# EFFECT OF INSIDER LOANS AND ADVANCES ON FINANCIAL PERFORMANCE OF MICROFINANCE BANKS IN KENYA

BY

MERCY SAFARI

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

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# DECLARATION

This study represents my independent research effort, and to the best of my awareness,

it has not been presented at any other academic institution.

Signature: ~~~~~~~~                                      Date: 16th November 2023

**NAME: MERCY SAFARI**

**REG. NO: D61/36596/2020**

This research project has been submitted for the award of degree of Master of Business

Administration with my approval as the University Supervisor.

**DR. ZIPPORAH ONSOMU**

Signed …………………………………………..                        Date. 2/12/2023…………..

Department of Finance and Accounting,

Faculty of Business and Management Science,

University of Nairobi.

# DEDICATION

I acknowledge my family for this achievement, whose steadfast support has been an immense source of inspiration. I am genuinely appreciative of the encouragement you have provided me throughout this journey.

# ACKNOWLEDGEMENTS

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# LIST OF ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| **AT** | Agency Theory |
| **CBK** | Central Bank of Kenya |
| **DTMBs** | Deposit Taking Microfinance Banks |
| **MFBs** | Microfinance Banks |
| **MFI** | Microfinance Institutions |
| **MHT** | Moral Hazard Theory |
| **MPT** | Modern Portfolio Theory |
| **ROA** | Return on Assets |
| **ROE** | Return on Equity |

# ABSTRACT

The study focused on the impact of insider advances and loans on the financial performance of Kenyan microfinance banks. A longitudinal descriptive survey design was employed in the study. It focused on all microfinance banks in Kenya, totaling to 14 by CBK Annual Report as of December 31, 2022. The study used secondary data, collected from Bank Supervision Annual Reports and AMFI Sector Reports for the study period. The R-value of 0.724 indicates there is a strong positive correlation between insider loans and advances and financial performance of Kenya's microfinance banks. The study found that insider loans and advances explained 52.5% of Kenyan microfinance bank financial performance differences. Total insider loans and advances, MFB size, operational efficiency, gross non-performing loans, and capital sufficiency therefore reliably predicted Kenyan microfinance bank financial performance. The study concluded that total assets, insider loans and advances, and gross non-performing loans significantly affect financial performance given $\beta=.040$, $p<.05$; $\beta=-1.970$, $p<.05$ and $\beta=-.159$, $p<.05$ respectively. Capital adequacy ratio and operating efficiency do not however have significant effect on financial performance given $\beta=.011$, $p>.05$ and $\beta=-.198$, $p>.05$ respectively. Since the study found that total assets, insider loans and advances, and gross non-performing loans significantly affect MFB financial performance in Kenya, MFB management should reduce non-performing loans and follow strict insider loan and advance rules. The fact that gross non-performing loans have a significant negative association with net income means that MFBs should effectively control their credit risk, by implementing tight credit policies in addition to sophisticated credit risk management frameworks.

# CHAPTER ONE:

# INTRODUCTION

## 1.1 Background of the Study

Loans provided to one or more of the company's officers, directors, employees, associates, subsidiaries, or relatives of an executive officer or director are referred to as insider loans and advances. These loans that relate to such a group can be favourable to them but a disadvantage to the depositors (Bwire, Tenai, & Odunga, 2021). Generally, financial institutions make loans to a variety of insiders. Such loans however are not a major concern if the favourable conditions are based on reliable information, leading to low uncertainty on the part of the financial institution (Eje, 2022). The regulations provided by the CBK, defines insider lending as all loans and advances to top bank directors and officers (CBK, 2022). The main concern however is that insiders pose a key threat to the financial survival of the financial institutions because they are knowledgeable of and access to proprietary systems, and they can circumvent security measures legitimately. The degree to which insider loans and advances impact financial institutions' financial performance is a cause for worry. This is predicated on the claim that insider loans are frequently the primary cause of sizable nonperforming loans, which raise credit risk and negatively impact financial institutions' profitability.

The study was anchored on Modern Portfolio Theory (MPT) by Markowitz (1952), Agency Theory (AT) by Jensen and Meckling (1976), and Moral Hazard Theory (MHT), by Akerlof (1970). The overarching theory was moral hazard theory. Based on this theory, a party in a contractual relationship deliberately fails to fulfil their obligation. The emphasis is on the possibility that insider loans could serve as a stand-in for management risk, which might show up as fraud and/or insider misuse. Insiders

may self-lend during periods of asset price booms and profit, but depositors bear the risk when initiatives don't go as planned. Modern portfolio theory on the other hand asserts that financial institutions hold diversified portfolios of loans and insider loans form part of these loans' portfolio. Lastly, agency theory is relevant on the assertion that insider loans and advances made to corporate insiders present such situations of agency conflict.

The loan stock for MFBs as of 31$^{st}$ December 2022 stood at Ksh1.05B, and this included insider loans and advances. Loans written off stood at Ksh123.87M, the greatest proportion being recorded in the trade sector (53.8%), in close following is the Real estate and transportation and communication industries had corresponding percentages of 20.5% and 6.2%. The energy and mining sectors had least allocation at 0.5% and 0.2% respectively (Bank Supervision Annual Report, 2022). Performance in microfinance banks indicated a decline in the year ended December 31, 2022, whereby due to greater competition, net loans fell by 2% from Ksh.40.1 billion in 2021 to Ksh.39.3 billion in 2022.

### 1.1.1 Insider Loans and Advances

The CBK appropriate regulations state that any loans or advances given to a bank's executive directors or chief executive officers are classified as insider lending (CBK, 2022). It refers to loans and advances given to employees of a company who are connected to a financial institution through ownership of shares or the ability to exercise influence, on more favorable terms, conditions, and scales than would typically be justified by the economy. It's best to keep insider lending to a reasonable level because going beyond could result in losses that could jeopardize a bank's ability to remain in business. Due to their access to and knowledge of proprietary systems, as well as their

capacity to legally bypass security measures, insiders generally pose a serious threat to financial services organizations (Eje, 2022).

Insider loans may be perceived as affecting management of risk, which is evidenced as aspects of fraud and or insider abuse. This is because is brought about by insiders taking advantage of asset prices that are doing well and lending themselves then exposing the depositors to risks as the project expectations fail to be achieved. The basis is that insider lending activities tend to result into fraud, unstable banking or not using fiduciary obligation as required (Ugoani, 2016). The central bank of Kenya prudential guidelines require provides guidelines for banks to avoid giving credit facilities not secured or to insiders that is above the core capital. Each bank is needed to have a core capital of at least Sh. 1 billion. The rule helps to avoid cases of insider issues that would cause an institution to fall (CBK, 2022). The current study measured insider loans and advances using total loans to Directors, Shareholders and Associates, as well as loans to employees.

### 1.1.2 Financial Performance

It explains how a firm effectively uses the available assets to achieve financial objectives. It is measured by returns on financial investments and related operations. The company is considered to have financially performed when they are financially healthy and can sustain good financial existence over time (Kamau, Olweny, & Muturi, 2021). It is an estimate of the ability of a company to come up with monetary returns and maximize asset performance. It means competitiveness, potentiality, and reliability of the business with the aim improving its profits, stability, and growth. The main goal of financial performance is to maximize profits while protecting stakeholders' social and environmental interests (King'ori et al., 2017). Financial performance is assessed

based on profitability ROA, net profits to total assets ratio, ROE, and net profits to shareholders' funds ratio.

Financial measures that assess profitability, liquidity, leverage, and investment capacity can also be used to assess financial performance (Agbata, Osingor, & Ezeala, 2021). They help in the evaluation of how healthy a company is financially, especially about realizing investment returns. This study focuses on financial performance indicated by net income. Net income measures the financial sustainability of MFBs by showing the extent to which they have reduced overdependence on a single revenue source. It also indicates the extent of reduced operating and non-operating expenses, as used by Marwa and Aziakpono (2015). High net income would indicate MFBs have innovative ways of boosting their revenue streams. The study considered net income as measured by Profit after Tax (PAT).

### 1.1.3 Insider Loans and Advances and Financial Performance

Insiders may have less motivation to return a loan than outsiders, which could be a problem with insider loans and advances. In other circumstances, the management may simply roll over or have a say in the rollover of the bad debts of insiders with whom they have a close relationship (Onyango, Tenai, & Odunga, 2020). Therefore, insider lending refers to lending to insiders who are linked to the bank by ownership or control, on conditions and in greater amounts than would be rationally justified economically. Because the favorable terms apply to parties connected by control or cash flow rights, connected lending is another name for it. The emphasis is that loan quality and insider loans statistically explain the fragility of banks. High insider lending in bank failures however suggest the issues with moral hazard since risks and incentives of insider lending are distorted since owners have nothing to lose if their bank failed (Eje, 2022).

Bank owners might also use the bank's deposits to fund high-risk ventures and earn significantly if they were successful while suffering only minor losses.

While most dangers are quantifiable, insider misuse has the potential to harm a bank's reputation far beyond any financial loss. This is because inappropriate insider activity can erode the public's trust in a bank, which subsequently affect financial health and long-term viability of a bank (Chege, 2014). The study by Eje (2022) established that fraud and insider lending significantly affect the banking industry as well as the whole financial system. Insider lending has been linked to the significant amount of toxic assets or bad and unrecoverable loans that endangers banks' ability to continue operating. This occurrence is typical of banking collapses in the 1990s. The basis is that, when insider lending is undertaken, an infrastructure should be in place to support a system of controls that reduces the risk of fraud. Bwire, Tenai, and Odunga (2021) believed that the main cause of the unpaid debts of collapsed African banks.

### 1.1.4 Microfinance Banks in Kenya

Microfinance service providers have greatly improved with the industry's growth and market saturation; a high degree of completeness has been observed. Few microfinance organizations make money, but many have strong levels of payback (Cull, Demirgüç-Kunt & Morduch, 2009). Because of the surge in microloan activity, MFIs are also forced to contend with commercial banks. In 2022, the microfinance industry's total assets dropped by 4.8%. Compared to Ksh.73.9 billion in 2021, the total assets as of December 31, 2022, were Ksh.70.4 billion. Net advances also decreased, going from Ksh. 40.1B in 2021 to Ksh. 39.3B in 2022, a 1.9% drop. Competition was the cause of this (CBK, 2022).

The microfinance banks fall into 3 categories: large, medium, and small. Those with a market share 5% and above are categorized under large; between 1% and 5% market share fall under medium whereas less than 1% market share are small. 14 licensed microfinance banks were still operating as of December 31, 2022. Only three of the 14 microfinance banks were licensed locally; the other eleven have national licenses. Microfinance performance in Kenya has been negatively impacted by deficiencies in the system, including an inadequate framework for loan disbursements and repayment collection (Apalia, 2017). This has an impact on both their overall financial performance and their capacity to achieve the goals of reducing poverty through growth and development.

## 1.2 Research Problem

The management of financial institutions may advance insider loans and advances with relaxed terms and conditions. The different types of insiders of focus include own officers, directors, staff, their associates, a subsidiary or relative of an executive officer or director. The insider loans may be of disadvantage to the depositors because of the terms that favor the ones involved (Bwire, Tenai, & Odunga, 2021). The concern is that insider loans are likely to cause banks to fail because of gross insider abuses. It is believed that insiders can misuse the system owing to unbalanced information and given their capability to keep it a secret. The implication is these loans given in excess may cause bank distress (Akani & Ifechi, 2017). On the contrary, it can be noted that insider loans and advances increase commitments of the beneficiary from the perspective of stakeholder arguments.

Most of the Kenyan microfinance banks practice good lending and financial risk management. However, a few have been left exposed to financial risks following

unchecked insider advances and loans. As per CBK (2022) two commercial banks exceeded the 100% of core capital restriction on insider borrowing, while five commercial banks exceeded the 20% restriction on insider borrowing. By the end of 2022, the total amount of advances, loans, and other facilities provided by microfinance banks accounted for 11.8% of all NPLs and advances. Thus, the rate of NPLs is significantly impacted by insider advances and loans.

With varied degrees of effectiveness, earlier investigation had been conducted on insider lending, advances, and the financial performance of financial institutions, including commercial banks and microfinance organizations. Bwire, Tenai and Odunga (2021) established that insider loans positively relate to commercial banks fragility, though the effect is not statistically significant. Eje (2022) concluded that insider lending has been linked to the high volume of toxic assets or bad and irrecoverable loans that endanger banks' corporate survival. Insider loans are a sort of credit risk that negatively but statistically negligibly affects the financial performance of Kenyan microfinance institutions, claim King'ori, Kioko, and Shikumo (2017). Ugoani (2016) found in another study that insider lending has a role in the problem of commercial banks' sizable nonperforming loan portfolios. He asserts that it negatively impacts the ability of banks to make profit on bank leading to financial risk.

From the empirical studies, a gap in context can be discerned given that most investigations focused on commercial banks, despite microfinance banks being equally in the same financial sector. The reality is that insider lending and advances affect financial performance. Despite the fact that their effect on the financial performance of Kenya's microfinance enterprises has not been examined in any previous research. Thus, the study aimed to bridge this knowledge gap by answering the research question

on What impact do insider loans and advances have on Kenyan microfinance institutions' financial performance.

## 1.3 Research Objectives

To find out how insider loans and advances impact the financial performance of Kenya's microfinance banks.

## 1.4 Value of the Study

The research yielded valuable insights that have practical applications in theory development, policy formulation, and practice. Regarding practice, the study would assist managers of banks, particularly those dealing with risk in understanding the aspects of being exposed to risk from the standpoint of loans and advances to insiders. They would be able to come up with appropriate measures that can be used to handle the situation. By gaining knowledge on how insider lending affects financial risk—a crucial factor in decision-making—corporate decision makers stand to gain from the results.

The work advances theoretical understanding in the field of financial hazards to which financial institutions are subject. Other researchers may further advance this study by looking at other elements of financial risk. Those planning to investment and those managing funds are likely to find the outcomes of this investigation helpful with regards to the decision on investments they must make bearing in mind the risks involved.

Finally, based on policy formulation, the banking industry regulator(s) would obtain new information that would help them formulate current policies in addition to revising the once that already exist on financial risk and insider lending. This would also be useful to the regulators and bank officers in routinely checking and assessing the

operations. Since high non-performing loans are related to lack of stability, policy makers need to limit banks with high non-performing loans, regarding issuing insider loans and advances. The study's conclusions would be used by regulatory bodies to determine the most recent acceptable estimates for insider loans and loan quality.

# CHAPTER TWO:

# LITERATURE REVIEW

## 2.1 Introduction

This section examines theories and empirical evidence. These are outlined in further detail, and a conceptualized relationships between the variables was created. Three theories are analyzed: Jensen and Meckling's (1976) Agency Theory (AT), Modern Portfolio Theory (MPT) by Markowitz (1952), and Akerlof's (1970) Moral Hazard Theory (MHT). Moral hazard theory serves as the main framework.

## 2.2 Theoretical Review

The three main theories that form the basis of the study are the Agency Theory (AT) by Jensen and Meckling (1976), the Modern Portfolio Theory (MPT) by Markowitz (1952), and the Moral Hazard Theory (MHT) by Akerlof (1970). Agency theory serves as the main framework and is examined below:

### 2.2.1 Agency Theory

This was initiated by Alchian and Demsetz (1972), and subsequently refined by Jensen and Meckling (1976). It states that enterprises comprise a contractual relationship between owners (principals) and managers (the agents). Thus, the principal delegates the enterprise's management to the agents (Kamal, Hussain, & Khan, 2021). Through this process, the principals believe that the agents will advance their interest as they operate the firms (Jensen & Meckling, 1976). The theory, however, draws an implication that the agents operating alone can be selfish and may not be willing to maximize the shareholders' profits. Thus, the need for the agency costs. These costs are those that the principal has to part with to control the agents' activities and to safeguard against the agent acting in his own interest (Harris, Petrovits, & Yetman, 2017).

The theory points out the behavior of the corporate insiders who are agents. They are equally the beneficiaries of the insider loans and advances, which creates an environment of agency conflict. Insider loans are those made to senior executives in a bank, board members. They are the agents, and they might extend credit to themselves or related parties on relaxed terms and conditions. This adversely affects financial risk when defaults are registered (Alkaf, Said, & Yee, 2022). The theory, however, faces the criticism that agency associations are generally very complicated and not clear compared to contractual ones, particularly on ethical. The old assumption that the interests of the principal are always ethically correct is not practical in most cases (Zogning, 2017).

### 2.2.2 Moral Hazard Theory

This was propounded by Akerlof (1970) and Stigliz & Weiss (1981). It is an attempt to explain how parties to a contract behave after the contract has been entered into. The theory is based on the information asymmetry that underlies contracts, including lending contracts. Moral Hazard describes the fact that people can change their actions as others take care of their risks and bear the repercussions of their poor decision. It therefore presents a situation where one-party refuses to fulfil their obligations as per the agreement. Based on the study, moral hazard refers to the change in behaviour or attitude of debtors after credit contracts have been signed and disbursement has taken place (Abugwu, Kur, Urama, & Abbah, 2022). The theory states that moral hazards are situations that occur where the actions of one side of the market cannot be observed by the other, creating the hidden action problem. The major proposition is that one party in a contractual relationship may adopt a behavior contrary to the agreement and can adversely affect the other party (Felix, & Wachira, 2018). Hence moral hazard occurs

because of people possess secrete ideas undertaking contrary actions with probable the bad outcomes.

The relevance of the theory is based on the concern that insider lending beneficiaries are privy to the often-relaxed terms and conditions governing the facilities advanced them. Equally, such insider facilities might lack collateral and may fail to meet the credit lending cannons of capital, capacity, collateral, condition, and character. The beneficiaries might also obtain the impetus to default due to many reasons, among them the relaxed terms and conditions of their respective facilities. This raises default risk where such lending is pervasive, and in effect financial risk, that affects financial performance (Eje, 2022). The high insider lending as a cause of bank failures suggests high cases of moral hazard. The theory has been deemed to be narrower and negative in its assessment of the moral behavior of people thus ignoring other important aspects such as need for achievement, altruism, respect, and intrinsic motivation (Agyapong, 2011).

### 2.2.2 Modern Portfolio Theory

It was proposed in 1952 by Markowitz. The theory assumes a market with no transaction's costs; no uninsurable risks and investors have information asymmetry. The main belief underlying the theory is that there is a need to combine assets or securities invested in to help reduce risks and improve returns. MPT enables investors to optimize projected returns of a portfolio for a given level of risk by assisting them in classifying, estimating, and controlling risks and returns. It guides the way individuals and organizations allocate financial resources among available investments (Abugwu, Kur, Urama, & Abbah, 2022). The theory further helps in ascertaining every bank's diversification of risks on lending, which helps to determine whether the risk is a key

aspect in ascertaining of loan portfolio. A loan portfolio comprises of normal loans as well as loans advanced to corporate insiders. The emphasis of the theory is that the microfinance banks must hold adequate portfolio of different loans that ensures maximization of returns from the loans (Abimbola, 2020).

The relevance of the theory is based on the emphasis that it helps in deciding regarding non-secured loans as a loan component under consideration. This includes loans and advances to corporate insiders (Maranga, Ngali, & Wepukhulu, 2022). The basis is that proper credit risk handling premises on proper-quality loan portfolio of assets that are performing thus loan pricing should reflect the risk. Diversification, according to Chiao, Yu, Li, and Chen (2018), lowers the required risk premiums on uninsured debt and other contingent claims. The theory faces criticism from several scholars. They see the model as far much withdrawn from reality. This is because it does not capture personal elements, the environmental, and socio-cultural dimensions expected of modern-day investment (Omisore, Yusuf & Nwufo, 2012). Lo and Mackinlay (2010) explain that the assumptions in the modern portfolio theory are not practical.

## 2.3 Determinants of Financial Performance of Microfinance Banks

Poor financial performance weakens MFIs' capacity to withstand the unexpected, which has an effect on solvency. When the business does well financially, lenders are able to recoup all of their expenses, turn a profit, and create institutions that can stand on their own for a long time without needing assistance from the government. Financial performance is influenced by the subsequent elements:

### 2.3.1 Insider Loans and Advances

Insider loans and advances comprises all loans and advances to a bank's executive directors and chief executive officers (CBK, 2022). It means the loans and advances

made to persons within a company that are associated to a financial institution by shareholding or being able to control terms, conditions and scales which are of great advantage compared to what could have been normally justified. Insider lending that is manageable is appropriate because lending in excess is likely to result into losses with a likelihood of threatening prolonged bank existence.

Insiders are particularly a threat to enterprises dealing with finances because they are knowledgeable and can access proprietary systems in addition to being able to change measures put in place to safeguard security in a justifiable manner (Eje, 2022). Generally, insider loans is associated with management risk, this is able to reflect itself in aspects such as fraud and or insider abuse. This is because insiders may be opportunistic and use booms of the price of assets to lend themselves and gain from the same yet deviation from project expectations generate risks to the depositors. The basis is that insider lending activities are likely to attract fraud, make banks unstable, or result into inappropriate usage of fiduciary responsibility (Ugoani, 2016).

### 2.3.2 Lending Rate

The lending rate is the amount charged on money lent. The possibilities of variations in interest rates affect exposure of risks by financial institutions (Saurina, 2014). It is the sum that the borrower pays the lender in addition to the loan principal as payment for using the money. The theory is that an increase in interest rate margin benefits the institution and will affect their bottom line. The justification for this is that borrowers' loan repayment schedules are significantly impacted by the MFI's high interest rate. Interest rate spreads have a negative effect on the financial performance of DTMBs as observed by Ndichu (2014). Additionally, Ahmed et al. (2018) shown that interest rates had a detrimental impact on commercial banks' ability to turn a profit. According to

Awoyemi and Jabar (2014), interest rates matter because they have an impact on the financial markets' liquidity.

### 2.2.3 Size of the Firm

In accounting, size is expressed in terms of total assets and is used to compute profitability metrics such as profit margin and ROA. The expansive the firm the more cost efficient and less likelihood of failure. Larger enterprises are assumed to be highly profitable, huge investments, very efficient, highly diversified with a lower risk level (Ishmail, Memba, & Muriithi, 2023). It was demonstrated that the bank's size had an impact on the correlation between credit risk and financial performance. The claim made is that larger businesses are able to function on a larger scale and compete with others on a global platform. A company size is also deemed to influence the association it enjoys within its surroundings both internally and externally thus its profit-making ability. The natural logarithm of the total assets of MFIs serves as a stand-in for size (Addisalem, 2015).

### 2.3.4 Operational Efficiency

This is a microfinance program's capacity to provide a particular service at the lowest possible cost. The proper use of MFBs loanable resources should be ensured by efficient expense management, which might increase their profitability (Ndinda & Mwai, 2023). Inefficiency is known to be a risky element because many institutions have yet to achieve the bare minimum of scale or efficiency required to cover costs. According to Githinji (2016), the financial stability of Kenya's commercial banks is directly impacted, however by operational effectiveness. Liquidity at commercial banks is similarly impacted by operational effectiveness (Ngaira & Miroga, 2018).

### 2.3.5 Capital Adequacy

It discusses the risks associated as well as a company's capacity to settle both short- and long-term loans. Financial institutions, such as banks, can effectively handle credit, market, and operational risks when they have a surplus of capital (Karadayi, 2023). Based estimated with capital adequacy ratio, it protects banks from undue leverage, insolvency, and debt. A bank's overall asset value is expressed in terms of risk-adjusted assets. A bank with enough capital adequacy will be able to grow its operations and have a strong enough net worth to withstand economic downturns without going bankrupt (Waqas & Bahrain, 2019). According to Kiio, Wamugo, and Omagwa (2023), sufficient capital significantly affects the liquidity of Kenyan microfinance institutions. The rationale is that managers must maintain optimal capital liquidity levels since holding more capital than the minimum required depletes bank liquidity.

### 2.4 Empirical Literature Review

A few studies have intended to clarify the ideas being studied. Research was done in 2021 by Bwire, Tenai, and Odunga on how insider loans and loan quality affect the instability of Kenyan banks. Before the 2015–2016 fragility events, thirty banks with at least 5 years of data for the years 2010–2014 were used. The Central Bank of Kenya provided the information. The results validated the association, notwithstanding the negligible influence of insider loans.

Eje (2022) looked into how insider lending affected the banking industry's performance in Nigeria. The study employed census method of all banks in Nigeria. It was found out that fraud and insider lending have significant effects on the banking industry as well as the whole financial system. The study concluded that insider lending leads to high volume of toxic assets or bad and irrecoverable loans that endanger banks' corporate

survival. As a result, banks and insiders should carefully review any potential insider transaction and, if necessary, seek legal advice before proceeding.

Gathaiya (2017) examined the problems relating to bank failures in Kenya from 2015 to 2016. Diagnostic research design was utilized considering the already available data. this was analyzed content wise. The conclusion was that most banking institutions collapsed because of insider lending, poor corporate governance standards, difficulties with regulatory and supervisory systems, a lack of carefully considered risk management plans, the absence of internal controls, and conflicts of interest.

Ishmail, Memba, and Muriithi (2023) looked into how credit risk affected Kenyan microfinance institutions' financial performance, concentrating on insider lending as an aspect of credit risk. Secondary data from 13 MFBs that were available in the annual reports from 2011 to 2019 was acquired through a census. An explanatory design was utilized. Using an unbalanced panel regression model, the impact of IV on DV using unbalanced panel data was analyzed. The outcomes were positive. This arises from the loan quality of the commercial banks, comprising of insider loans.

In their 2017 study, King'ori, Kioko, and Shikumo examined the variables influencing Kenyan microfinance organizations' financial performance. Microfinance banks data were acquired over the course of five years, from 2011 to 2015. The outcomes of regression showed that operational effectiveness, enough capital, and business size had a favorable and significant impact on Kenyan microfinance banks' financial performance. Financial performance, liquidity risk, and credit risk were found to be weakly correlated. The study's findings show a clear relationship between Kenya's microfinance institutions' financial success and their operational effectiveness, capital sufficiency, and business size.

## 2.3 Summary of Literature Review and Research Gaps

The studied literature reveals conceptual, contextual, and methodological shortcomings that require attention. While credit risk and non-performing loans are increasingly being used to gauge financial performance, a large portion of financial institutions, including MFBs, also provide advances and insider loans, which could affect the caliber of loans that are given out (Apalia, 2017). The focus on insider loans and advances as an independent variable tries to address the existing conceptual gap. The study would help to bring into perspective the MFBs, contrary to the previous concentration on banks. Equally, some studies that are relevant are conducted in other countries, making it possible for replication based on the Kenyan context. Finally, apart from studies based on sampling, the current study was a case study, focusing on all MFBs in Kenya.

## 2.4 Conceptual Framework

The framework depicts the link between insider loans and financial performance using the following control variables: the number of MFBs, operational effectiveness, gross non-performing loans, and capital sufficiency. The size of the MFBs was determined by total assets; operational efficiency was determined by the cost-to-income ratio; capital adequacy was determined by the capital adequacy ratio; and gross non-performing loans were approximated by total gross non-performing loans. As demonstrated in Figure 2.1.

**Independent Variable**                    **Dependent Variable**

| | |
|---|---|
| **Total Insider Loans and Advances** | **Financial Performance** <br> Net Income |

**Control Variables**

- Size of MFBs
- Operational Efficiency
- Capital Adequacy
- Total Gross Non-Performing Loans
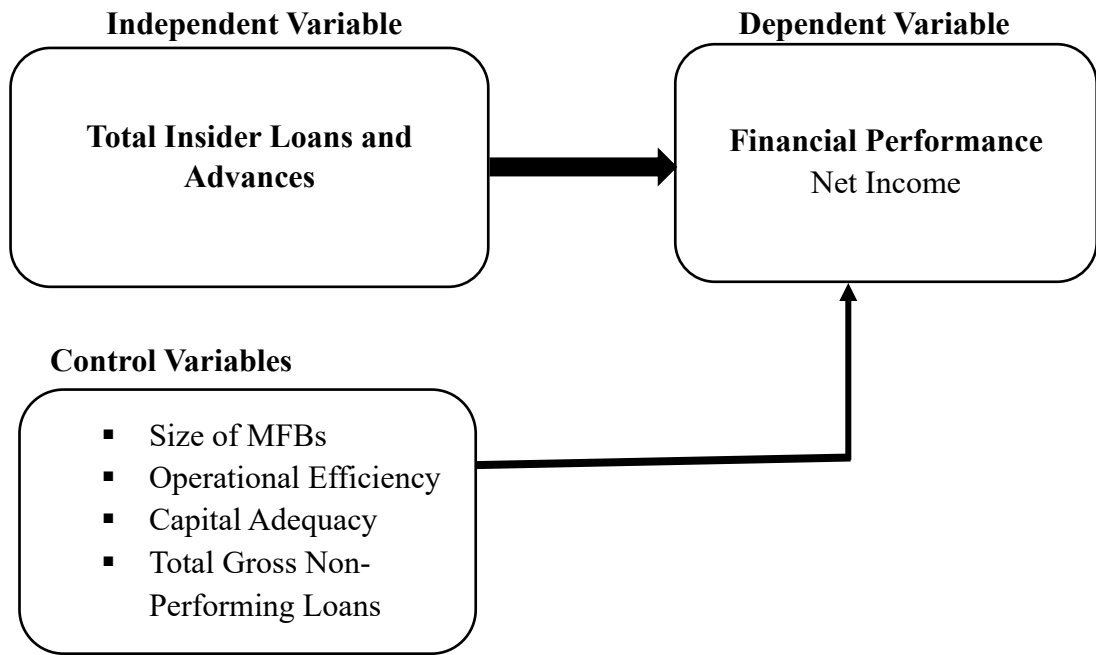
**Figure 2.1:** Conceptual Framework

# CHAPTER THREE:

# RESEARCH METHODOLOGY

## 3.1 Introduction

This section describes the target population and the methodology used to conduct the inquiry. It also sheds light on the data that was used, how it was collected and analysed as well. Finally, it indicates how the study variables was measured and tested to assert their significance.

## 3.2 Research Design

Used here is longitudinal descriptive survey. This entails keeping an extended, possibly multi-year, eye on the factors being studied. In this study, the data on the variables were collected for five years. Data from a survey are used to describe how the phenomena being studied relate to one another. This design has the benefit of not interfering with the study's setting (Hollstein, 2022). The implication is that the work of the researcher is to observe the subject matter over the period under study. The study considered the period of five years between 2018 – 2022, being the latest period of consistent operation of the MFBs.

The approach can be considered suitable in assessment of causality, enabling the quantification of how the variables affect each other. It is considered relevant since it helped determine how insider loans and advances affected microfinance banks' financial performance over a period of time longer than a year. Accurate analysis, interpretation, and reporting of research findings were also aided by the design.

## 3.3 Population of the Study

The probe focused on all Kenyan microfinance banks. According to the CBK Annual Report (CBK, 2022), there were a total of 14 as of December 31, 2022. Of them, 3 are licensed community microfinance banks, and 11 are licensed national microfinance banks (Appendix II). Because all MFBs were taken into account, the investigation amounted to a census.

## 3.4 Data Collection

The published data was secured. The Association for Microfinance Institutions (AMFI) Sector Report and Bank Supervision Annual Reports were the key sources. Information required was from these reports about the total assets, profit after tax, total gross loans, total insider loans and advances, and each MFB. The instrument used to gather the data was the data sheet found in Appendix III.

## 3.5 Operationalization of Study Variables

Financial performance is the dependent variable, and insider loans and advances are the independent factors being examined. Size and total gross loans are the control variables. The parameters are measured in accordance with the example shown in Table 3.1:

**Table 3.1: Operationalization of Study Variables**

| Variable | Measures | Empirical Study Adapted from |
|---|---|---|
| **Independent Variable** Insider Loans and Advances | Total Insider Loans and Advances | Eje (2022) |
| **Control Variables** | | Ishmail, Memba and Muriithi (2023) |
| Capital Adequacy | ▪ CAR $$\frac{Core\ Capital}{Total\ Deposit\ Liabilities}\ (\%)$$ | Addisalem (2015) |
| Size of the MFBs | ▪ Total Assets | |

| Operational Efficiency | Cost-to-income $$\frac{Operating\ Expenses}{Operating\ Income}$$ | Ndinda, & Mwai, 2023 |
|---|---|---|
| Gross Non-performing Loans | Total Gross NPLs | |
| **Dependent Variable** Financial Performance | Net Income *Profit After Tax* | Kamau, Olweny and Muturi (2021) |

**Source:** Researcher (2023)

## 3.6 Regression Diagnostics

The research employed multiple regression analysis. Determining if the regression model accurately captures the data's structure is made easier with the use of regression diagnostics. Among the diagnostics are:

### 3.6.1 Normality Test

This is the determination of whether a sample data represents a normally distributed population. The emphasis is the need to confirm normal distribution of data. The test employed to determine if the data were normally distributed was the Shapiro-Wilk Test,. The data is normal if the Shapiro-Wilk significance value for this test is greater than 0.05.

### 3.6.2 Heteroscedasticity Test

In a linear regression model, the parameters ought to be unrelated to one another and have a constant variance. The absence of this would mean that there is a problem of heteroscedasticity. In a linear regression, the assumption of homoscedasticity means same variance and is central to linear regression models. The data should therefore be homoscedastic (Yang, Tu, & Chen, 2019). The Koenker test was utilized in this investigation; results greater than 0.05 signify homoscedasticity in the data.

### 3.6.3 Multicollinearity Test

When there is a strong correlation between the independent factors under investigation, both among themselves and with the DV in a linear regression analysis, this is known as multicollinearity. This may create statistical insignificance of the parameters studied when they are expected to be significant. This can also lead to skewedness in the study outcomes (Shrestha, 2020). Variance Inflation Factors (VIF) were used in this investigation to assess it. It is advised that the value of VIF should not exceed 10. The lower VIF values of the parameters indicate no collinearity issues.

### 3.6.4 Autocorrelation Test

Autocorrelation is the extent to which the measures of the parameters correlate similarly in non-similar observations. It is pertinent when gathering data across time, necessitating the need to examine how parameter values vary across various observed data sets. Winner, Noonan, Fleming, Olson, Mueller, Sheldon, & Calabrese (2018) state that this means that it is a measurement of the correlation between the variables over time on the same set of data. It's useful to find out if the sampled data set was generated randomly. In this study, the Durbin-Watson test was employed to ascertain the association between the neighboring features. A Durbin-Watson value of about 2 indicates the absence of autocorrelation.

### 3.6.5 Linearity Test

When a parameter's average measurement falls inside a straight line, it is said to be linear. It is adopted in testing the linear correlation between the measured and explanatory parameters, about the linear regression models (Chiesa, Manohar, & Shinkar, 2020). The objective is to assess, whether the parameters under study are linear or non-linear, with values below 0.05 considered to be accepted.

## 3.7 Data Analysis

SPSS was used to examine the data. The initial stage in this process was to create both descriptive and inferential statistics. Descriptive measures like M and SD helped determine the total amount of insider loans and advances made by the MFBs. Next, multiple regression analysis was employed to investigate the effect of insider loans and advances on the financial performance of microfinance banks in Kenya.

The model is exemplified as

$$FP = a + \beta_1 TILA_1 + \beta_2 SM_2 + \beta_3 OE_3 + \beta_4 GNPL_4 + \beta_5 CA_5 + \varepsilon$$

**Where:**

FP = Financial Performance

a = Constant

$\beta$ = Coefficient

$TILA_1$ = Total Insider Loans and Advances

$SM_2$ = Size of MFBs

$OE_3$ = Operational Efficiency

$GNPL_4$ = Gross Non-Performing Loans

$CA_5$ = Capital Adequacy

$\varepsilon$ = Error term.

## 3.8 Test of Significance

The predictive power of the model was evaluated using the F-Test. The modified coefficient of determination ($R^2$) was used to quantify the amount of variation in the DV brought about by changes in the IV. This made it easier to assess how well the model fit the data. The significance of each parameter under study was ascertained with

the aid of the t-test. The importance of the various variables was established, however, with the aid of the F-test.

# CHAPTER FOUR:

# DATA ANALYSIS, DISCUSSION AND FINDINGS

## 4.1 Introduction

In this chapter, analysis aspects and conclusions are covered. A complete understanding of the study objectives is the foundation for the analysis. The MFBs considered for the study were 14 as at December 2022. Out of the 14, Branch Microfinance Bank Limited commenced their publication of performance on December 2022, while Muungano Microfinance Bank Limited started reporting on December 2020. The implication is that the study considered 12 MFBs that had consistent reported data for the period under study.

## 4.2 Descriptive Statistics

Descriptives are used to arrange and compile data by describing the relationship between the variables under study. Descriptive statistics computation is therefore an essential preliminary stage in research and serves as a guide for inferential statistical comparisons. The study's variables' values were expressed in millions of Kenya Shillings (Kshs). Table 4.1 shows that total assets, total insider loans, capital adequacy ratio, operating efficiency, gross non-performing loans, and net income had the mean of M=6055.81(SD=10034.16); M=87.44 (SD=167.72); M=896.75 (SD=3391.90); M=16.57 (SD=18.41); M=1011.57 (SD=1558.22) and M=-89.78 (SD=249.47) respectively. Total assets had the highest mean because the total asset figures for each MFBs was higher per year as compared to the other variables, with significant differences between highest and lowest values, leading to the larger standard deviation (SD).

**Table 4.1: Descriptive Statistics**

|  | N | Mean | Std. Deviation | Skewness | Kurtosis |
|---|---|---|---|---|---|
| Total Assets | 60 | 6055.81 | 10034.16 | 1.76 | 1.35 |
| Total Insider Loans | 60 | 87.44 | 167.72 | 2.38 | 5.11 |
| Capital Adequacy Ratio | 60 | 896.75 | 3391.90 | 5.01 | 24.97 |
| Operating Efficiency | 60 | 16.57 | 18.41 | 1.02 | 1.65 |
| Gross Non-Performing Loans | 60 | 1011.57 | 1558.22 | 1.45 | .55 |
| Net Income | 60 | -89.78 | 249.47 | -3.58 | 17.13 |
| Valid N (listwise) | 60 |  |  |  |  |

**Source:** Research Data (2023)

Furthermore, Table 4.1 shows that the skewness statistics for total assets, total insider loans, CAR operating efficiency, and GNPLs were all greater than + 1.0, thus the distributions were skewed to the right. On the other hand, the net income skewness statistics showed that the distribution was left skewed, with a value of less than -1.0. A distribution's skewness might be zero, left (or negative), or right (or positive). An indicator of asymmetry is skewness. The variables' distribution was leptokurtik, meaning that the kurtosis statistics exceeded + 1.0. Higher kurtosis values suggest that the distribution has more outliers that fall comparatively far from the mean. Thus, leptokurtik distributions are more likely to contain outliers. Kurtosis is a statistic used to determine how many outliers there are in a distribution. It evaluates a distribution's tendency to have extreme values near its tails.

**4.3 Regression Diagnostics**

Multiple regression analysis assessed effect of insider loans and advances on the financial performance of Kenyan microfinance banks. Determining whether the regression model accurately captured the data's structure was made easier with the use of regression diagnostics. The following was the result:

**4.3.1 Normality Test**

This involves figuring out if a sample of data is representative of a population that is normally distributed. Used here was Shapiro-Wilk Test, which is considered suitable for small samples. The Shapiro-Wilk Test's Sig. value of less than 0.05 indicates that the data significantly depart from a normal distribution, as Table 4.2 demonstrates. Because some of the variables under consideration have extreme values, it is implied that the data lacks symmetry.

**Table 4.2: Test of Normality**

|  | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|
|  | Statistic | df | Sig. | Statistic | df | Sig. |
| Net Income | .289 | 49 | .000 | .652 | 49 | .000 |
| Total Assets | .342 | 49 | .000 | .641 | 49 | .000 |
| Total Insider Loans | .378 | 49 | .000 | .592 | 49 | .000 |
| Capital Adequacy Ratio | .402 | 49 | .000 | .306 | 49 | .000 |
| Operating Efficiency | .136 | 49 | .023 | .919 | 49 | .003 |
| Gross Non-Performing Loans | .336 | 49 | .000 | .713 | 49 | .000 |
| a. Lilliefors Significance Correction | | | | | | |

**Source:** Research Data (2023)

**4.3.2 Test of Heteroscedasticity**

Heteroskedasticity is the ability of a predicted variable's standard deviations to change over a range of IV values. It is the existence of consistent variations in the residuals' distribution or the model's error term. A linear regression model requires that both the independence of the parameters and the variance of the error term be constant. For this reason, the data ought to be homoscedastic (Yang, Tu, & Chen, 2019).

Table 4.3 shows that the sig-value is 0.076> 0.05, and the Koenker test statistics is 9.976. Thus, the data are homoscedastic. It follows that the data would produce less skewed outcomes.

**Table 4.3: Breusch-Pagan and Koenker test**

|  | LM | Sig. |
|---|---|---|
| Breusch-Pagan | 61.102 | .000 |
| Koenker | 9.976 | .076 |

**Source:** Research Data (2023)

### 4.3.3 Multicollinearity Test

Multicollinearity is a situation where there is significant association between independent parameters under study, among themselves, as well as with the dependent variable in a linear regression analysis. This may create statistical insignificance of the parameters studied when they are expected to be significant. This can also lead to skewedness in the study outcomes (Shrestha, 2020).

The data are shown in Table 4.4, where the VIFs from 1 to 10 and the tolerances were more than 0.20. This implied that there was little to no relationship between the repressors. Thus, there would be no major fluctuations in the model findings if one variable changed without affecting another. Furthermore, given a little change in the data or model, the outputs of the model would remain stable and not significantly fluctuate.

**Table 4.4: Multicollinearity Test**

|  | Collinearity Statistics | |
|---|---|---|
| **Variables** | **Tolerance** | **VIF** |
| Total Assets | .068 | 14.680 |
| Total Insider Loans | .132 | 7.593 |
| Capital Adequacy Ratio | .776 | 1.288 |
| Operating Efficiency | .947 | 1.056 |
| Gross Non-Performing Loans | .151 | 6.612 |

**Source:** Research Data (2023)

### 4.3.4 Autocorrelation Test

Autocorrelation is the degree to which the parameter measures correlate similarly in observations that are not similar. It is pertinent when gathering data across time, necessitating the need to examine how parameter values vary across various observed data sets. Winner, Noonan, Fleming, Olson, Mueller, Sheldon, & Calabrese (2018) state that this means that it is a measurement of the correlation between the variables over time on the same set of data. Finding out if the sampled data set was produced by a random process is helpful. The Durbin-Watson statistic from Table 4.5 depicts lack of autocorrelation is shown by a value of 2.222.

**Table 4.5: Autocorrelation Test**

| Model | Durbin Watson Test |
|---|---|
| **a. Predictors:** (Constant), Gross Non-Performing Loans, Operating Efficiency, Capital Adequacy Ratio, Total Insider Loans, Total Assets <br> **b. Dependent Variable:** Net Income | 2.222 |

**Source:** Research Data (2023)

### 4.3.5 Linearity Test

When a parameter's average measurement falls inside a straight line, it is said to be linear. It is adopted in testing the linear correlation between the measured and explanatory parameters, about the linear regression models (Chiesa, Manohar, & Shinkar, 2020). The objective was to assess whether the parameters under study are linear or non-linear.

Table 4.6 indicates that there was a linear association between total assets and capital adequacy ratio and net income, with a significant divergence from linearity greater than 0.05. Yet, there was a nonlinear linkage between the total amount of insider loans and the gross amount of NPLs and net revenue.

**Table 4.6: Linearity Test**

| Variables | Deviation from Linearity |
|---|---|
| Net Income and Total Assets | 0.065 |
| Net Income and Total Insider Loans | 0.000 |
| Net Income and Capital Adequacy Ratio | 1.000 |
| Net Income and Gross Non-performing Loans | 0.000 |

**Source:** Research Data (2023)

## 4.4 Correlation Analysis

To find out how strong any links were between the variables, the researcher used correlation analysis. For this purpose, Pearson's correlation coefficient was employed. Correlation coefficients, thus, express the strength of these linkages.

**Table 4.7: Correlation Matrix**

| | | NI | TILs | CAR | OE | G.N.P.L | T.A |
|---|---|---|---|---|---|---|---|
| NI | Pearson Correlation | 1 | -.563** | .009 | .100 | -.505** | -.427** |
| | Sig. (2-tailed) | | .000 | .947 | .482 | .000 | .001 |
| | N | | 60 | 60 | 60 | 60 | 60 |
| TILs | Pearson Correlation | | 1 | .243 | -.003 | .826** | .926** |
| | Sig. (2-tailed) | | | .074 | .981 | .000 | .000 |
| | N | | | 60 | 60 | 60 | 60 |
| CAR | Pearson Correlation | | | 1 | .045 | .421** | .370** |
| | Sig. (2-tailed) | | | | .753 | .001 | .004 |
| | N | | | | 60 | 60 | 60 |
| OE | Pearson Correlation | | | | 1 | -.051 | .027 |
| | Sig. (2-tailed) | | | | | .724 | .850 |
| | N | | | | | 60 | 60 |
| GNPLs | Pearson Correlation | | | | | 1 | .918** |
| | Sig. (2-tailed) | | | | | | .000 |
| | N | | | | | | 60 |
| TA | Pearson Correlation | | | | | | 1 |
| | Sig. (2-tailed) | | | | | | |
| | N | | | | | | |

**. Correlation is significant at the 0.01 level (2-tailed).
**Source:** Research Data (2023)

From table 4.7, total assets, total insider loans, and gross non-performing loans all showed a substantial negative and moderate connection (r = -.427, p<0.05; r = -.563, p<0.05, and r = -.505, p<0.05, respectively) with net income, according to Table 4.7's findings. It follows that a rise in total assets, total gross non-performing loans, and total insider loans causes a moderate but noticeable decline in net income. As indicated by their respective r values of.009, p>0.05 and.1, p>0.05, the CAR and operational efficiency have a weakly positive and negligible connection with net income. It follows that improvement in operating efficiency and capital adequacy ratio result in a negligible rise in net income.

## 4.5 Regression Analysis

This was utilized to determine how insider loans and advances affected the microfinance banks' financial performance in Kenya. The following was the analysis's conclusion:

### 4.5.1 Model Summary

The applicability of the findings is demonstrated by the Adjusted R-squared in Table 4.8, which demonstrates that changes in insider loans and advances as well as the control variables were responsible for 47% of variances in the financial performance of microfinance banks in Kenya. The inference was that the financial performance of Kenya's microfinance banks is influenced by an additional 53 percent of factors. The average separation between the observed values and the regression line is shown by the standard error of estimation. As a result, smaller values are preferable since they show that the observations are nearer the fitted line. As a result, the score of 199.17475 suggested that the study's regression fit was satisfactory.

**Table 4.8: Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|------|----------|-------------------|----------------------------|
| 1 | .724[a] | .525 | .470 | 199.17475 |

a. Predictors: (Constant), Gross Non-Performing Loans, Operating Efficiency, Capital Adequacy Ratio, Total Insider Loans, Total Assets

b. Dependent Variable: Net Income

## 4.5.2 Analysis of Variance

Table 4.9 shows that insider loans and advances have a significant effect on Kenya's microfinance organizations' financial performance since $p<0.05$. It implies that the amount of insider loans and advances has a significant influence on fluctuations in the financial performance of Kenya's microfinance institutions. The lower p-value of.000 and the larger F statistic of 9.499 suggest that changes in insider loans and advances were a reliable and significant source of variances in the financial performance of Kenyan microfinance institutions. It also suggests that the study's regression model was trustworthy.

**Table 4.9: Analysis of Variance**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|-------|--------|
| 1 | Regression | 1884129.197 | 5 | 376825.839 | 9.499 | .000[b] |
| | Residual | 1705835.048 | 43 | 39670.583 | | |
| | Total | 3589964.245 | 48 | | | |

a. Dependent Variable: Net Income

b. Predictors: (Constant), Gross Non-Performing Loans, Operating Efficiency, Capital Adequacy Ratio, Total Insider Loans, Total Assets

**Source:** Research Data (2023)

## 4.5.3 Regression Coefficient

According to Table 4.10, the regression intercept is -28.21, which means that financial performance takes on a value of -28.21 when insider loans and advances have a value of 0. It stands for the regression model's slope. The negative value of the slope indicates

that as insider loans and advances increase, Kenya's microfinance institutions' financial performance decreases. The beta values indicate that 0.04 is the amount by which net income varies with one unit variation in total assets. Net income also varies with -1.970, because of one unit variation in total insider loans. Further, a one-unit variation in capital adequacy ratio leads to .011 variation in net income.

The result also shows that a change of one unit in operating efficiency would result in a change in net income of -.198. Ultimately, a variance of one unit in gross non-performing loans results in a variation of -.159 in net income. The findings also indicate that total assets, insider loans and advances and gross non-performing loans significantly affected financial performance, given by $\beta$=.000, .000 and .001 respectively. However, the capital adequacy ratio and operating efficiency have no appreciable effect on the financial performance of Kenya's microfinance banks because the beta values are more than 0.05.

**Table 4.10: Regression Coefficients**

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|
| | $\beta$ | Std. Error | $\beta$ | | |
| (Constant) | -28.210 | 44.052 | | -.640 | .525 |
| Total Insider Loans | -1.970 | .451 | -1.265 | -4.367 | .000 |
| Size of the Firm | .040 | .010 | 1.575 | 3.910 | .000 |
| Operating Efficiency | -.198 | 1.601 | -.013 | -.124 | .902 |
| Gross Non-Performing Loans | -.159 | .045 | -.948 | -3.509 | .001 |
| Capital Adequacy Ratio | .011 | .009 | .145 | 1.219 | .229 |

a. Dependent Variable: Net Income
**Source:** Research Data (2023)

The regression model to be used can therefore be summarized as follows:

**$Y = -28.210 - 1.970X_1 + .04X_2 - .198X_3 - .159X_4 + .011X_5 + \varepsilon$**

Where Y = Financial Performance, $X_1$= Total Insider Loans and Advances, $X_2$= Size of MFBs, $X_3$ = Operational Efficiency, $X_4$ = Gross Non-Performing Loans and $X_5$ = Capital Adequacy

$\varepsilon$ = Error term.

## 4.6 Summary of Findings

Finding out how insider loans and advances impacted the financial performance of Kenya's microfinance banks was the aim of the research. The findings showed that net income and total assets, total insider loans, and gross non-performing loans had a significant negative and moderate relationship (r = -.427, p<0.05; r = -.563, p<0.05, and r = -.505, p<0.05, respectively). As indicated by their respective r values of.009, p>0.05 and.1, p>0.05, the capital adequacy ratio and operational efficiency have a weakly positive and negligible connection with net income. The results align with the research conducted by King'ori, Kioko, and Shikumo (2017), which determined a direct correlation between the operational effectiveness, capital sufficiency, firm dimensions, and financial prosperity of Kenya's microfinance institutions.

The study discovered a strong correlation (R-value of 0.724) between insider advances and loans and Kenyan microfinance institutions' financial performance. The impact of insider advances and loans on the financial performance of Kenyan microfinance banks was investigated in relation to this effect. The R-square showed that 52.5% of the differences in the financial performance of Kenya's microfinance banks could be explained by changes in insider loans and advances. Finally, the Adjusted R-squared provides a broad application of the findings by demonstrating that 47% of the variability in the financial performance of Kenya's microfinance institutions can be explained by changes in insider loans and advances as well as the control variables. Furthermore, the

study found that insider loans and advances had a significant effect on Kenya's microfinance organizations' financial performance, with p<0.05. The statistical significance of the model was further supported by the P value, which was less than 0.05. It demonstrated the model's fitness, defending the application of regression. The results align with Eje's (2022) research, which demonstrated the substantial adverse impact of insider loans on financial performance.

Finally, the regression coefficients established that the regression intercept, indicating that financial performance took the value of -28.21 when insider loans and advances takes value 0. The standardized beta values indicate that 1.575 is the amount by which net income varies with one unit variation in total assets. Net income also varied with -1.265, because of one unit variation in total insider loans. Further, a one-unit variation in capital adequacy ratio led to .145 variation in net income. The result also shows that a change of one unit in operating efficiency caused a change in net income of -.013 units. Ultimately, a fluctuation of one unit in gross NPLs resulted in a variation of -.948 in net income. The results also demonstrated the importance of the studied variables' values. Total assets, insider loans and advances and gross non-performing loans significantly affected financial performance, given by $\beta$=.000, .000 and .001 respectively. However, the capital adequacy ratio and operating efficiency have no appreciable effect on the financial performance of Kenya's microfinance banks because the beta values are more than 0.05.

# CHAPTER FIVE:

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

## 5.1 Introduction

Provided here is overview of the outcomes, recommendations, and concluding statements that were drawn from them. It also examines the challenges encountered throughout the investigation.

## 5.2 Summary of Findings

Outcomes of investigation showed that net income and total assets, total insider loans, and total GNPLs had a moderate but substantial negative association. This suggests that an increase in these variables would result in a moderate but significant decline in net income. Capital adequacy ratio and operating efficiency, however, had low positive and insignificant correlation with net income implying that an increase in capital adequacy ratio and operating efficiency lead to an insignificant increase in net income.

The study also found that 52.5% of the variability in the financial performance of Kenya's microfinance banks was explained by changes in insider loans and advances. The Adjusted R-squared, which showed that variations in insider loans and advances along with the control variables were accountable for 47% of variances in the financial performance of microfinance banks, proved the results' universality. Furthermore, the study found that insider loans and advances had a significant effect on Kenya's microfinance organizations' financial performance, with $p < 0.05$. The model was found appropriate.

Finally, the regression coefficients established that the regression intercept, indicating that financial performance took the value of -28.21 when insider loans and advances

takes value 0. This showed a negative coefficient, implying an inverse association for financial performance and insider loans and advances. The standardized beta values indicate that 1.575 is the amount by which net income varies with one unit variation in total assets. Net income also varied with -1.265, because of one unit variation in total insider loans. Further, a one-unit variation in capital adequacy ratio led to .145 variation in net income. The result also shows that a change of one unit in operating efficiency caused a change in net income of -.013 units. Finally, a one-unit variation in gross non-performing loans led to a -.948 variation in net income.

Finally, the investigation revealed that the values of the variables under investigation had a significant impact. Coming forth was that these variables had a substantial impact on financial performance with significance thresholds of equivalent to.00000,.00000, and.0001 for total assets, insider loans and advances, and gross non-performing loans, respectively. Since the beta values of Kenya's microfinance banks were more than 0.05, there was no appreciable effect of the institutions' operating efficiency or capital adequacy ratio on their overall financial performance.

## 5.3 Conclusion of the Study

The investigation came to a closure that insider advances and loans had a big impact on Kenya's microfinance institutions' financial performance. It follows that differences in their financial performance are highly impacted by an elevated amount of insider loans and advances. The study unraveled a greater correlation between insider loans and advances and Kenyan microfinance institutions' financial performance, and that variations in insider loans and advances were the main factor influencing a sizable variation in those banks' financial performance. Overall, the study discovered that

factors other than changes in insider loans and advances and the control variables affect the financial performance of MFBs.

The study also unraveled that financial performance of Kenyan microfinance banks is highly impacted by total assets, gross non-performing loans, advances, and insider loans. While gross NPLs insider loans, and advances impacted negatively, the overall assets have a positive one. This is due to the fact that asset quality, which includes gross non-performing loans and insider advances, determines financial success. The concern arises from high volume of bad and irrecoverable insider loans and advances that increase credit risk and subsequently reduce financial performance. The further result was that, because the beta values were more than 0.05, the capital adequacy ratio and operating efficiency did not significantly affect the financial performance of microfinance banks in Kenya. Operating efficiency had a negative while capital adequacy had a positive insignificant effect.

## 5.4 Recommendations of the Study

According to the research, MFB incharge should design procedures for effectively managing insider advances and loans. As a result, there would be fewer instances of toxic insider loans and advances, which would raise credit risk. According to the study, total assets, insider loans and advances, and GNPLs have a significant impact on the financial performance of MFBs in Kenya. As a result, those in charge of of MFBs should effectively minimize NPLs and adhere to strict regulations regarding insider loans and advances. As significant contributors to non-performing loans, prominent owners, directors, and employees should also be subject to a standard objective credit evaluation prior to loan disbursement.

Additionally, the management of MFBs ought to be responsible for formulating policies to enhance the quality of the assets held by the institutions. This conclusion is drawn from the observation that the total assets and net income have a correlation that is inverse and statistically significant. If the quality of the assets is going to be improved, the managers, who are also the policy makers, might need to concentrate on the assets that generate income. This may necessitate the requirement to retain a portfolio of assets that ensures consistent financial returns over an extended period. By passing laws and regulations governing insider loans and advances, the Kenyan central bank could also push MFBs to adopt corporate governance procedures.

The fact that gross non-performing loans were shown to have a substantial negative association with net income led the me to make the following recommendation: By diversifying their investment portfolio and implementing an efficient credit policy, MFBs can effectively control their credit risk. In addition, microfinance institutions (MFBs) had to implement tight credit policies in addition to sophisticated credit risk management frameworks in order to cut down on the amount of non-performing loans and defaults.

## 5.5 Limitations of the Study

The procedure was complicated by a variety of different problems. Only secondary sources of information were used. Some secondary data may have also been smoothened for the interest of the management team, that may compromise objectivity as compared to the use of a questionnaire. I incorporated qualitative components into my analysis of the findings in various ways. I conducted using quantitative methods, with an emphasis placed on determining the relationships between the factors. The insights, particularly those qualitative elements that affect financial performance,

would be made clearer, and this would improve their quality as well. I overcame the problem by adding a comprehensive explanation of the findings that considered the qualitative parts of the investigation.

In summary, the study required the laborious and time-consuming collection of secondary data over a five-year period. There were gaps in the data for some MFBs in specific years over the course of the research effort. The study only included those MFBs in its analysis that were able to give data for the period under consideration by the researcher.

**5.6 Suggestions for Further Study**

In the future, more assessments on the connection between insider loans and advances and bank failures—including those of commercial banks and other financial institutions under central bank supervision—may be carried out. This would provide additional insights into the issues that are associated with insider loans and advances. Mortgage firms, commercial banks, and other types of non-banking financial institutions would all be the focus of separate research projects that would investigate the topic of various types of financial institutions that lend money to the public.

Future research should also concentrate on the impact that insider loans and advances have on loan quality. This research should rely on primary data to obtain a more primary perspective of the loan management team. Future research ought to look into the possibility of a relationship between non-performing loans and non-loan related attributes of the bank.

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# APPENDIX I

# LIST OF MICROFINANCE BANKS IN KENYA

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

# APPENDIX II: RAW DATA

| Years | | Total Assets | Net Income | Total Gross Non-Performing Loans | Total Insider Loans | Capital Adequacy Ratio | Operating Efficiency |
|---|---|---|---|---|---|---|---|
| **2018** | Kenya Women Microfinance Bank Limited. | 29,582.00 | - 827.00 | 4,301.00 | 737.00 | 23.00 | - 25.02 |
| | Faulu Microfinance Bank Limited. | 27,225.00 | 181.00 | 2,507.00 | 257.00 | 19.00 | 5.21 |
| | Rafiki Microfinance Bank Limited. | 6,050.00 | - 192.00 | 1,973.00 | 17.00 | 29.00 | - 4.82 |
| | SMEP Microfinance Bank Limited. | 2,942.00 | - 22.00 | 326.00 | 41.00 | 18.00 | 14.57 |
| | Sumac Microfinance Bank Limited | 1,530.00 | 5.00 | 354.00 | 17.00 | 61.00 | 1.46 |
| | LOLC Microfinance Bank Limited/ Key | 433.00 | - 14.00 | 100.00 | 8.00 | 79.00 | - 3.28 |
| | Maisha Microfinance Bank Ltd. | 289.00 | - 119.00 | 65.00 | 5.00 | - 6.00 | - 1.46 |
| | Caritas Microfinance Bank Limited. | 1,244.00 | - 85.00 | 54.00 | 19.00 | 28.00 | - 2.89 |
| | U & I Microfinance Bank Limited. | 534.00 | 8.00 | 46.00 | 11.00 | 59.00 | 3.95 |
| | Salaam Microfinance Bank Limited/ Uwezo | 225.00 | - 27.00 | 94.00 | 3.00 | 819.00 | - 2.39 |
| | Choice Microfinance Bank Limited. | 98.00 | - 42.00 | 9.00 | 3.00 | - 47.00 | - 1.24 |
| | Daraja Microfinance Bank Limited. | 172.00 | - 32.00 | 14.00 | 2.00 | - 30.00 | - 1.55 |
| **2019** | Kenya Women Microfinance Bank Limited. | 30,613.00 | - 402.00 | 3,998.00 | 607.00 | 20.00 | 22.74 |
| | Faulu Microfinance Bank Limited. | 29,682.00 | 312.00 | 2,546.00 | 383.00 | 14.00 | 40.26 |
| | Rafiki Microfinance Bank Limited. | 5,935.00 | - 3.00 | 2,195.00 | 24.00 | 23.00 | 8.61 |
| | SMEP Microfinance Bank Limited. | 3,314.00 | 6.00 | 395.00 | 27.00 | 16.00 | 9.93 |
| | Sumac Microfinance Bank Limited | 2,013.00 | 9.00 | 201.00 | 11.00 | 50.00 | 75.67 |
| | LOLC Microfinance Bank Limited/ Key | 406.00 | - 13.00 | 104.00 | 6.00 | 71.00 | 16.80 |
| | Maisha Microfinance Bank Ltd. | 1,264.00 | - 38.00 | 86.00 | 8.00 | 174.00 | 7.35 |
| | Caritas Microfinance Bank Limited. | 1,712.00 | - 51.00 | 139.00 | 34.00 | 18.00 | 20.85 |
| | U & I Microfinance Bank Limited. | 686.40 | 4.00 | 29.00 | 10.00 | 49.00 | - |
| | Salaam Microfinance Bank Limited/ Uwezo | 168.00 | - 31.00 | 55.00 | 2.00 | 275.00 | 57.00 |

| Years | | Total Assets | Net Income | Total Gross Non-Performing Loans | Total Insider Loans | Capital Adequacy Ratio | Operating Efficiency |
|---|---|---|---|---|---|---|---|
| | Choice Microfinance Bank Limited. | 79.00 | - 29.00 | 9.00 | 2.00 | - 75.00 | - |
| | Daraja Microfinance Bank Limited. | 133.00 | - 32.00 | 17.00 | 1.00 | - 76.00 | 60.00 |
| 2020 | Kenya Women Microfinance Bank Limited. | 28,038.00 | - 1,485.00 | 4,784.00 | 462.00 | 12.00 | 22.00 |
| | Faulu Microfinance Bank Limited. | 29,279.00 | - 399.00 | 4,086.00 | 499.00 | 8.00 | 42.29 |
| | Rafiki Microfinance Bank Limited. | 6,005.00 | - 42.00 | 2,648.00 | 35.00 | 18.00 | 7.68 |
| | SMEP Microfinance Bank Limited. | 3,446.00 | - 69.00 | 465.00 | 16.00 | 6.00 | 11.57 |
| | Sumac Microfinance Bank Limited | 2,310.00 | 7.00 | 425.00 | 19.00 | 34.00 | 46.83 |
| | LOLC Microfinance Bank Limited/ Key | 307.00 | - 34.00 | 86.00 | 8.00 | 43.00 | 18.00 |
| | Maisha Microfinance Bank Ltd. | 1,665.00 | 65.00 | 160.00 | 11.00 | 56.00 | 4.72 |
| | Caritas Microfinance Bank Limited. | 2,284.00 | 5.00 | 128.00 | 19.00 | 12.00 | 19.57 |
| | U & I Microfinance Bank Limited. | 805.00 | 12.00 | 39.00 | 15.00 | 54.00 | - |
| | Salaam Microfinance Bank Limited/ Uwezo | 134.00 | - 18.00 | 62.00 | 2.00 | 451.00 | 40.00 |
| | Choice Microfinance Bank Limited. | 54.00 | - 26.00 | 8.00 | 4.00 | - 95.00 | - |
| | Daraja Microfinance Bank Limited. | 124.00 | - 40.00 | 16.00 | - | - 125.00 | 44.00 |
| 2021 | Kenya Women Microfinance Bank Limited. | 26,961.00 | 204.00 | 4,959.00 | 314.00 | 19,313.00 | 14.50 |
| | Faulu Microfinance Bank Limited. | 27,780.00 | - 407.00 | 3,917.00 | 329.00 | 17,885.00 | 30.88 |
| | Rafiki Microfinance Bank Limited. | 5,889.00 | - 153.00 | 3,262.00 | 30.00 | 3,849.00 | 9.11 |
| | SMEP Microfinance Bank Limited. | 3,382.00 | - 46.00 | 542.00 | 11.00 | 2,272.00 | 9.97 |
| | Sumac Microfinance Bank Limited | 3,037.00 | 6.00 | 468.00 | 26.00 | 2,120.00 | 19.65 |
| | LOLC Microfinance Bank Limited/ Key | 289.00 | - 51.00 | 86.00 | 6.00 | 219.00 | 29.00 |
| | Maisha Microfinance Bank Ltd. | 1,480.00 | - 178.00 | 286.00 | 11.00 | 1,359.00 | 4.11 |
| | Caritas Microfinance Bank Limited. | 2,951.00 | 17.00 | 120.00 | 65.00 | 2,260.00 | 18.67 |
| | U & I Microfinance Bank Limited. | 1,006.00 | 24.00 | 40.00 | 23.00 | 710.00 | - |

| Years | | Total Assets | Net Income | Total Gross Non-Performing Loans | Total Insider Loans | Capital Adequacy Ratio | Operating Efficiency |
|---|---|---|---|---|---|---|---|
| | Salaam Microfinance Bank Limited/ Uwezo | 433.00 | - 31.00 | - | - | 110.00 | 21.50 |
| | Choice Microfinance Bank Limited. | 45.00 | - 24.00 | 7.00 | 2.00 | 88.00 | 26.00 |
| | Daraja Microfinance Bank Limited. | 120.00 | - 30.00 | 15.00 | - | 43.00 | - |
| **2022** | Kenya Women Microfinance Bank Limited. | 27,329.00 | - 57.00 | 4,413.00 | 209.00 | 11.00 | 11.29 |
| | Faulu Microfinance Bank Limited. | 22,704.00 | - 321.00 | 4,270.00 | 285.00 | 13.00 | 21.47 |
| | Rafiki Microfinance Bank Limited. | 5,346.00 | - 314.00 | 2,162.00 | 51.00 | 10.00 | 13.54 |
| | SMEP Microfinance Bank Limited. | 3,219.00 | 5.00 | 598.00 | 12.00 | 5.00 | 6.34 |
| | Sumac Microfinance Bank Limited | 3,678.00 | 6.00 | 490.00 | 26.00 | 21.00 | 4.19 |
| | LOLC Microfinance Bank Limited/ Key | 451.00 | - 48.00 | 73.00 | 3.00 | 81.00 | 19.25 |
| | Maisha Microfinance Bank Ltd. | 853.00 | - 498.00 | 158.00 | 12.00 | 49.00 | 11.63 |
| | Caritas Microfinance Bank Limited. | 3,353.00 | 32.00 | 194.00 | 46.00 | 12.00 | 24.63 |
| | U & I Microfinance Bank Limited. | 1,480.00 | 24.00 | 42.00 | 20.00 | 51.00 | - |
| | Salaam Microfinance Bank Limited/ Uwezo | 405.00 | - 56.00 | - | - | 1,030.00 | 4.08 |
| | Choice Microfinance Bank Limited. | 142.00 | - 12.00 | 4.00 | 3.00 | 221.00 | 3.33 |
| | Daraja Microfinance Bank Limited. | 235.00 | - 21.00 | 41.00 | - | - 12.00 | - |

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