responses were strongly in concurrence, 24.4% in tandem while 32.9% neutral with a mean of 3.6 and a corresponding SD of 1.1 meaning that on average, the responses were in agreement. 26.8% of the responses further agreed that effective debt management reduces the risk of loan defaults, 14.6% taking a neutral stand and 41.5% agreeing strongly with a mean and SD of 3.9 and 1.1 accordingly.

Concerning the statement, regular evaluation of debt management strategies is important for loan performance, 45.1% of the responses strongly concurred, 14.6%, agreeing whereas 20.7% did not take sides with a mean of 3.8 and an SD of 1.2. With an average of 3.8 and SD of 1.1, 19.5% of the responses were in agreement that they adopt proactive debt management practices to enhance a company's creditworthiness. Furthermore, 61.5% were in strong concurrence while 26.8% did not take sides. Finally, 40.2% of the responses were in strong agreement that utilize proper analysis of debt-related metrics for evaluating loan performance and making informed decisions. However, 18.3% were in agreement and 20.7% neutral with a mean of 3.8 and an SD of 1.2.

Table 4.8: Descriptive Results for Loan Performance

	SD %	**D %**	**UN %**	**A %**	**SA %**	**M**	**S Dev**
Proper debt management helps businesses optimize their financial performance	2.4%	12.2%	32.9%	24.4%	28.0%	3.6	1.1
Effective debt management reduces the risk of loan defaults	0.0%	17.1%	14.6%	26.8%	41.5%	3.9	1.1
Regular evaluation of debt management strategies is important for loan performance	1.2%	18.3%	20.7%	14.6%	45.1%	3.8	1.2
We adopt proactive debt management practices to enhance a company's creditworthiness	2.4%	11.0%	26.8%	19.5%	40.2%	3.8	1.1
We utilize proper analysis of debt-related metrics for evaluating loan performance and making informed decisions	2.4%	18.3%	20.7%	18.3%	40.2%	3.8	1.2

4.5 Diagnostic Tests

Before estimating a model, it is paramount to ascertain the suitability of data for such model estimation. Thus, diagnostic tests are carried out before model estimation. The tests conducted include the tests for autocorrelation, multicollinearity tests as well as the normality tests.

4.5.1 Tests for Multicollinearity

Multicollinearity tests are executed to determine the degree of correlation between the independent elements in the study. In cases where there is high connection amid two independent variables, one of the variables is omitted in the study. Due to multicollinearity issues, the confidence intervals and the standard errors are inflated which may lead to unstable estimates of the coefficients for individual predictors (William *et al.* 2013). The study adopted Variance Inflation Factor method to carry out multicollinearity tests. As a decision rule, VIF values greater than 10 would imply the presence of multicollinearity in the data set. However, VIF values less than 10 implied the lackof multicollinearity in the data set (Field, 2009). It is clear from the outcomes that all the VIF values for all the study variables are less than 10 (1.572<10, 1.326<10, 1.459<10, 1.376<10 and 1.577<10).

Table 4.9: Multicollinearity Test Results

	Collinearity Statistics	
	Tolerance	**VIF**
(Constant)		
Credit Rationing	0.636	1.572
Debt Budgeting	0.754	1.326
Debt Structure	0.685	1.459
Credit Monitoring	0.727	1.376
Debt Analysis	0.634	1.577

a Dependent Variable: Loan Performance

4.5.2 Test for Autocorrelation

The tests for autocorrelation is usually executed to examine the correlation of error terms among the elements. In carrying out these tests, the Durbin Watson method was utilized by the study. As a decision making rule, Durbin Watson value of 2 implies the absence of correlation of error terms. Watson value > 2 implies the presence of negative autocorrelation while Watson value < 2 implies

the presence of positive autocorrelation. From the results, the Watson value of 2.047 implied that there was no serial autocorrelation among the error terms. Thus, the data is fit to carry out regression analysis.

Table 4.10: Autocorrelation Test Results

Model	Durbin-Watson
1	2.047

a Predictors: (Constant), Debt Analysis, Debt Budgeting, Credit Monitoring, Debt Structure, Credit Rationing
b Dependent Variable: Loan Performance

4.5.3 Normality Tests

Before carrying out regression analysis, it is basic to test on the distribution of data. The assumption of normality ($ut \sim N(0, \sigma 2)$) is therefore necessary (Brooks, 2008). The study applied the histogram plot to test for normality. From the plot in Figure 4.1, it can be observed that the data follows normal distribution. This is an indication that the data set in evaluation is normally distributed and the hence the zero hypothesis that the data is not normally distributed is turned down and assessment fails to decline the alternative hypothesis.

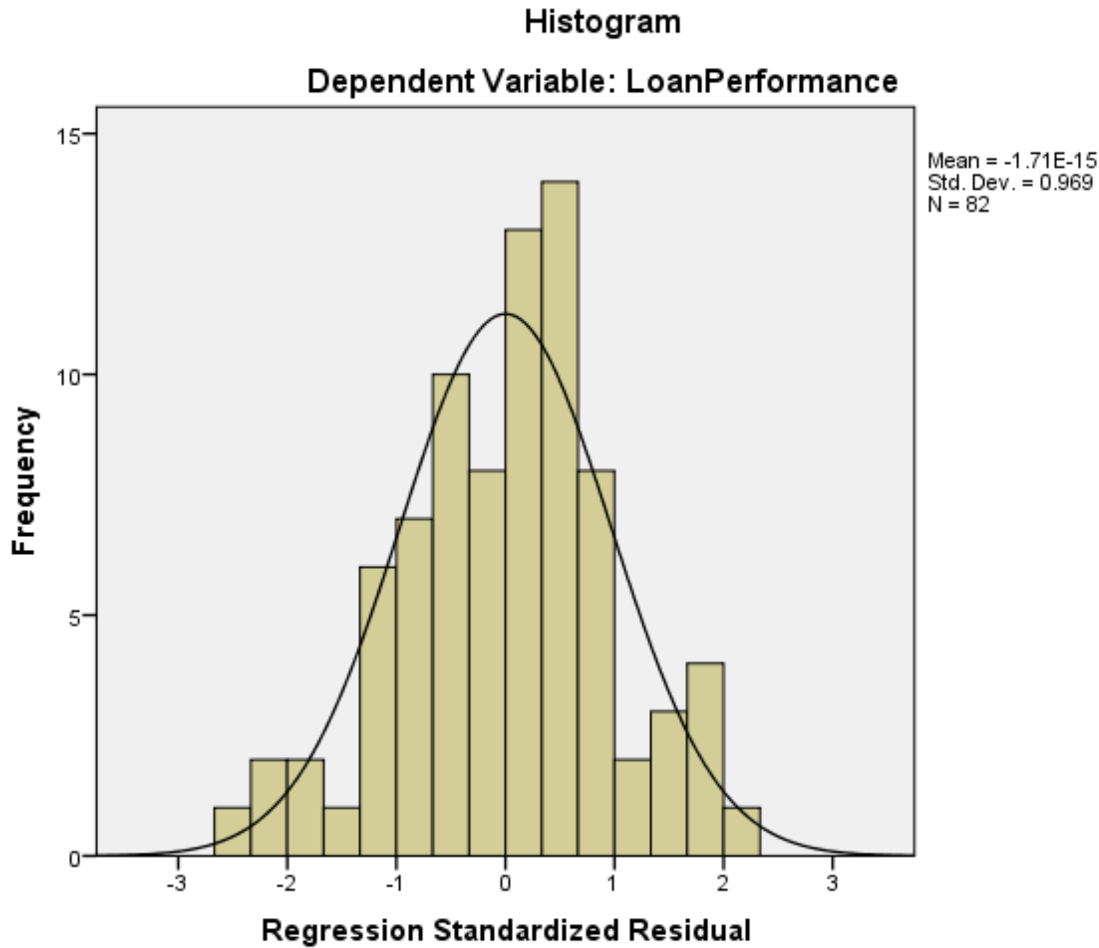

Figure 4.1: Histogram Plot

4.6 Inferential Analysis

Inferential analysis in this study involved correlation and regression analysis and involves ascertaining the existence of relationships among the factors in the investigation. The main variables in the study were credit rationing, debt budgeting, debt structure, credit monitoring and debt analysis, which were the independent attributes and loan performance was the dependent fcator.

4.6.1 Correlation

Pearson correlation scrutiny was conducted to determine the strength and direction of relationships amidst the study factors.

Table 4.11: Correlation Results

		Loan Performance	Credit Rationing	Debt Budgeting	Debt Structure	Credit Monitoring	Debt Analysis
Loan Performance	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	82					
Credit Rationing	Pearson Correlation	.566**	1				
	Sig. (2-tailed)	0.000					
	N	82	82				
Debt Budgeting	Pearson Correlation	.554**	.423**	1			
	Sig. (2-tailed)	0.000	0.000				
	N	82	82	82			
Debt Structure	Pearson Correlation	.560**	.446**	.367**	1		
	Sig. (2-tailed)	0.000	0.000	0.001			
	N	82	82	82	82		
Credit Monitoring	Pearson Correlation	.547**	.384**	.353**	.371**	1	
	Sig. (2-tailed)	0.000	0.000	0.001	0.001		
	N	82	82	82	82	82	
Debt Analysis	Pearson Correlation	.556**	.495**	.316**	.465**	.443**	1
	Sig. (2-tailed)	0.000	0.000	0.004	0.000	0.000	
	N	82	82	82	82	82	82

** Correlation is significant at the 0.01 level (2-tailed).

From outcomes, the correlation between credit rationing and loan performance was positive and statistically significant (0.566, 0.000<0.05). In addition, the outcomes of link amid debt budgeting and loan performance was also significantly positive (0.554, 0.000<0.05). Debt structure further indicated a significant positive correlation with loan performance (0.560, 0.00<0.05). Credit monitoring further indicated a significant positive correlation with loan performance (0.547, 0.00<0.05). Debt analysis further indicated a significant positive correlation with loan performance (0.556, 0.00<0.05). Thus, it can be concluded that the identified assessed elements are significant in giving explanations to the loan performance of the deposit taking SACCOs in Kenya. The correlation results are outlined in Table 4.11.

4.6.2 Regression Analysis

A regression analysis was conducted to determine the linear relationship between the variables of the study, which included credit rationing, debt budgeting, debt structure, credit monitoring and debt analysis on loan performance. From the results of regression analysis the model estimated explains 59.3% of the total changes in loan performance as evidenced by the value of R Square in the model of 0.593. This means that the variables credit rationing, debt budgeting, debt structure, credit monitoring and debt analysis system are significant in providing explanations on loan performance of deposit taking SACCOs in Kenya. The approach discoveries outlined below.

Table 4.12: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.770a	0.593	0.566	0.4498

a Predictors: (Constant), Debt Analysis, Debt Budgeting, Credit Monitoring, Debt Structure, Credit Rationing

4.6.3 Analysis of Variance

The model estimated was crucial statistically. This is provided by the estimated P value of 0.000<0.05. Furthermore, these results can be confirmed by the estimated value of F (22.142) which is far greater than the F critical value (F 5, 76) in the F tables. Thus, the identified study variables are significant in giving explanations on loan performance of deposit taking microfinance in Kenya. The ANOVA results are outlined in Table 4.13.

Table 4.13: ANOVA Results

	Sum of Squares	df	Mean Square	F	Sig.
Regression	22.399	5	4.48	22.142	.000b
Residual	15.377	76	0.202		
Total	37.776	81			

a Predictors: (Constant), Debt Analysis, Debt Budgeting, Credit Monitoring, Debt Structure, Credit Rationing
b Dependent Variable: Loan Performance

4.5.4 Regression Coefficients

Based on the regression coefficient outcomes, the estimated model's constant exhibited a positive value on table 4.18. The coefficient of credit rationing was positive (0.169) and statistically significant (0.049<0.05). Improving credit rationing by unit results in a significant 0.169 units improvement in the loan performance of DTMs in Kenya under review in the study. Thus, credit rationing is a significant determinant of the loan performance of DTMs in Kenya. The coefficient of debt budgeting was positive (0.194) and statistically significant (0.003<0.05). Improving debt budgeting by unit results in a significant 0.194 units improvement in the loan performance of deposit taking microfinance in Kenya under review in the study. Thus, debt budgeting is a significant determinant of the loan performance of DTMs in Kenya. The coefficient of debt

structure was positive (0.179) and statistically significant (0.018<0.05). Improving debt structure by unit results in a significant 0.179 units improvement in the loan performance of DTMs in Kenya under review in the study. Thus, debt structure is a significant determinant of the loan performance of deposit taking microfinance in Kenya. The coefficient of credit monitoring was positive (0.194) and statistically significant (0.011<0.05). Improving credit monitoring by unit results in a significant 0.194 units improvement in the loan performance of DTMs in Kenya under review in the investigation. Thus, credit control is a significant determinant of the loan performance of DTM in Kenya. The coefficient of debt analysis was positive (0.177) and statistically significant (0.049<0.05). Improving debt analysis by unit results in a significant 0.177 units improvement in the loan performance of deposit taking microfinance in Kenya under review in the study. Thus, debt analysis is a significant determinant of the loan performance of DTMs in Kenya.

Table 4.14: Regression Coefficients

	Unstandardized Coefficients		**Standardized Coefficients**	**t**	**Sig.**
	B	**Std. Error**	**Beta**		
(Constant)	0.562	0.300		1.875	0.065
Credit Rationing	0.169	0.085	0.183	1.998	0.049
Debt Budgeting	0.194	0.063	0.261	3.098	0.003
Debt Structure	0.179	0.074	0.214	2.42	0.018
Credit Monitoring	0.194	0.074	0.224	2.609	0.011
Debt Analysis	0.177	0.089	0.184	1.998	0.049

a Dependent Variable: Loan Performance

4.6 Discussions

From the results of the regression coefficients, the constant of the estimated applioch was positive (0.562) indicating that there are other factors other than the identified variables can be used to

explain the changes in loan performance of DTM in Kenya. Furthermore, the coefficient of credit rationing was positive (0.169) and statistically significant (0.049<0.05). Improving credit rationing by unit results in a significant 0.169 units improvement in the loan performance of deposit taking microfinance in Kenya under review in the study. Credit rationing is state in which lenders are not willing to advance more funds to borrowers at usual market rate of interest. Obae and Jagongo (2022) explored credit management activities and loan performance particularly on commercial banks. As a consequence, outcomes from the exploration portrayed that credit rationing has positive effect on loan performance. Moreover, the rise in unitary loan rationing results in the improved loan performance.

Jerono and Olweny (2023) investigated fiscal hazard management activities on performance of MFIs in Kiambu County. As a subsequent, assessment discovered that liquidity risk administration practices have important and positive influence on the financial performance. In addition, Beck (2019) explored Small and Medium Entities in Ghana. From this evaluation, it was uncovered that non-performing credit ratio for the medium sized entities is greater in Africa more than other continents. Obae and Jagongo (2022) further established that performance of commercial Bank's loan was firmly connected with the efficiency in Credit Management Practices

The coefficient of debt budgeting was positive (0.194) and statistically significant (0.003<0.05). Improving debt budgeting by unit results in a significant 0.194 units improvement in the loan performance of DTM in Kenya under review in the evaluation. Debt budgeting is the phases of planning and governing debt- associated costs within the total budget framework. This activity

included setting and controlling debt- associated objectives, computing relevant level of debt and coming up with strategies to effectively administer and repay loan. Karanja and Simiyu (2022) explored the credit management acts and microfinance entities loans' performance in Kenya. The assessment found out that client scrutiny and credit risk administration have great influence on the microfinance banks.

Performance of loans imply to earnings return rate in various advances. In this case, it examines the number of clients is seeking for credit, amount loaned, loan product amount on chain and arrear rate recovery (Chernykh and Theodossiou, 2015). In addition, good quality credit is the one that gives the satisfaction to the bank's quest to fully utilized profit and has lower default risk also (Asiamah and Osei, 2016). As per above empirical observations it shows that debt budgeting is key to the debt management activities and loan performance.

The coefficient of debt structure was positive (0.179) and statistically significant ($0.018<0.05$). Improving debt structure by unit results in a significant 0.179 units improvement in the loan performance of deposit taking microfinance in Kenya under review in the study. This entails different aspects that includes the kind of debt instruments utilized, profile of maturity, rates of interest and collateralization. Stiglitz (2018) examined SMEs with chances to capitalize in positive NPV projects. However, moral risks setbacks are linked with the capacity of SMEs diversifying money available to them to fund alternative activities to greater risk as result of pervasive incentive structure in the network.

Furthermore, Karabulut and Bilgin (2020) executed an examination on the influence of the non-limited deposit insurance on NPLs together with market discipline. Therefore, it uncovered that government in various advanced together with growing economies demonstrated deposit insurance schemes for lowering risk of systematic failure of commercial banks. Furthermore, Nawai and Shariff (2012) investigated the element influencing the repayment performance in microfinance entities. This assessment was built on regards to four elements; firms' factors, loan factors, individual forces and lender factors. The findings from this investigation showed that loan type, total loan received and repayment time are loans attributes factor that statistically important. The coefficient of credit monitoring was positive (0.194) and statistically significant ($0.011<0.05$). Improving credit monitoring by unit results in a significant 0.194 units improvement in the loan performance of deposit taking microfinance in Kenya under review in the assessment. Owizy (2015) explored the results of terms of credits on loan performance of Nigerian banks. This was in specific respect to the UBA bank, in Nigeria. Implications from this investigation showed that credit terms have a crucial and significant impact on loan performance. Gizaw (2016) executed investigation also on influence of credit terms on banks' loan performance.

Utilizing data amid 2014 and 2015 from annual fiscal statements from particular commercial entities together with Ethiopian National bank, Kabede, Tegegn and Tafese (2016) aimed to delineate critical knowledge to enhance understanding loan performance. The data collected was evaluated and findings showed that credit loss provision, non-performing credit, adequacy capital with credit terms have important effect on loan performance of the banks. Additionally, Karanja and Simiyu (2022) executed an evaluation on the credit management acts and loan performance. This assessment aimed at microfinance banks in Kenya. From the assessment it was uncovered

that credit status and credit risk management is of great importance to loan performance. The coefficient of debt analysis was positive (0.177) and statistically significant ($0.049<0.05$). Improving debt analysis by unit results in a significant 0.177 units improvement in the loan performance of deposit taking microfinance in Kenya under review in the investigation.

Debt analysis involves a comprehensive assessment of an entity's borrowing activities, including the amount of debt incurred, the terms and conditions of the loans, and the overall debt structure. In addition, loan performance refers to the evaluation of how well loans are being managed and repaid by borrowers. Interconnection between debt analysis and loan performance is symbiotic and mutually influential. Debt analysis provides insights into the borrowing practices and financial health of borrowers, which can impact loan performance (Scott-Clayton, & Zafar, 2019). By conducting a thorough debt analysis, lenders and financial institutions can assess the creditworthiness of borrowers, determine the risk associated with lending, and make informed decisions regarding loan approval and interest rates.

Debt analysis helps identify potential red flags and risk factors that may affect loan performance. It enables lenders to evaluate the borrower's ability to service the debt, including assessing their income, cash flow, collateral, and credit history. This analysis allows lenders to make informed judgments about the likelihood of timely loan repayments and the overall financial stability of the borrower. Furthermore, ongoing debt analysis plays a vital role in monitoring loan performance over time (Mutua, Jagongo & Simiyu, 2020). By tracking key financial indicators and metrics, such as debt-to-income ratios, debt service coverage ratios, and payment histories, lenders can assess the borrower's capability to attain their loan obligations. This analysis provides valuable

information to identify early signs of financial distress or default risk, allowing lenders to take proactive measures to mitigate potential losses.

Conversely, loan performance data contributes to debt analysis by providing real-world insights and empirical evidence. By analyzing the performance of existing loans, lenders can refine their debt analysis models and criteria, identify trends, and make adjustments to lending practices. Loan performance data helps lenders understand the factors that contribute to successful loan outcomes and those that lead to defaults or delinquencies.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

The section is presentation of the main discoveries from the data analysis. The study then outlines the conclusions the study makes based on the summarized results of the study and finally the basis of the recommendations are the conclusions of the study, which is done in accordance with the objectives of the study. The goals were to determine the impact of credit rationing, debt budgeting, debt structure, credit monitoring and debt analysis on the loan performance of deposit taking micro financial institutions in Kenya.

5.2 Summary of the Findings

The foremost aimed was to assess the influence of credit rationing on loan performance of micro financial firms in Kenya. The correlation between credit rationing and loan performance was positive and statistically significant (0.566, 0.000<0.05). From the regression results, the coefficient of credit rationing was positive (0.169) and statistically significant (0.049<0.05). Improving credit rationing by unit results in a significant 0.169 units improvement in the loan performance of deposit taking microfinance in Kenya under review in the study. Thus, credit rationing is a significant determinant of the loan performance of DTM in Kenya.

The outcomes of correlation amid debt budgeting and loan performance was also positive and significant (0.554, 0.000<0.05). The coefficient of debt budgeting was positive (0.194) and statistically significant (0.003<0.05). Improving debt budgeting by unit results in a significant 0.194 units improvement in the loan performance of DTMs in Kenya under review in the study.

Thus, debt budgeting is a significant determinant of the loan performance of deposit taking microfinance in Kenya.

Debt structure further indicated a significant positive correlation with loan performance (0.560, 0.00<0.05). The coefficient of debt structure was positive (0.179) and statistically significant (0.018<0.05). Improving debt structure by unit results in a significant 0.179 units improvement in the loan performance of DTMs in Kenya under review in the study. Thus, debt structure is a significant determinant of the loan performance of DTMs in Kenya.

Credit monitoring further indicated a significant positive correlation with loan performance (0.547, 0.00<0.05). The coefficient of credit monitoring was positive (0.194) and statistically significant (0.011<0.05). Improving credit monitoring by unit results in a significant 0.194 units improvement in the loan performance of DTMs in Kenya under review in the study. Thus, credit control is a significant determinant of the loan performance of deposit taking microfinance in Kenya.

Debt analysis further indicated a significant positive correlation with loan performance (0.556, 0.00<0.05). The coefficient of debt analysis was positive (0.177) and statistically significant (0.049<0.05). Improving debt analysis by unit results in a significant 0.177 units improvement in the loan performance of DTMs in Kenya under review in the assessment. Thus, debt analysis is a significant determinant of the loan performance of DTMs in Kenya.

5.3 Conclusions

The first objective was to investigate the impact of credit rationing on loan performance of micro financial enterprises in Kenya. The study concludes that credit rationing has a positive significant link with and loan performance. Thus, credit rationing is a significant determinant of the loan performance of DTMs in Kenya.

The second objective was to investigate the effect of debt budgeting on loan performance of micro financial institutions in Kenya. The study makes the conclusion that debt budgeting has a positive significant association with and loan performance. Thus, debt budgeting is a significant determinant of the loan performance of DTMS in Kenya.

The third objective of the research was to investigate the significant of debt structure on loan performance of micro financial firms in Kenya. The study concludes that debt structure has a positive significant link with and loan performance. Therefore, debt structure is a significant determinant of the loan performance of DTMs in Kenya.

The fourth objective of the investigation was to investigate the impact of credit monitoring on loan performance of micro financial organization in Kenya. The study makes the conclusion that credit monitoring has a positive correlation with loan performance. Hence, credit monitoring is a significant determinant of the loan performance of DTMs in Kenya.

The fifth objective of the evaluation was to investigate the impact of debt analysis on loan performance of micro financial firms in Kenya. The study concludes that debt analysis has a positive significant connection with and loan performance. Hence, debt analysis is a significant determinant of the loan performance of DTMs in Kenya.

5.4 Recommendations

The study recommends that the deposit taking micro financial enterprises in Kenya ought to analyze the debt of every borrower in relation to the existing interest rates in the market. Before advancing any more credit to the borrower, the institutions ought to keenly analyze the ability of the borrower to repay considering their existing loans as well as the collaterals that are available to guarantee the payments.

It further recommends that the deposit taking micro financial firms in Kenya ought to have a clear budget of the amounts of money to be advanced as loans. This is in consideration of the operational costs of the micro financial institutions as well as the costs associated with such lending. In so doing, the micro financial institutions under study would be quarantined of continued operations and profitability.

The study further recommends that the deposit taking micro financial institutions in Kenya ought to have regularly review its structure to match with the dynamic debt risks. The institutions should consider lending collateral-based loans or the loans that are based on the regularity of the individuals' source of income. This would ensure minimal rates of loan defaults as well as sustained operations.

The assessment recommends that the deposit taking micro pecuniary organization in Kenya ought to periodically monitor its loans to check on the loans that are due or that are almost due. This involves updating the borrowers on their loan due times as well as beginning the process of recovering the loans due. Thus, the institutions should have loans recovery team in place who are specifically assigned to loans monitoring.

The evaluation finally recommends that the deposit taking micro fiscal firms in Kenya ought to regularly analyze its existing debts. This entails analyzing the loans to confirm the loans that are at risk hence identifying the ways of mitigating such risks. This entails ascertain the presence or absence of collaterals attached to the loans.

5.5 Limitations of the Study

The investigation was limited to the 14 micro finance institutions in Kenya. The study was further limited to a descriptive research approach and questionnaire maximized as the basic data collection instrument used to collect primary data. A census was further utilized in the study where 7 respondents were selected from each of the 14 micro finance institutions in Kenya under study.

5.6 Suggestions for Further Studies

The study recommends that further studies be conducted on the effects of infrastructural capabilities and loan performance of micro finance institutions in Kenya. Delving further into the sphere of debt management and loan performance unveils opportunities for a comprehensive grasp and strategic refinement in financial methodologies. A pivotal area for prospective inquiry

involves scrutinizing the intricate correlation between macroeconomic conditions and strategies employed in debt management. This exploration would delve into how entities, encompassing both individual and organizational facets, dynamically recalibrate their debt portfolios in response to shifts in economic variables, such as alterations in interest rates, inflation, and broader economic fluctuations.

The financial landscape undergoes continuous transformation, and the emergence of inventive debt instruments introduces a captivating domain for additional investigation. Research in this arena can evaluate the effectiveness and associated risks of groundbreaking financial products, such as fintech and green energies. Extending this exploration, a promising trajectory involves an in-depth examination of the behavioral economics facets influencing decision-making within the realm of debt management. Gaining insights into the psychological factors at play in the borrowing, repayment, and overall debt management behavior of individuals and organizations provides valuable perspectives for crafting more efficacious financial strategies.

The ongoing evolution of the financial landscape introduces another compelling avenue for research. A focused study can assess the effectiveness and risks tied to pioneering financial products, such as green bonds or social impact bonds, shedding light on their contributions to sustainable finance and their influence on loan performance. The transformative impact of technology on financial processes cannot be overstated. Hence, a pertinent course of investigation involves exploring how technologies like blockchain and artificial intelligence are reshaping practices in debt management.

Narrowing the focus to the challenges faced by small businesses, research can cast light on their strategies in debt management. This in-depth analysis can bring to the forefront issues related to credit access, debt management, and the broader implications on the financial well-being of small businesses, contributing to a more holistic understanding of the financial landscape. Harmonizing debt management practices with broader societal objectives is increasingly significant. Investigating how debt contributes to achieving Sustainable Development Goals (SDGs) provides insights into the role of finance in effecting social and environmental impact.

Within the realm of credit scoring models, a crucial undertaking involves exploring the effectiveness of various models in predicting loan performance. The impact of evolving methodologies, including machine learning algorithms and unconventional data sources, introduces a layer of complexity that merits thorough examination.

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APPENDICES

Appendix I: List of Licensed Deposit-Taking Microfinance as of 31st December 2021

1.	Caritas Microfinance Bank Limited
2.	Century Microfinance Bank Limited
3.	Choice Microfinance Bank Limited
4.	Daraja Microfinance Bank Limited
5.	Faulu Microfinance Bank Limited
6.	Kenya Women Microfinance Bank Limited
7.	Key Microfinance Bank Limited
8.	Maisha Microfinance Bank Limited
9.	Muungano Microfinance Bank Limited
10.	Rafiki Microfinance Bank Limited
11.	SMEP Microfinance Bank Limited
12.	Sumac Microfinance Bank Limited
13.	U & I Microfinance Bank Limited
14.	Uwezo Microfinance Bank Limited

Appendix II: Questionnaire

Please note that the information provided in these questionnaires will be treated with the utmost confidentiality, integrity, due care, and due diligence. Your responses will be kept confidential and will only be used for the purpose of research and analysis related to debt management practices and loan performance. The data collected will be handled in accordance with applicable privacy laws and regulations. Your participation in this survey is voluntary, and you have the right to withdraw at any time. If you have any concerns or questions regarding the confidentiality of your responses, please feel free to reach out to the research team. Your cooperation is highly appreciated.

PART A: GENERAL INFORMATION OF RESPONDENTS

1. Name of Bank

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2. Designation

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3. Years of service in the Deposit Taking Microfinance

0-6 [ ]

7-13 [ ]

14 and more [ ]

Part B: Specific Questionnaires

Kindly indicate your level of agreement by placing a tick mark in the appropriate column in the table provided below. The table allows you to express your agreement on a scale of 1 to 5, with 1 representing strong disagreement and 5 representing strong agreement. Your selection in the table will reflect your level of agreement with the statements presented.

5: Strongly Agree; 4: Agree; 3: Undecided; 2: Disagree; 1: Strongly Disagree

Credit Rationing	**5**	**4**	**3**	**2**	**1**
We have greater understanding of credit rationing in our firms					
The availability of credit is reliance on several threshold for the client					
Very risky loans are highly rationed based on expertise recommendations					
Extent of credit rationing experienced by borrowers influences the outcomes of their loans					
Continuous Identification of the indicators of credit rationing helps assess the potential risks and benefits associated with loan performance					

In your own opinion, how does credit rationing influences loan performance in your firm…………………………………………………………………………………………

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Debt Budgeting

Kindly demonstrate your level of agreement by marking the corresponding column in the table provided below. The ratings encompass a range from 1 to 5, where 1 denotes significant disagreement, and 5 indicates substantial concurrence. Your selection in the table will indicate your agreement level with the given statements.

5: Strongly Agree; 4: Agree; 3: Undecided; 2: Disagree; 1: Strongly Disagree

Debt Budgeting	**5**	**4**	**3**	**2**	**1**
We plan and schedules for the effectiveness and efficiency of debts					
Expertize budgets for debts to avoid unpredicted risks					
The organization employees are trained periodically on the current trends of issues on debts and their implications					
Our firm is cognizance of debt budgeting techniques which usually for greater loan performance and stability					
The repayment timeframe and cost is periodically evaluated and monitored					

In your own opinion, how does debt budgeting affects loan performance in your business………………………………………………………………………………………

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Debt Structure

Kindly indicate your level of agreement by placing a tick in the designated column within the table provided below. The ratings span from 1 to 5, encompassing the following range of options: 1 signifying strong disagreement, while 5 denotes strong concurrence. Your selection in the table will accurately reflect your degree of agreement with the presented statements.

5: Strongly Agree; 4: Agree; 3: Undecided; 2: Disagree; 1: Strongly Disagree

Debt Structure	**5**	**4**	**3**	**2**	**1**
There are organizational instruments for managing debts structure					
Our firm optimizes debt structure for better financial performance and sustainability of loan repayment					
There are organizational targets that shows effectiveness of the debt structure					
The risk demonstrated by the degree of debt structure is well calculated and predicted by the firm					
There is timely communication and monitoring of debt structure and loan performance					

In your own opinion, how does debt structure affects loan performance in your organization…………………………………………………………………………………

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Credit Monitoring

Kindly demonstrate your agreement level in the table presented beneath by marking the corresponding column with a tick. The ratings encompass a range from 1 to 5, delineating the following: 1 signifies profound disagreement, while 5 signifies resolute agreement. Your selection within the table will indicate your degree of concurrence with the statements outlined.

5: Strongly Agree; 4: Agree; 3: Undecided; 2: Disagree; 1: Strongly Disagree

Credit Monitoring	**5**	**4**	**3**	**2**	**1**
Our firm keep track of the repayment pattern					
Our employees are well-informed about the of cost monitoring on loan performance, and what areas to improve					
Our cost monitoring techniques have been particularly successful in positively impacting loan performance in our organization					

We have proactive monitoring techniques specifically for early detection and resolution of potential loan issues or defaults					
Our organization monitor and assess the performance of loans, including metrics used to measure repayment rates and overall loan quality					

In your own opinion, how does credit monitoring impacts on loan performance in your firm……………………………………………………………………………………………

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Debt Analysis

Please indicate your level of agreement by placing a checkmark in the appropriate column in the provided table below. The table allows you to express your agreement on a scale of 1 to 5, where 1 signifies strong disagreement and 5 signifies strong agreement. Your selection in the table will reflect your level of agreement with the presented statements.

5: Strongly Agree; 4: Agree; 3: Undecided; 2: Disagree; 1: Strongly Disagree

Debt Analysis	**5**	**4**	**3**	**2**	**1**
Our firm does debt analysis to assess the overall financial health and stability of the organization					
Our organization utilizes repayment pattern and its loan structure to evaluate its potential impact on loan productivity					

Our firm projects and communicates the difficulties that may be experienced in future					
There are effective strategies allowing our firm to minimize financial stress and achieve long-term financial stability					
Our firm take actions to address underperforming loans and mitigate the risk of loan defaults					

In your own opinion, how does debt analysis impacts on loan performance in your firm…………………………………………………………………………………………………

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Loan Performance

Please indicate your level of agreement by placing a checkmark in the corresponding column in the table below. The table allows you to express your agreement on a scale of 1 to 5, where 1 represents strong disagreement and 5 represents strong agreement. Your selection in the table will reflect your level of agreement with the presented statements.

5: Strongly Agree; 4: Agree; 3: Undecided; 2: Disagree; 1: Strongly Disagree

Loan Performance	**5**	**4**	**3**	**2**	**1**
Proper debt management helps businesses optimize their financial performance					

Effective debt management reduces the risk of loan defaults					
Regular evaluation of debt management strategies is important for loan performance					
We adopt proactive debt management practices to enhance a company's creditworthiness					
We utilize proper analysis of debt-related metrics for evaluating loan performance and making informed decisions					

In your own opinion, how does debt management techniques impacts on loan performance in your firm…………………………………………………………………………………………………

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