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Firm Characteristics and Financial Performance of Licensed Microfinance Banks in Kenya

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Abstract

Microfinance institutions significantly contribute to the financial sector by providing credit facilities to low-income earners and the unbanked population. However, the rising economic crisis in Kenya has adversely affected the financial performance of Microfinance institutions, raising concerns about their sustainability. This study aims to investigate how firm characteristics such as capital adequacy, bank size, and management efficiency impact the financial health of microfinance banks in Kenya. The research spans a six-year period from 2018 to 2023, a time marked by rapid expansion in the microfinance sector and significant economic challenges, including the devaluation of the Kenyan shilling, corporate consolidation, and the takeover of financial institutions. The theoretical framework of the study is underpinned by Capital Buffer Theory, Economic Theory and Efficiency Structure Theory. A descriptive research design was employed, collected secondary data from the published financial reports of the 13 licensed microfinance banks in Kenya, using a census sampling method. Ethical and logistical standards were rigorously followed, ensuring voluntary participation and maintaining data confidentiality. Results revealed a strong positive correlation between capital adequacy and financial performance. Management efficiency also showed a significant positive correlation with financial performance, while bank size showed a weaker relationship. Panel regression further confirmed that capital adequacy and management efficiency had a positive impact on financial performance, whereas bank size had a minimal effect. Conclusions from the study indicate that firm characteristics significantly influence financial performance. Larger banks due to economies of scale and diversified portfolios, tend to perform better, implying that growth and expansion strategies can enhance financial stability. Capital adequacy emerged as a crucial determinant of financial health, with well-capitalized banks being more resilient to financial shocks and better positioned for growth. Management efficiency also played a key role, with better-managed institutions showing higher profitability through cost control and optimal resource allocation. These insights can guide policymakers and bank managers in crafting strategies to bolster the financial resilience of Microfinance institutions s, with an emphasis on maintaining robust capital adequacy ratios and enhancing managerial capabilities to drive long-term sustainability and competitiveness.

Keywords: *Bank Size, Capital Adequacy, Management Efficiency, Financial Performance*

1.0 INTRODUCTION

Microfinance refers to advancement section that offers monetary assistance and yields like as microloans, reserves, small –scale leasing, micro coverage and funds transfer to give assistance to low socio-economic populace (Bassem, 2020). According to Enad and Gerinda (2022) initially microfinance evolved in 1970s and was termed as micro credit which later shifted towards a micro segment now termed as a microfinance which demands more attention towards commercialization and is now referred to as microfinance institutions. According to Daher and Le Saout (2021) microfinance is a segment most appropriate for reducing income dispersion, making low socio-income citizens to participate in the economy. Microfinance Banks (MFBs) serve the micro segment of the populace, generally poor people with low income which limits them the access to finances from formal financial institutions. Sonia (2022) concurs that in USA, MFBs facilitate the delivery of financial solutions to modest income and underprivileged consumers locked out from accessing convectional financial entities. Henceforth, MFBs remains essential. She adds that MFBs can give support to other Sustainable Development Goals, such as SDG 2 relating to zero hunger by allowing access to credit among small scale farmers and food producers and SDG 5 on gender equality by providing women with financial services who may otherwise be excluded from the formal financial system.

Santosuosso (2021) explored firm performances in relation to selected characteristics, evidence from Italian listed firms. The study established that measuring financial performance is increasingly gaining prominence in the banking industry. This is mainly due to financial liberalization and globalization of financial markets. They assert that a banking organization that is unaware and non-considerate to its firm characteristics faces financial consequences in the business sector. Alshatti (2021) established that Micro Finance Banks (MFBs) in Jordan offered services such as delivery of financial assistance to modest-income earners and the entrepreneur. These provisions mostly encompass savings and credit, insurance and payments. Al-Homaidi, Tabash, Farhan, and Alastair (2020) highlighted that in India commercial banks are now adopting more innovation and digitalization and are more demand driven with the most current financial products while maintaining institutional sustainability. A comprehensive study by Bustaman Ekaputra, Husodo and Prijadi (2021) in Asia indicated that MFBs are characterized by businesses with micro, small and medium scale in the agricultural, industrial or trade in the urban and rural areas. The segment also comprises of generally the middle to lower economic communities and a high risk of credit services (He, & Deng, 2020). Santosuosso (2021) asserted that MFIs entails the practice of providing small loans to poor people who are not conventionally served by the main commercial banks

According to Batra and Dhir (2019) in the Sub-Saharan Region (SSR) the current state of MFBs' art of performance assessment encompasses two main schools of thought namely: the projected beneficiary school focusing on impact on users, and the intermediary school focusing on the sustainability of future operations. To achieve these goals, MFBs are building efficient market, reducing transaction cost and ensuring better risk management strategies. Initially MFBs market development relied and attracted huge fund from donors, but currently, most MFBs have entered into the market with share of donor funds getting scarcer. These sentiments are validated by Odunga (2020) who asserted that profit margin is an accurate gauge of effective bank financial health analysis. Hamadi and Awdeh (2022) in their study in Lebanon, evidence showed that efficient use of MFBs' internal resources as a major characteristic of MFBs with great considerations on sources of funds, loan volume, lending approach, and' compensation framework as motivators behind effectiveness and increased financial performance. They also

offer provide social networking social services like group formation, building self-esteem, financial education and self-management among group member's .For successful delivery and sustainability of such services MFBs have devised strategies aimed at increasing financial performance (Gatuhu, 2021). Odekina, Gabriel and Solomon (2019) analyzed the effects of CA, credit risk and bank size and financial performance in Nigeria. They identified that microfinance programs incorporate group lending services like peer choice and punishment, repeated public verbal pledges and joint responsibility.

1.1 Firm Characteristics

Nyabaga and Matanda (2020) portrayed firm attributes as the population –related and administrative parameters comprising of the interior attributes of a company. They comprise of company size, financial leverage, asset quality and structure, capital adequacy, credit risk management, liquidity, and interest rate among others. They note that company parameters play a significant function in a company's financial performance. The attributes also dictate the type of financing mode, the firm's management decides to employ. Odekina, Gabriel, and Solomon (2019) assert that these firm characteristics have immediate impact on the financial standing of any financial institution. They add that the gauge of the characteristics is determined by use of financial statements commonly found on the Central Bank of Kenya (CBK) website and other banking entity websites. According to Saleh and Afifa (2020) the financial health is enhanced by the readiness of a company to respond to challenges related to any of its attributes as well as embracing the opportunities in the environment it operates. According to Kataiki (2020) the more significant the size of a bank the greater the advantage it has in spreading fixed costs which in turn reduce their average costs. In addition, an increase in the operation scale is linked to higher bank sizes where specialized inputs such as skilled loan officers are utilized. Similarly, small size banks oftentimes possess stronger relationships and associations with smaller customers as well as the local business environment as opposed to large banks. This provides them essential information which facilitates in formulating and implementing important policies related to credit decisions. Chekol and Mutwol (2022) highlight that this advantageous position of readily available information and pricing enables small banks facilitate the offsetting of losses which may result from the economies of scale.

According to Odunga (2020) capital adequacy is the adequate amount generally defined by controllers of shareholder money that MFBs need to hold as percentage of its risk-weighted assets. This is based on the CAR which measures the total amount of money an MFB retains equated to its risk. Capital adequacy is evaluated by calculating the relation of MFB's asset –to-liability and the net worth of the MFI. The national supervisory body tracks the CAR of an MFB to ascertain how effective it can sustain a realistic amount of loss and also determine if an MFB's present CAR complies with statutory capital regulations. The CAR is significant to stakeholders since it is a vital measure of the financial soundness of a MFB. Equity-to-assets ratio will serve as a measure. Maket (2021) observed that capital adequacy entails levels of investment which enable banks carry out their primary functions in an effective manner while absorbing losses in order to prevent bank failures. According to Ngungu and Abdul (2020) capital adequacy is termed as a firm characteristic based on the bank's management's ability to make decisions on the levels of capital which are over and above the regulatory requirements. Thus, capital adequacy remains one of the crucial and major characteristics of banks which has significant positive influence on a bank's financial performance. Bassem (2020) asserted that capital represents the available amount of money a particular bank owns and utilizes to support business activities. The capital serves as a buffer in times of negative events which occur in the

bank. The banks' liquidity is established by the capital since deposits are more prone and delicate in running banks. Thus, high levels of capital minimizes the likelihood of economic strain or instability of a bank. In addition, the larger the capital base a bank provides the more stability. Further, adequate capital makes it possible for a bank to diversify business operations consequently enhancing its ability to withstand risks. In this study, primary capital to aggregate assets was utilized as a metric of capital adequacy.

Effective management is defined as the capacity of the administration and the panel to evaluate and mitigate operational risks of the bank for efficiency in operations in line with simple authorities and regulations (Odunga, 2020).In particular, operating income as a percentage of income helps determine management performance or effectiveness. When the relation of operating earnings to the aggregate income has risen, it can be estimated that the corporation's management has the appropriate income-performance ratio. In particular management performance is an important determinant of operating expenses, which ultimately affects the stability of banks (Sonia, 2022). Operating profit to net income was utilized to assess management efficiency. Bolarinwa, et al (2021) asserted that management efficiency entails the ability to recognize, evaluate and manage the perils which emanate from the operations of a bank by the management as well as the board of directors. The main aim is to ensure efficient and safe operations while at the same time corresponding to underlying laws and regulations of banking industry. They also ascertain that effective operations and maximum profits are possible through efficient management which is can be assessed by use of financial ratios Chekol and Mutwol (2022) concurred that working profit to income percentage is important in evaluating the efficiency of management or quality of operations. As they add that bank management is regarded efficient when there is an increase in the ratios between the operating profits and total income ratio with respect to income generation and operations. Sonia (2022) asserted that management efficiency is notably a momentous determining factor of the extent to which operating expenses ultimately affect banks' financial performance. The ratio between operating profit to net income will be used to assess the management efficiency of MFBs.

1.2Financial Performance

Financial performance refers to assessing the outcomes of organizational guidelines and activities regarding fiscal returns. Economic returns are represented in the organizational return on investment (ROI).They are manifested ROA (Returns on assets), ROE (Returns on Equity), value added progress (VAP), sales growth, profitability, institutional efficiency and corporate performance (Firer & Roper, 2019; Ali & Dhiman, 2019). Maket (2021) explained that financial results is qualitative assessment of a firm capacity to deploy its resources from core business and produce similar earnings from similar firms in the same sector of the economy or to sum up industries or sectors. We carry out analysis of financial standing and earnings of an organization using key ratios such as ROA, ROE and ROI. Financial performance metrics include determination of quick and current ratios, debt-to-equity ratio, working capital, gross profit and net profit margins, equity multiplier, ROA; ROE total asset income, inventory gross revenue as well as operating cash flow (Bassem, 2020). The financial standing in this analysis was based on return on assets (ROA). The ROA indicated how efficient MFB is in managing its total assets on its balance sheets to generate profits. ROA was achieved by dividing each of the MFB's after-tax earnings by its total assets. This profitability indicator assisted in establishing how each MFB creates its revenue and how it compares with its competitors. According to Al-Homaidi et al (2020) the ROA has the ability to accurately give the management and stakeholder's notion on how efficient the Micro Finance Institutions (MFI) is in transforming invested funds into net

income. It also allows a quick understanding of MFBs' performance in the banking industry. Also, an MFI can use its ROA business sections to compare its ratio with other MFBs' operations in similar segments. This is because a higher ROA ratio is advantageous and shows a good position in the market. This is because higher ROA translates to asset efficiency.

Matiang'i (2022) examined the repercussion of microcredit services on the fiscal performance of small and medium-sized businesses in Kenya. He established that accurate measurement of financial performance to be of paramount importance for financial reporting. It also continues as a fundamental issue for majority of financial institutions. The financial performance of MFBs similarly to other firms might at several instances be revealed by financial results such as capital adequacy, credit risks, liquidity and quality of assets. According to Ngungu and Abdul (2020) the MFBs in Kenya experienced a decrease in financial performances (1:13) in August 2019 in ROA and ROE. This led to restructuring of Kshs 1.13 trillion (1:39) loan book of Kshs 2.9 trillion. The operating profit to net income of MFB sector noted decline in pre-tax earnings of (1:17.2) to Kshs 134.1 billion in 30th June 2020 motivated by (1:11.9) increase in expenditure to Kshs 404.1 billion in 2020, December. The ration of good debts to bad debt charges increased to 1: 2.1 (Central Bank of Kenya, 2022). In total, the MFBs had combined pre-tax loss Kshs 62 million, Kshs 1.4 billion and Kshs 339 million in 2020, 2021 and2022 correspondingly.

1.3 Micro Finance Banks

According to Microfinance legislation (2006), a micro bank is an enterprise accepting deposits. The person conducting the business publicly offers his services by accepting deposits daily. According to Enad and Gerinda, (2022), Microfinance banks are also known under Microfinance Act (2006), although they are accredited but partially regulated. However, they are subject to nearly all the requirements of fully registered banking institutions pursuant to the prudent regulation the Central Bank as they mobilize client deposits to source funds for self-sufficient banking facilities. MFBs have customers deposit, which they take and use as capital to provide credit to their clients (Omondi & Jagongo, 2020).The MFB activities put Kenya at the forefront and the 5th in the global market (Alshatti, 2021).Kenya has almost 250 MFBs of a kind, but majority of them are not affiliated with the Association of Microfinance Institutions (AMFI) . Celikoz and Arslan (2021) stated that according to the information available up to December 2018, there were 12 microfinance institutions in Kenya. The Micro finance industry in Kenya focal point is delivery of financial solutions to modest earners from low socio-economic status and micro and small firms involved in off-farm activities. Significant advancement in products and services have been made by MFBs over the years, which are patronized by MSEs (Maket et al., 2021).According to the findings ,the total figure of assets belonging to the microfinance sector grew progressively in the last five years and microfinance activities are dominated by microfinance banks ii the industry (Otieno, 2021).

1.4 Statement of the Problem

Based on their unparalleled positioning and design of MFBs, a significant role of allocating microfinance to Microfinance banks play a paramount important role in allocating microfinance the under privileged and the unbanked population in the rural areas is reached (Ondoro Omena (2020). It is estimated that private investiture capital which translates to 18 percent by small businesses and individuals in Kenya is connected to microfinance sources (Sonia, 2022). The MFBs mainly operate in limited geographical areas and having an advantage of better understanding of the financial needs specific to the people helps them perform an essential role in the livelihood of the Kenyan citizens. According to Religiosa et al (2021) MFB services target small scale business and unbanked individuals who are excluded from accessing credit

through formal banking institutions. Nonetheless, notwithstanding the crucial role played by this sector, the provision of financial services by these banks has been below expectations. Over the last decade, microfinance financial results in Kenya have drawn fundamental consideration from policy makers and researchers (Mennawi, 2020).

Statistics from CBK (2022) report, over the last five years, banking efficiency, profitability and liquidity have deteriorated. The earning indicators (ROA and ROE) of MFBs have indicated decreased figures since 2018 to date. By June, 2018, measuring financial performance by use of ROE and ROA were (1:34) and (1: 3:9) respectively while by the end of 2019, ROE was reported at (1:1.4) and ROA at 18.4 %(1:5.4). The liquid asset to deposit ratio was at 1: 4 by June 2020. Based on this data, it's apparent that the financial effectiveness of MFBs has been experiencing a varying pattern. Micro-finance banking sector of Kenya incurred loss as high as $8.41 million during the financial period 2021, the previous year 2020 the loss was $ 7.36 million. The MFB sector had earlier in the year of 2019 reported increased profits in its place experiencing an additional upsurge in non-performing loans rising from $6.4million in 2015 to $9.8 million a ratio of (1: 1.5) of the original value in 2018. At the same time, the deposits from customers between 2017 and 2018 similarly went down to $405.8 to $387, a ratio of (1: 0.04) (CBK Banks' Supervision Report CBK, 2022). Narasimhan, Swink and Kim (2022) highlight that the enormous deterioration in profits among the MFBs can be attributed to the CBK's demands for tougher, core capital laws, whereby some of the laws mitigate more losses.

A recent paper by Sonia (2022) highlighted the decline in the financial performance of MFBs hampers the full participation in the achievement of the (Sustainable Development Goals (SDGs), since their role of financial inclusion enhances the attainment of many of the SDGs. For instance, SDG one which entails culminating extreme poverty which is possible by means of access to access to financial services, SDG 8 encompasses promotion of peace and stability which are easy to attain when people are financially stable. The SDG 9 calls for business innovation whereby wider access to credit to the common populace can meet this target very well, (SDG 10) focuses on inclusive economic growth at local and the national levels which are possible r when people are economically stable. These targets can easily be achieved through the financial roles played by MFBs and especially if they have a successful financial performance. Yet, according to Ondoro and Omena (2020) the MFBs in Kenya have experienced an unremitting decline in their financial performance. This raised great concern which warranted an in-depth investigation of the underlying factors of the decline with an aim of the devising relevant measures for enhancing financial performance. This decline was of great concern because it posed threat to financial stability thus increasing firm's uncertainties for its future operations.

In spite the theoretical connection between firm characteristics and financial performance, there existed scanty empirical evidence documented on the relationships in the context of MFBs in Kenya which thus formed the basis for this study. Several studies have cited overstatement of liquidity and corporate governance as major causes of firmness results to a destitute situation in financial performance of MFBs Saleh, et al., (2020) observed that bank dimension had substantial impact on banks' financial achievement whereas Religiosa et al, (2021) & Mennawi, (2020) established noteworthy positive connection between capital adequacy and banks' financial results. Abdo and Onour (2020) further indicated that management efficiency significantly effects banks' financial performance. The aforementioned studies however, mostly centered on commercial banks based in other countries with varying operational frameworks. Notably, the studies focused on a single indicator of financial stability. Hence, in regard to this

foundation, the current research intended to evaluate the impact of company characteristics on financial results of MFBs.

1.5 Objectives of the Study

1.5.1 General Objective

General objective of the analysis was to find out the repercussion of firm characteristics on financial performance of licensed micro finance banks in Kenya.

1.5.2 Specific Objective

The research endeavored to achieve the subsequent specific goals:

(i) To explore how bank size affects financial performance of licensed Micro Finance banks in Kenya**.**

(ii) To evaluate how capital adequacy affects financial performance of licensed Micro Finance banks in Kenya.

(iii) To establish how management efficiency affects financial performance of licensed Micro Finance banks in Kenya.

1.6 Research Hypotheses

$H_{01:}$ There is no significant relationship between bank size and financial performance of licensed Micro Finance banks in Kenya.

$H_{02.}$ There is no significant relationship between capital adequacy and financial performance of licensed Micro Finance banks in Kenya.

H_{03} There is no relationship between management efficiency and financial performance licensed Micro Finance banks in Kenya.

1.7 Scope of the Study

This research intended to scrutinize the influence of firm attributes on financial performance of the 13 licensed MFBs in Kenya based on the bank size, capital adequacy and management efficiency, thus, being the conceptual and contextual research scope. Period scope was between years 2018 to 2022. Buffer Capital theory, Economic theory and Efficiency Structure Theory formed the theoretical framework. The researcher gathered secondary data from published financial statements for six years from 2018 to 2023.

2.0 LITERATURE REVIEW

2.1 Theoretical Review

The theories reviewed underpinning this study includes: Capital Buffer theory, Efficiency structure theory, and Economic theory. Capital Buffer theory was advocated by Caleb and Rob in the annum 1996. Prediction of this theory is that banks' capital requirements violation upon reaching the minimum regulatory capital ratio, may obtain incentive as a result of boosting capital and reducing risk hence minimizing the probability of any regulatory costs associated with it. On the note, banks with poor capital may have higher risks in expectancy of higher returns needed to increase their capital base (Barngetun, 2021). Hence, this becomes the channel in with risks related to lower levels of capital affect the operations of banks. Both the regulations and guidelines linked to adequate capital buffers' creation are formed hence shrinking the pro-cyclical lending scene by promoting the constitution of counter cyclical buffers (Sharifi, Haldar & Rao, 2019). Reid and Sanders (2020) utilizing the capital buffer theory, emphasized maintenance of levels of capital ratios that are above the set standards by the regulatory authorities as minimum capital requirement in all their operations. Based on this premise, financial institutions will always endeavor to increase their capital ratios whenever they come closer to the minimum regulatory capital ratio. Also, the motivation to ensure bumper capital among commercial banks is based on the need to prevent regulatory approvals in relation to

capital obligations breach. Also, it increases their performance by reducing the cost of capital. Religiosa and Surjandari (2021) validating this theory suggest that banks often utilize buffer capital to limit the chances of reaching the minimum requirements set by the regulating authorities when they foresee the possibility of facing market risk to avoid being sanctioned as operating illegally without the allowable capital requirement.

Sharifi, Haldar and Rao (2019) explained that the excess capital is referred to as buffer capital. They hold that banks consider holding buffer capital as being highly competitive in the banking industry. This is because a bank may utilize the excess capital to indicate its financial stability hence probability of non-failure. On the flip side, insufficiently capitalized banks have a likelihood of facing higher risks with cost of capital which can be disadvantageous for their overall performance. To maximize efficiency and profitability, financial institutions endeavor to operate way above the mandatory minimum capital requirements so as not to experience significant financial pressure especially if they have a volatile CAR (Barngetuny, 2021). In relation to this study, among the stated reasons, therefore buffer capital theory was utilized as a mechanism of saving MFBs from failure owing to the buffer capital great competition for unsecured deposits and money market funding. It envisions that MFBs will be very careful about their own capital buffer size which should be relatively higher than that of their competitors. Additionally, holding buffer capital may enable MFBs to explore unexpected investment opportunities. Maintaining an optimum level of buffer capital would help MFBs reduce risks as well as the operational costs hence positively influence their financial performance.

Theory Efficiency Structure is accredited to Demsetz in 1972. The theory is grounded on assumptions, namely, X-efficiency and scale efficiency propositions. The X-efficiency proposition asserts financial institutions which embrace sound routines and management are able to control operational costs thus increasing their income consequently starring the bank towards the best practice and cost curve of lower bound (Karlan and Zinman (2021). The efficiency scale posits banks that are more able to attain solid operations scales enjoy lower costs. It is worth noting that lower costs result to better profits as well as increased growth rate scale for efficient banks. According to Narasimhan, Swink and Kim (2022) Efficiency Structure Theory also suggests that the constitution of bank portfolio with earnings and stockholder returns reflect the internal decisions assumed by the bank management as well as the banks' overall policy decisions. Hamadi and Awdeh (2022) asserted that banks are subject to both external and internal factors which if are not addressed adversely affects the general performance of banks. The efficiency theory holds that through economies of scale, the most favorable production is attainable. Similarly, maximal efficiency in performance is achievable at an output level where all the obtainable economies of scale are efficiently utilized (Kataiki, 2020). Efficient Structure theory opines that effective management and adoption of information technology capabilities in banks helps to reduce their operations costs and ultimately earned increased investment returns (Bustaman, et al, 2021).

In relation to this study, Efficiency Structure Theory provided valuable linkages between management efficiency and banks' performance. The theory argues that improved management scale efficiency results to increased concentration .Stability achievement of higher earnings is derivable from efficiency, which deepens banks' ability to ensure minimum costs and maximum earnings. Additionally, management efficiency leads to a larger share of the market and enhanced market concentration (Ochanda, 2021). Karlan and Zinman (2021) validates this theory and hold that the more efficient the banks and the banking sector are, the more stable they become leading to effective operations in their day- to -day transactions. This theory gives the

underpinnings necessary for management efficiency and financial performance linkage with respect to banking institutions. Increased efficiency management levels lead improved financial performance of Micro finance banks and vice versa.

Economic theory was founded John Maynard Keynes and Adam Smith and it has evolved overtime therefore no period attached to it. The economic theory states that a large firm can be more profitable because its size increases its access to potential customers and leverage small businesses to generate greater profits. In the case of banking sector in Kenya new entrants have no choice but to charge a fixed price when entering the market in the form of purchasing and managing resources to serve customers and investing in capital equipment (Ochanda,2021).The higher the barrier to entry, the lower the potential threat of competition and the greater the profits that incumbent firms can make without entry (Hamadiand and Awdeh,2022).There is the ability to diversify and exploit economies of scale and resources and efficiency of the process. These features make the firm more efficient, allowing large firms to produce better results than small ones (Tarus et al., 2022).Another view is that size is associated with market power and when market power is created through poor performance, it leads to poor performance.

This model is applicable to this research since the bank size will greatly influence the financial performance. Large banks have greater capacity of utilizing behaviour performance. Large banks have greater capacity of utilizing behaviour performance (SCP) models to identify relevant market trends such as demand and market growth as the main determinants of firm results. On the other hand, the capital based perspective suggests that the explanation for the existence of banks with greater or lesser value in terms of size in the same market should be present in each banks internal conditions e.g., joint ventures, stability, skills, etc. These unique factors related to bank size help in achieving and maintaining a competitive advantage, ultimately leading to different financial performance levels among banks of different sizes in the same industry.

2.2 Empirical Reviews

2.2.1 Bank Size and Financial Performance

Enad and Gerinda (2022) studied the factors influencing profitability in banking sector: An evidence lower tier III banks from the United States of America. The sample size comprised of 36 banks and descriptive survey design was used. The research finding findings revealed that lower tier III banks specifically are founded on varied operational situations thus the results of an inquiry business banks may not directly be universal to MFB .Thus, the geographical locations and the socialist- economic circumstance in which this study was conducted greatly differ from the prevailing circumstances with those of the current study.

Egbunike and Okerekeoti (2020) examined the impact of macroeconomic elements on firm characteristics and execution of some rural banks in Nigeria. The research centered on Nigeria's rural banking industry. Out of the 122 rural banks, by the year 2019, only data for 108 rural banks was acquired due to data availability constraints. Quarterly reports were used as sources of information of rural business banks for the phase 2014 to 2019. Banks' sizes were measured by use of deposits and total assets. The study outcomes revealed that deposits insignificantly influenced banks' financial performance. Moreover, total assets had an important direct effect on banks' financial achievement. The research was undertaken on rural banks in Nigeria. In contrast, this research will be conducted on Kenyan microfinance banks.

Nyabaga and Matanda (2020) studied the outcome of firm characteristics on the financial performance of commercial banks cataloged on the Kenyan stock exchange. Their study aimed to evaluate the impact of firm characteristics on economic stability for the top five commercial banks for the years 2013t o 2018.The study made use of a generalized least squares approach to

evaluate the research data. The feedback from the inferential analyses indicated that bank size significantly affected commercial banks' financial soundness. On the contrary, the current study differs from the previous based on the premise that a census design will be used to study all licensed microfinance banks in Kenya, unequal to the previous study, which sampled the top five Kenyan commercial banks.

Alam and Akhter (2019) assessed banking- specific variables financial performance, on selected commercial banks in Bangladesh. The study targeted twenty one (21) banks for time scope ranging from 2006 to 2018, which accounted for 82% of the total banking sector as of 2018. Supported by GMM estimators, it was evident that bank size had a negligible direct impact on banks' liquidity. The research targeted the banking sector in Bangladesh, where there are varying regulatory framework and policies compared to Kenyan banking system. The present research notably, focuses on licensed MFB in the country where insolvency risk will be explored thus this study being unique.

2.2.2 Capital Adequacy and Financial Performance

Olarewaju and Obalade (2022) evaluated of the factors of financial performance for Nigerian commercial banks during a period of ten years from 2010 to 2020. Core focus was influence of money deposits on financial performance in the Nigerian banks while the current study focuses on Capital Adequacy CA and financial wellness of MFBs in Kenya. The research established optimistic bearing between the CA and financial performance of the money deposit banks in Nigeria. Time periods for the two studies differ along with the prevailing economic circumstances.

Mennawi (2020) carried out an investigation on the effect of capital adequacy, leverage risks and liquidity on financial performance, a case for Sudanese banking sector. The target population comprised of all licensed middle and lower tier banks. Grouping of the population into distinct groups was used to sample the two categories of banks where simple random sampling was employed to select banks with an aim of ensuring proportional representation. A total of 4 best performing middle and 6 best performing lower level banks were selected. The outcomes from the study were that a decrease in capital loans poses a potential risk to financial performance henceforth hampering banks' ability to achieve their objectives thus the need for leveraging risk strategies to safeguard the banks' capital. The research findings also established a negative association with ROE from all the components of capital adequacy. The discoveries indicated that the inverse correlation between the variables was explainable by the control of interest rates. The reviewed study was carried out in a more evolving financial Sudanese systems compared to Kenyan which has varied financial systems hence the feedback may not accurately represent the scope of the present study.

Batra and Dhir (2019) conducted a literature review in the Sub-Saharan region to evaluate the impacts of (CA) and inter-partner fit in the financial performance of IJVs .The study size comprised thirty-six (36) commercial banks, and the research made use of descriptive survey design. A multiple linear regression analysis was employed to evaluate the information. Findings revealed that CA inter-partner fit had a negative influence on the financial performance of banks; likewise, management efficiency, liquidity and asset quality enhanced the functioning of commercial banks. The research was nonetheless, done across Sub-Saharan international joint ventures. In contrast, this study aimed to use census design to conduct the research with the help of financial statements to verify the impacts of capital adequacy on the economic performance of MFBs in Kenya.

Al-Harbi (2019) researched capital adequacy of conventional banks profitability in developed and low-income countries in the Middle East. An exploratory research design was adopted, and the study sample comprised sixteen (16) conventional banks purposively chosen. The dataset used was panel data obtained from the quarterly reports for the four years from 2013 to 2018. As it was established, both multicollinearity and regression tests were conducted. The evaluation conducted in the study supported the hypothesis that CA has optimistic impact on financial standing of commercial banks. This contrasts with the present research, which used data review guide to collect research data and prepare a data collection sheet. Secondary research information was also gathered from the certified and published financial reports of MFBs from 2018 to 2022 to find out the impact of CA and economic showing of the licensed MFB in our country.

2.2.3 Management Efficiency and Financial Performance

In a study conducted by Mutinda (2022), the focus was on evaluating microfinance services and poverty reduction in rural areas; a case of Kitui County. The research employed a descriptive survey research method. The focus group was six (6) cataloged MFIs within the county and sixty four (64) employees. Data was gathered from primary sources using self-completed questionnaires. The data analysis involved correlation, multiple regression and descriptive studies. The research finding showed that the level of that management efficiency hurts the financial performance of the cataloged MFIs. Nonetheless, the study utilized primary data sources using research questionnaires as research tools which are very subjective leading to bias whereas the current study intended to use secondary sources which is more objective hence less biased to focus on licensed Kenya's microfinance banks.

Daher and Saout (2021) assessed elements affecting the financial performance of MFI, a legacy of worldwide economic emergency focusing on Central American countries. Various variables such as profitability, risk leverage, bank size and management efficiency were utilized. The research used secondary information based on regression analyses. The results indicated liquidity buffer as having the highest the ratio. The outcome of regression analysis unveiled that management efficiency posed a substantial constructive outcome on global MFIs' liquidity. Central America, being a developed state is guided by varying more advanced banking regulations and management policies, unlike Kenya, being a developing country which is periodically affected by avoidance social-economic and political circumstance thus negatively impeding of the some management policies. A notable difference occurs between the two studies since the current study seeks to additionally examine the interest rates and their effects on management efficiency as a stabilizer of financial standing of MFI banks in Kenya.

Ondoro and Omena (2020) analyzed in their conference paper entitled "the effect of operational efficiency of microfinance services on the financial performance in Migori County, Kenya" with independent variable being operational efficiency while the criterion variable was financial performance. Causal -experimental design used on seven (7) MFIs in Migori County which were purposely selected for the period 2012 to 2019. A Generalized Method of Moments (GMM) model was implemented and outcomes illustrated that the operational effectiveness significantly had an optimistic impact on financial performance of MFIs. The study endorsed improvement of the economies of scale among MFIs. Instead of sampling, this study embraced a demographic assessment of all licensed Microfinance banks in Kenya.

Malhotra, et.al (2019) carried out this empirical study on management of liquidity and financial standing of commercial banks in South Africa. The study emphasized on time scope 2012-2017 and sampled top eight (8 banks). The research variables included capital, loans, deposits, efficiency and financial performance. The generalized least squares method was applied in

information analyses. The conclusion from the inferential analyses indicated the management efficiency had a significant shock South Africa's commercial banks financial performance. Unequal to the reviewed study which sampled pinnacle eight commercial banks, this examination will embrace a headcount of all licensed microfinance banks in Kenya with an aim of enhancing the validity and reliability of results

3.0 RESEARCH METHODOLOGY

3.1 Research Design

The research used descriptive research design as it is most suitable for establishing a correlation between various parts of the input variables (firm characteristics) and the outcome variable (financial performance of licensed MFB) of this research. It was achieved by use of a census approach. The descriptive design and census approach have proved quite useful in previous related studies (Barry &Tacneng (2021); Egbunike & Okerekeoti (2020); Lotto (2022); Ochanda (2021).

3.2 Empirical Model

The following function served as the foundation for the regression model:

$Y = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \varepsilon$

Where; Y = Financial Performance; β_0= Constant; $\beta_1 X_{1it}$ = Bank Size for MFB i at time t.; $\beta_2 X_{2it}$ = Capital Adequacy for MFB at time t.; $\beta_3 X_{3it}$ = Management Efficiency MFB i at time t; ε= Error term

3.3 Operationalization and Measurement of Variables

Table 1: Operationalization and Measurement of Variables

Variable	Type	Operationalization of variables	Measurement	Measurement scale	Hypotheses Direction
Financial performance	Dependent Variable	Insolvency risk- the risk that a bank will be unable to meet its debt commitment as informed by a combination of accounting ratios	ROA	Ratio	Positive/ Negative
Bank size	Independent Variable	The total assets-total volume of bank assets	Log of Total assets	Ratio	Positive/ Negative
Management Efficiency	Independent variable	Utilization of resources effectively	Operating profits/Total assets	Ratio	Positive/Negative
Capital Adequacy	Independent Variable	Adequacy of capital held by Microfinance banks	Total Equity/total assets	Ratio	Positive/ Negative

Source: Researcher (2024)

3.4 Target Population

Population target is viewed as the aggregation of objects that researcher is interested in covering (Cotton, 2019). This study targeted all the thirteen (13) licensed MFB in Kenya, derived on the unit of analysis (Central Bank of Kenya, 2023). Accordingly, the financial reports of these banks ranging from 2018 to 2023 were considered as the unit of consideration.

3.5 Sampling Technique and Sample Size

As per Celikoz and Arslan (2021) the target population is the subjects the researcher is intending to involve in the study. They also note that sampling consists of the listing of all population units

subject to sampling. Consequently public financial statements these banks, ranging from 2018 to 2023 was the unit of observation. These were selected by the virtue of in the list of the licensed MFBs in Kenya. A census approach was therefore the most pertinent for this study since it remains tenable to include the entire target population.

4.0 RESULTS AND DISCUSSIONS

4.1 Descriptive Statistics

Descriptive statistics refers to a quantitative technique that provides an overview and characterizes the essential aspects of a dataset. Several observations were made as part of descriptive statistics including mean, standard deviation, minimum, and maximum Skewness and Kurtosis were computed as shown in Table 2.

Table 2: Descriptive Statistics

Variable	Mean	SD	Min.	Median	Max.	Skewness	Kurtosis
Capital Adequacy	-0.2	0.91	-1.98	-0.24	1.97	0.01	-0.61
Bank Size	1.73	0.88	1.01	1.5	4.91	0.48	0.15
Management Efficiency	-0.13	0.25	-0.5	-0.18	0.6	0.61	-0.19

Source: Study Data (2024)

Table 2 above, presents the descriptive statistics for the key variables used: Return on Assets (ROA), Capital Efficiency (Capital), Bank Size, and Management Efficiency.

The mean ROA is -0.08, exhibiting that on average, the licensed MFB in Kenya experienced a slight negative return on assets over the period under study. The standard deviation of 2.16 suggests a high variability in financial performance, with ROA values ranging from -14.88 to 8.25. This large range indicates that while some microfinance banks had significant negative returns, others were able to achieve high positive returns. The Skewness of -0.07 suggests that the distribution of ROA is approximately symmetric, while a kurtosis of 0.72 indicates a relatively flat distribution compared to a normal distribution.

Capital Efficiency has a mean of -0.20, signifying that, in most cases, the banks have slight negative capital efficiency, meaning they are operating below their optimal capital structure. The standard deviation of 0.91 shows moderate dispersion in capital efficiency among the banks. The Skewness is 0.01, indicating a nearly symmetric distribution, and the kurtosis of -0.61 suggests a slightly platykurtic layout, meaning the distribution is flatter than a normal distribute

Bank Size has a mean value of 1.73 and a standard deviation of 0.88, indicating that the sizes of the microfinance banks vary considerably. The minimum bank size is 1.01, while the maximum is 4.91, showing a wide range in the size of banks operating in Kenya. The Skewness of 0.48 indicates a slight positive skew, suggesting that there are a few larger banks in the dataset that skew the size dispersion to the right. The kurtosis value of 0.15 suggests that the distribution is close to normal, with moderate tail behaviour.

Management Efficiency has a mean of -0.13 and a standard deviation of 0.25, reflecting relatively low variability in management efficiency across the banks. The minimum threshold of -0.50 and maximum value of 0.60 indicate that management efficiency varies within a narrow range. The Skewness of 0.61 shows a slight positive skew, implying a tail that extends to the right in the distribution, while the kurtosis value of -0.19 indicates a nearly normal dispersion with slightly lighter tails.

4.2 Correlation Analysis

Table 3 Correlation Matrix

Variable	Capital Efficiency	Bank Size	Management Efficiency	ROA
Capital Adequacy	1			
Bank Size	0.528**	1		
Management Efficiency	0.504**	0.547**	1	
ROA	0.331**	0.318**	0.465**	1

*** p < .001*

Source: Study Data (2024)

Table 3 above unveils the correlation matrix for the key elements analysed in this study: Capital Efficiency, Bank Size, Management Efficiency, and Return on Assets (ROA). The relationship between Capital Efficiency and Bank Size is positive and statistically significant, r=0.528, p<.001. This result indicates a moderate positive relationship, suggesting that as Capital Efficiency increases, Bank Size tends to increase as well. The correlation between Capital Efficiency and Management Efficiency is also positive and significant, r=0.504, p<.001, demonstrating that firms with higher capital efficiency are likely to exhibit better management efficiency.

Capital Efficiency and ROA are directly proportional, r=0.331, p<.001, indicating that increases in capital efficiency are associated with improvements in financial performance, as measured by ROA. Although this correlation is lower in magnitude compared to the relationships between Capital Efficiency and the other independent variables, it is still statistically significant, showing that capital efficiency has a meaningful impact on ROA.

Bank Size and Management Efficiency show a significant positive relationship, r=0.547, p<.001. The moderate to strong correlation indicates that larger banks tend to have more efficient management practices, likely due to the resources available to larger institutions for staff training, technology adoption, and other factors that contribute to managerial effectiveness. The correlation between Bank Size and ROA is r=0.318, p<.001, which suggests that larger banks are generally associated with better financial performance.

Management Efficiency has the strongest positive correlation with ROA, r=0.465, p<.001. This finding implies that improvements in management efficiency are strongly associated with increases in ROA, highlighting the crucial role of management practices in driving profitability. The relatively high correlation coefficient indicates that among the firm characteristics studied, management efficiency is the most influential in determining financial performance.

4.3 Panel Regression Analysis

Table 4 Panel Regression Analysis

Predictor	Estimate	Std. Error	t-value	p-value	95% CI	
					Lower	Upper
(Intercept)	0.1989	0.6766	3.294	0.017	0.056	1.295
Capital Adequacy	2.4464	0.3452	2.293	0.021	1.4014	3.4914
Bank Size	1.1403	0.3667	3.383	0.003	0.2653	2.0153
Management Efficiency	3.9905	1.181	3.379	0.001	2.4215	5.5595

Dependent: ROA, F = 9.084, p < .001, R^2 = 0.372

Source: Study Data (2024)

Table 4 above presents the results of a panel regression model developed to analyse the relationship between firm characteristics specifically, capital, bank size, and management efficiency and financial performance (using ROA) for licensed microfinance banks in Kenya. The panel regression model accounts for both cross-sectional and time series dimensions of the data, controlling for entity-specific and time-specific effects. The ANOVA results indicate that the model is statistically significant, $F=9.084$, $p<0.001$, suggesting that the independent variables collectively explain variations in ROA. The R2 value of 0.372 indicates that approximately 37.2% of the variation in ROA is explained by the three predictors.

The first predictor, Capital adequacy, has a coefficient of 2.4464 (SE = 0.3452), t (3) =2.293, $p=0.021$, with a 95% confidence interval [1.4014, 3.4914]. This indicates that a unit increase in capital, keeping other variables fixed, increases ROA by 2.4464 units. The positive coefficient suggests that higher capital positively influences the profitability of licensed microfinance banks. This supports the hypothesis that capital adequacy significantly influences financial performance. Adequate capital enables microfinance banks to cushion financial risks, invest in profitable ventures, and expand operations, thus contributing to better financial outcomes. The regression results confirm that capital adequacy consistently enhances ROA over time, underlining its importance in sustaining financial success.

Bank size has a significant positive relationship with ROA, with a coefficient of 1.1403 (SE = 0.3667), $t=3.383$, $p=0.003$, and a 95% CI [0.2653, 2.0153]. A unit increase in bank size increases ROA by 1.1403 units, implying that larger banks tend to perform better financially due to their capacity to leverage economies of scale. This finding rejects the null hypothesis that bank size does not influence financial performance. Larger microfinance banks are able to scale operations, access more resources, and improve efficiency, directly leading to higher profitability. Both the correlation and regression analyses demonstrate that as bank size increases, so does financial performance, making size a significant factor in the long-term financial success of microfinance banks.

Management efficiency, the third predictor, shows the strongest effect on ROA, with a coefficient of 3.9905 (SE = 1.181), $t=3.379$, $p=0.001$, and a 95% CI [2.4215, 5.5595]. This suggests that a one-unit improvement in management efficiency increases ROA by 3.9905 units. The positive and statistically significant coefficient highlights the critical role of effective management in enhancing financial performance. These results reject the null hypothesis that management efficiency is unrelated to financial performance. Efficient management practices enable microfinance banks to optimize operations, reduce costs, and improve service delivery, resulting in better financial outcomes. The panel regression analysis further shows that the impact of management efficiency is sustained over time, emphasizing its role as a key driver of profitability in the competitive microfinance sector.

In summary, the panel regression analysis supports the hypotheses that capital adequacy, bank size, and management efficiency all have significant positive effects on the financial performance of licensed MFB. The observations suggest that these firm characteristics play a critical role in determining profitability, and improvements in these areas can lead to sustained financial success.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Firm characteristics such as bank size, capital adequacy, and management efficiency significantly influence the financial performance of licensed microfinance banks in Kenya. The analysis demonstrated that larger banks tend to have better financial performance due to

economies of scale and diversified portfolios, which enable them to absorb risks and expand operations more effectively. This finding implies that the strategic pursuit of growth and expansion can be beneficial for microfinance institutions aiming to enhance their financial standing. Furthermore, bank size may provide a competitive edge in accessing cheaper funding options, improving lending capacity, and achieving greater market penetration.

Capital adequacy was found to be a critical determinant of financial stability and achievement. Well-capitalized banks are more resilient to financial shocks and can leverage their capital base to engage in higher-risk, higher-return investments. This finding suggests that regulatory bodies should emphasize maintaining robust capital adequacy ratios to ensure the financial health of microfinance banks. Additionally, the ability of these banks to maintain high levels of capital adequacy could also attract investors and enhance customer confidence, thus supporting long-term growth and sustainability. As such, policy initiatives that promote adequate capitalization are essential to bolster the resilience of microfinance institutions.

Management efficiency emerged as another key factor impacting financial performance. Efficient management practices, including cost control and optimal resource allocation, were associated with higher Return on Assets (ROA). This finding highlights the importance of strong governance and leadership in driving profitability and sustainability in microfinance banks. It underscores the need for these institutions to invest in staff training, process optimization, and strategic planning to enhance operational efficiency. Enhancing managerial capabilities can lead to better decision-making and improved financial outcomes, thus positioning microfinance banks as reliable financial intermediaries that can contribute to the broader economic development.

Overall, the study provides valuable insights into how firm characteristics shape financial outcomes in the microfinance sector. By identifying these critical determinants, the findings can inform policymakers and bank managers in designing targeted strategies to strengthen the financial achievement and competitiveness of microfinance banks. Results also contribute to broader understanding of key drivers of financial performance in emerging markets, offering a basis for future research to explore additional variables such as market conditions, technological adoption, and customer satisfaction. Such studies could provide a more holistic view of the determinants of financial performance and help microfinance institutions refine their strategies to better serve their clients and stakeholders.

5.2 Recommendations of the Study

5.2.1 Policy Recommendations

The study's outcomes call for comprehensive framework recommendations that prioritize financial performance while ensuring outreach and sustainability. Policymakers should focus on improving the regulatory environment for financial institutions, particularly in developing and underdeveloped economies. This can be achieved by strengthening capital adequacy frameworks, which have been shown to enhance profitability without compromising outreach (Al-Harbi, 2019). Microfinance institutions (MFIs), in particular, must strike a balance between social outreach and financial sustainability, as explored by Nurmakhanova, Kretzschmar, and Fedhila (2020). Effective capital adequacy policies would ensure that MFIs maintain their ability to meet social goals while remaining financially viable. Moreover, policies should aim at promoting effective risk management strategies, especially in regions where credit risk poses significant challenges. As demonstrated by Ali and Dhiman (2019), poor credit risk management directly undermines profitability in commercial banks. Therefore, regulators should mandate the adoption of sophisticated credit risk management tools that can predict and mitigate financial risks while ensuring financial performance remains optimal. By implementing policies that encourage the

use of advanced risk management models, such as those discussed by Merton (2022), financial institutions can improve profitability and reduce their exposure to market fluctuations.

Another critical recommendation involves operational efficiency. Evidence from Maket (2021) underscores the magnitude of operational efficiency in driving financial self-sufficiency for institutions, particularly in resource-constrained environments. Therefore, policymakers should prioritize measures that incentivize technological innovation and digital transformation in financial services. By modernizing financial operations and integrating digital tools, financial institutions, including MFIs, can reduce operational costs and improve service delivery, thereby enhancing both outreach and profitability (Alam & Akhter, 2019).

Further, policymakers must address the need for effective governance structures within financial institutions. Strong governance frameworks have been linked to improved financial performance and outreach, as seen in Barry and Tacneng's (2021) work on Sub-Saharan African MFIs. Policies that promote transparency, accountability, and stakeholder engagement can foster an environment where financial institutions can grow sustainably while meeting their outreach targets. This is especially critical for institutions that serve vulnerable populations, as strong governance ensures that resources are efficiently allocated and that clients receive the services they need.

Finally, efforts should also focus on enhancing financial literacy and inclusion through targeted policies. In their study, Montgomery and Weiss (2021) emphasize that financial literacy plays a crucial role in enabling underserved populations to access and utilize financial services effectively. Policymakers should design initiatives that educate marginalized groups about the benefits of financial products, thereby boosting demand for such services. This will not only help institutions expand their outreach but will also ensure that their clients make informed decisions, leading to improved client retention and financial stability.

In conclusion, these policy recommendations emphasize the need for a holistic approach that addresses capital adequacy, risk management, operational efficiency, governance, and financial literacy. By aligning these areas with regulatory support, financial institutions can improve their financial performance while ensuring they meet their social goals, especially in developing economies (Bassem, 2020). Addressing these factors will allow institutions to manage the inherent trade-offs between outreach and profitability effectively, creating a more resilient and inclusive financial sector.

5.2.2 Recommendations for Future Research

For future studies, it's recommended to explore the dynamic interplay between financial sustainability and social outreach within microfinance institutions (MFIs). While numerous studies have focused on the trade-offs between these two dimensions (Lebovics et al., 2019), there remains a need to examine how these trade-offs shift over time, particularly in response to changing market conditions and regulatory environments. Another important area for subsequent research is the exploration of how external elements factors such as macroeconomic conditions, regulatory policies, and political stability influence the financial performance of MFIs. Furthermore, forthcoming studies could broaden the scope of investigation to include the influence of emerging technologies, such as fintech solutions, on the operational efficiency and client outreach of microfinance institutions.

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