FIRM CHARACTERISTICS AND FINANCIAL PERFORMANCE OF MICROFINANCE BANKS IN KENYA

Cavine Onyango Ouma.

Master of Science Finance Student, Department of Accounting and Finance School of Business, Economics and Tourism, Kenyatta University, Kenya.

Dr. Daniel Makori (PhD).

Department of Accounting and Finance, School of Business, Economics and Tourism Kenyatta University, Kenya.

Dr. Moses Odhiambo Aluoch (PhD).

Department of Accounting and Finance, School of Business, Economics and Tourism Kenyatta University, Kenya.

©2024

International Academic Journal of Economics and Finance (IAJEF) | ISSN 2518-2366

Received: 2nd October 2024

Published: 7th October 2024

Full Length Research

Available Online at: https://iajournals.org/articles/iajef v4 i3 164 193.pdf

Citation: Ouma, C. O., Makori, D., Aluoch, M. O. Firm characteristics and financial performance of microfinance banks in Kenya. *International Academic Journal of Economics and Finance*, 4(3), 164-193.

ABSTRACT

Kenya has one of Sub-Saharan Africa's most active microfinance marketplaces. Microfinance gives the forte to improve the economic activity of low-income individuals and eliminate poverty, resulting in economic progress. However, microfinance's financial performance in the country has declined over time. With this view, this investigation aims to explore how firm characteristics (capital adequacy, assets quality, managerial efficiency, earning ability and liquidity) performance of microfinance banks in Kenya. The study was grounded on stakeholders, liquidity preference, financial intermediation, buffer capital, efficiency structure and interest rate parity theories. The study research methodology rested on positivism research philosophy. Research Design was explanatory non-experimental design. Secondary panel data was utilized. 13 microfinance banks in Kenya were target. Information was gathered secondary data sources using from microfinance banks accounting report from 2016 to 2022. Data was descriptively and inferentially analyzed. The investigation employed panel multiple regressions and Pearson's Product Moment Correlation Diagnostics analysis. test such multicollinearity, normality, autocorrelation, heteroscedasticity and stationary tests were carried out. All ethical considerations were appropriately observed. Findings uncovered that adequacy of capital exerts a notable and direct effect on financial performance, underscoring the importance for microfinance banks in Kenya to prioritize maintaining sufficient capital levels to support their overall stability and financial outcomes. Conversely, quality of asset demonstrates a significant and adverse influence performance financially, highlighting the

need for microfinance banks to enhance their credit assessment processes to ensure the quality of their loan portfolios. The research reveals that efficiency of management has an insignificant direct influence on performed financially. To address microfinance banks are advised to invest in comprehensive management training programs and capacity-building initiatives to improve operational effectiveness decision-making processes. Earning ability, on the other hand, exhibits a considerable and direct influence on performance financially. Microfinance banks should thus focus on continuous innovation of their products and services to enhance their earning potential and overall financial outcomes. Liquidity levels exhibit an insignificant and inverse effect on the financial performance outcomes. To mitigate potential risks, microfinance banks should establish comprehensive policies and procedures to monitor and manage liquidity effectively. Interestingly, the study reveals that the connection concerning firm-level attributes. Therefore, the study recommends that microfinance banks concentrate on improving governance structures, operational efficiency, risk management practices, and asset quality. This can be achieved through capacity-building programs, training initiatives, and adopting best practices from microfinance institutions. successful Strengthening these firm characteristics will enable microfinance banks to enhance their financial performance, irrespective of interest rate fluctuations.

Keywords: Firm Characteristics, Capital Adequacy, Assets Quality, Managerial Efficiency, Earning Ability, Liquidity and Financial Performance.

INTRODUCTION

Microfinance provides an extensive array of financial services to vulnerable and economically disadvantaged people, households, and their small and medium in size businesses that includes loans, savings, payment solutions, money transfers, and insurance. This implies that the supply of Monetary and non-monetary services, as well as the handling of little amounts of cash, via a range of goods and a network of transitional roles designed for low-income people (Babarinde, Abdulmajeed, Angyu & Abu, 2021). According to Babarinde *etal* (2019), microfinance is a strategy for economic development that entails offering low-income clients, such as micro, small, and medium in size businesses, financial and non-financial services through institutions. A lucrative microfinance sector is crucial for maintaining a healthy microfinance banking system since microfinance is a tool that may be used to combat poverty, but in order to escape it, demand for money must match supply. Lower profits lessen microfinance banks capacity to withstand adverse economic shocks, eventually jeopardizing its solvency (Ndegwa, 2021).

The measures that support and stabilize the efficient operation of the banking sector are sound monetary and transparent fiscal policies. A healthy banking system is a symptom of a stable economy, which encourages saving and investment decisions. All of these actions are essential for the banks to run successfully. With their capacity for forecasting and procedures for risk management, banks can cover the risk of losses (Ahmed, Rehan, Chhapra & Supro, 2018). Since the worldwide financial meltdown of 2007-2009, financial performance has evolved into a major cause of concern for policymakers. The US housing market's collapse of an asset price bubble was the catalyst for the 2007-2009 Financial Crisis (Brauers, Ginevicius & Podviezko, 2014). Immediately after the investment bank Lehman Brothers collapsed, there was a credit crunch that led to liquidity and solvency difficulties and a subsequent global recession. The U.S. and European basic banking financial crises had a significant impact on developed nations. The G10 governors were motivated by the recurrent financial crisis to develop a technique that would guarantee financial success globally, which led to the creation of the Camel Model in 1974 in Switzerland (Matanda, 2020). The focus on strengthening the important internal aspects of the financial system is a common theme throughout these accords. They are all intended to improve the sector's financial performance by defining minimum standards for the critical internal components that banks must meet (Wafulu, 2020).

CAMEL is an evaluation system for onsite bank assessments. The Federal Financial Institutions Examination Council (FFIEC) adopted the CAMEL supervisory evaluation system in 1979, officially known as the Uniform Financial Institutions Rating System (UFIRS). This framework assesses financial institutions based on five key factors: capital adequacy, asset quality, management, earnings, and liquidity. In 1997, sensitivity to market risk was added as the sixth component, leading to the acronym CAMELS. These elements collectively reflect the financial performance, operational stability, and regulatory adherence of financial institutions (Gebregiorgies, 2021). According to Dogan (2013), firm characteristics are characteristics that are primarily the responsibility of regulators. Examine the firm's capital adequacy, liquidity, management efficiency, and assets. The importance of bank characteristics, particularly those supported by the CAMEL framework, has an impact on microfinance banks. Prior research into the

effectiveness of CAMEL ratings revealed that when combined with national statistics, CAMEL rankings can detect and/or predict problems or failing banks (Gasbarro *etal.*, 2015). The CAMEL classification system is used by Kenya's Central Bank to assess the sustainability of banking firms (CBK, 2015). The majority of the banking industry that failed during the 2007/08 financial meltdown did so because they lacked the necessary financial fortitude to withstand the crisis's losses (Aswani, 2019).

Globally, microfinance has become an important aspect of development and economic revitalization measures. Microfinance (MF) assists low-income individuals in alleviating poverty, enhancing corporate management, raising output, achieving higher investment revenues, and improving the worth of life for themselves and others in the general public (García-Pérez, Fernández-Izquierdo and Muñoz-Torres, 2020). MFIs typically make minimal loans to those with low incomes persons in the hopes of increasing labor productivity and investment, hence improving their household incomes (Khan, Khan, Fahan, Ali, Khan &Luo, 2020). Microfinance extends past the providing of little loans to Individuals with little earnings, as well as micro and small businesses. Microfinance offers financial services to micro and small-scale business owners, such as insurance, payments, remittances, savings, and money transfers, using market-driven and commercial methodologies (Tasos, Amjad, Awan & Waqas, 2020).

Microfinance has aided in the creation of employment opportunities, the generation and retention of wealth, capacity building of people living in challenging circumstances, and a long-term stability of the social and economic conditions in communities throughout Africa (Gidigbi, 2021). Microfinance provides the necessary resources to increase low-income individuals' economic activity, thereby contributing to the eradication of poverty. Microfinance in Africa is rapidly increasing, and organizations have boosted their activity. In reality, African microfinance are among the most productive in the world, according to the number of debtors and depositors per employee. Microfinance helps create equal possibilities in the economic sector by efficiently alleviating poverty. The value of microfinance in growing the economy has recently taken prominence in economic strategy and planning modification throughout African economies because of its beneficial spillover benefits to spur the efficiency of small businesses/enterprises through the provision of microcredit facilities (Hyeladzira & Ochonogor, 2020).

Kenya has one of Sub-Saharan Africa's most active microfinance marketplaces. It has a broad branch network and a variety of institutional forms to serve the underprivileged. The legislative structure for microfinance is reputable by the 2006 Act of Microfinance and further supported by the 2008 Rules of Microfinance. These acts serve as a comprehensive set of laws, regulations, and supervisory guidelines that govern the operations of microfinance institutions in the country(Association Microfinance Institutions, 2013). Kenya's need for microloans has been prompted by a number of interrelated hurdles to the expansion of the banking and finance industries (Alastair, 2015). These key constraints have been the framework and composition of Kenya's financial and banking sector, the absence of proper guideline and governance required for enhanced quality in banking and finance, and the cautious commercial business practices of profit-focused banking institutions(King'ori, Kioko & Shikumo, 2017).

Financial Performance

Performance is the outcome of a particular activity, according to one definition (Mwakajila & Nyello, 2021). The type of company being evaluated and the purpose of the evaluation decide the metric utilized to measure performance in the business industry (Mazviona *et al.*, 2017). This serves as a standard for choosing the best performance metric. Numerous methods for examining financial performance have been suggested by researchers in the field of finance. According to the interdisciplinary viewpoint of performances, the usage of numerous models or connection structures between firm efficiency and its causes would show in diverse associations among dependent mixed with individual elements in the construct measures (Badea, 2017).

One way to measure financial success is an evaluation of how well a corporation earns money utilizing its finances from its primary business model. Additionally, the concept is employed as general gauge of a business's long-term fiscal health. Financial performance is defined by the Business Dictionary (2013) as the measurement of an organization's guidelines and practices' monetary outcomes, which are represented in the organization's returns on investment, earnings per share, real value, and so on (Mahfoudh, 2017). These earnings per share and profit can be generated by a profitable company. A profitable company can generate an adequate return on capital. As a result, a company's financial performance is defined as its ability to use the resources available to achieve sustainable earnings while also strengthening its capital foundation by keeping earnings to guarantee its long-term viability and maximize shareholder fortune (Ndegwa, 2018).

A financial ratio known as Return on Equaity (ROE) is the overall sum of proceeds an organization made virtual to the investment made by owners. In other terms, it relates to the returns on investment that investors expect to receive. When an organization gets a good return on equity, it may be able to generate cash on the inside (Mwangi 2018). According to Khrawish (2011), a firm's ability to make proceeds is therefore improved by having a higher Equity Return. Moreover, the investigation contended that Return on Equity might be calculated as Net Income minus Tax divided by Total Equity Capital. Return on Equity is a quantifier of how much money investors make on their investments. ROE demonstrates how efficiently a bank's managers employ shareholder money. As a result, it stands to reason that the management uses shareholder funds more effectively the greater the Equity Return (Saseela, 2018).

Return on Asset (ROA) is the size of the financial success of the company. An institution's assets return (ROA) is computed as the proportion of income to assets total. Asset Return (ROA) gauges the bank's capacity to spawn earnings from its assets. ROA simply shows how efficiently the firm's assets are being used to produce income. Additionally, ROA demonstrates the capacity of a business to produce extra revenue while utilizing all its available resources. The business is more efficient at using its resources when ROA is higher (Wekesa, 2021). This study used ROA to measure financial performance. Mwangi (2020) examined firm characteristics and profitability, using ROA as its measures. ROA serves as an indication of an institution's management effectiveness in generating income from all organizational resources. Therefore, an increasing ROA indicates that the institution is well-organized in resources utilization. Macharia (2019) also using ROA as measure for financial performance, explained that it is necessary to provide a basic approach that would

provide plans to remunerate managers and achieve firm's goals. ROA also explains how firms generate income and become profitable. However, due to its low level of key indicator (ROA), the microfinance banks (MFBs) subsector continues to be weak and susceptible to even the slightest shock. Over the years, there has been an oscillating tendency in the Return on Assets (ROA) and has remained in a negative trajectory, with larger losses being recorded.

Firm Characteristics

The intrinsic elements that contribute to a bank's financial soundness are firm characteristics. In literature, the terms "firm features" have been used similarly. Nevertheless, they point to a fundamental factor (Mdoe, 2017). According to Okpanachi, Doha and Mohammed (2018), a firm's administration has a significant amount of control over the factors that make up its qualities. According to Kandiru, Gachunga, Muturi and Ogutu (2015), firm attributes are the organizational and socioeconomic factors that make up the corporate context of the company. Additionally, one of the most important aspects of an institution that might affect efficiency is its firm characteristics (Ondigo, 2016). The managerial and demographic factors that make up the internal environment of the business are seen as firm characteristics. The internal business enterprise's knowledge- and information-based capabilities and processes are among the factors determining corporate characteristics (Mwebia, 2017). TheCBKBanking Study of 2018 lists firm characteristics indicators to include asset quality, capital sufficiency, liquidity, management effectiveness, and earning potential.

Capital adequacy as the first indicator of firm characteristics shows the effectiveness and capability of banks to measure and manage their risks (Almazari & Alamri, 2017). The amount of capital that banks take losses to protect themselves from economic shocks should they arise is referred to as adequate capital (Musyoka, 2017). The financial regulators are reassured that the banking industry is not jeopardized or lessened by a little problem within a lone bank or cluster of institutions through the assessment of a bank's capital, and the public is assured that the monies of depositors are secure. Additionally, it guarantees a bank's security, aids in reducing the danger of liquidation, and funds the risk of credit that a firm is required to take on in a typical commercial loan. The greater the primary resources, or foundation, the greater the number of loans and advances the Bank might make overall and to specific people (Aliu, Abdullahi & Bakare, 2020). According to Fatima (2014), adequate principal ensures that a bank has the right amount of principal for business expansion and that its net assets are enough to protect it from insolvency during financial downturns. Capital adequacy ratio (CAR), according to Almazari and Alamri (2017), is regarded as an important factor in determining banks' financial solvency. The ratio is thought of as a safety valve that helps to promote financial safety, soundness, and efficiency in banking as well as to help protect depositors' money. CAR demonstrates the inner fortitude of financial institutions to bear economic shocks and their resilience in times of crisis. Decrease their cost of borrowing, which finally increases profitability noticeably.

Asset quality is the second feature of a firm's characteristics that involves evaluating the company's assets to make it simpler to decide the extent and kind of risk of credit connected with its activities. Asset quality is one of the micro prudential parameters that influence a bank's stability and profitability. It alludes to the opposite side of the balance sheet of a banking institution and

emphasizes the quality of the loans that give the bank funding (Abata, 2014). It is 7 out of 25 fundamental guidelines for good banking supervision. Sustaining strong asset quality demands rigorous loan issuing that must be evaluated and compliance with banking regulations. Insufficient quality of assets has an impact on financial success and the stability of the banking industry as a micro factor of profit (Lucky & Andrew, 2018). The financial system stability typically determines how well an economy performs financially. In order to achieve bank soundness and stability, banks need to maintain high-quality assets because stable finances are a result of high-quality assets (Wafulu, 2020). The credit portfolio, current assets, noncurrent assets, and other investments held by the banks make up the assets of microfinance. The major portion of bank assets and the best indicator of capital risk are advances by microfinance institutions. Other equally significant components of a bank that may have an impact on asset quality include Real estate, cash owed from accounts, and off-balance-sheet items are examples of additional assets (Atsango, 2018).

The loan portfolio is the most valuable asset of MFIs, according to Nelson (2011), it is the loan asset that contributes to returns generation. The loan assets quality determined profits. The loan quality of asset, as well as the Asset-related risk, can be difficult to quantify. Non-performing loan ratios provide a solid gauge of asset quality. Banks strive for low levels of non-performing loans because they have an impact on their success. A portfolio's health is demonstrated by an inadequate non-performing loan to gross loans ratio. A higher ratio indicates a better performing bank (Nazir & Sangmi, 2016). Asset quality was assessed using the gross loans percentage that is net non-performing loans.

Managerial efficiency is the third feature of firm characteristics. It demonstrates how efficient bank management can maintain mobilized deposits, assets, capitals, shareholder funds, employees, inventories, assets, and so on to generate profit (Ihenetu 2017). Profits are made by banks by efficiently and effectively channeling these resources to the most productive ventures. Management efficiency, according to the Uniform Financial Institution Rating System (1997), is the management's way to recognize, evaluate, and regulate the risks of a bank's actions, as well as to guarantee secure, sound, and effective compliance with legislative requirements. It is the most important single component of Camel rating because the success of banks is dependent on it (Amachree & Iheanyi, 2020). Management efficiency demonstrates how well a manager combines management team spirit, leadership ability, and other factors to improve production (Cakir, 2020).

Financial ratios are a useful tool for assessing management's capacity to effectively manage resources, optimize profits, and minimize operating costs. The operational gain to earnings is one statistic used to assess management quality (Sangmi & Nazir, 2015). The proportion of expenses for operations compared to the overall asset share is projected to be in reverse proportional to financial success. In this regard, the competence of management affects the amount of operating costs, which affects output (Ikapel, Namusonge & Sakwa, 2019).

Earnings ability, being the fourth feature of firm characteristics in the current investigation, refers to a bank's capability to generate profits that would allow it to expand, stay viable, and raise capital. The main function of earnings capacity, from the perspective of the bank's regulator, is to mitigate losses and increase the bank's capital (Magoma, Mbwambo, Sallwa & Mwasha, 2022). Any organization that deals with money strives to increase profits, and since commercial banks are

constantly competing with one another, a successful bank will typically attract more clients than its opponent. Currently, a commercial bank that consistently generates profits is considered financially solid (Banking Study, 2018). A bank's earning capacity is assessed using a variety of metrics, including loan income over loan, deposit cost over deposit and loan income over deposit cost. Banks have traditionally relied on income from interest-based sources, however income diversification has been observed over time in published reports of various listed banks. This suggests that company traits-based streams are used to increase the banks' profits. Fees charged, commissions from investment banking, and incomes from insurance underwriting services are some examples of alternate sources of income. Periodically, the earning potential is examined in order to monitor the sector (Maina, 2021). This study used loan income over deposits.

In general, liquidity as the fifth indicator refers to banks' capacity to finance the growth of their asset holdings and fulfill their obligations to depositors when they become due without sustaining intolerable losses (CBK, 2018). Given that liquidity is intended to fund the purchase of resources, satisfy rapid drawings, conduct lending in the short term, and promote the opening of new performance networks, balancing the liquidity responsibilities of a bank is a difficult task. The regulator recognized a number of ratios to be employed in testing and limit the likelihood of liquidity risk because this may result in liquidity issues (Idama et al., 2014). The most frequently utilized ratios are Overall liquid assets compared to all assets, loans sum to all deposits, and liquid assets total to liabilities total. In identifying potential liquidity stressors that could restrict the financial institutions' capacity to earn broad income levels and possibly expose the financial institution to setbacks, it is reasonable that banking institutions evaluate liquidity consistently and develop methods for acquiring or financing liquidity specifications, particularly all through unexpected conditions (Ndegwa, 2018). This necessitates that banking institutions pertain liquidity stress tests on an as-needed basis. These liquidity tests aid in the creation of backup strategies for dealing with liquidity issues. A mandatory minimum of twenty percent of all obligations pertaining to deposits, maturing obligations, as well as immediate obligations must be retained in liquid resources, according to CBK (2013) standards (Maina, 2021).

Kenyan Microfinance Banks

Kenya has one of Sub-Saharan Africa's most active microfinance marketplaces. It has a variety of established structures and a sizable branch subdivision to assist the underprivileged (Teeboom, 2019). However, Kenya has just recently begun to regulate microfinance activities. Innovations have been made possible by the lack of regulation, which made it simple to establish institutions without obstacles like minimum capital requirements. In this context, the microfinance business has prospered. The microfinance in Kenya is controlled by the Microfinance Act of 2006 and the Microfinance (Deposit Taking Institutions) guidelines, which were issued in response (Aswani, 2019). The Microfinance Act went into existence on May 2nd, 2008. Existing microfinance organizations that wanted to be able to accept deposits from customers and members of the public submitted license applications (CBK, 2019). The Microfinance Act's principal goal is to govern the institution, conduct, and operation of Kenyan microfinance via certifying and oversight. According to research by CBK (2021), Kenya now has 13microfinance banks in operation. Customers can obtain financial services from microfinance banks to expand and build their enterprises with the aim of turning a profit.

Former credit-only microfinance institutions must make a wide range of changes in order to transition from a wholly deregulated state to full banking regulations. The guidelines by CBK (2008) outlined the following proportions: a baseline capital adequacy proportion of 20 percent; a confine on anonymous source loans that should not surpasses 2percent of total assets and ought to be enclosed on totality; a fundamental equity of 10 percent of overall capital quality value was calculated risk modified off financial assets; a central equity of 8 percent of overall deposit obligations; and overall principal of 12 percent of overall risk adjusted returns investments and furthermore risk modified off financial assets. Regulations and policymaking become important because these financial institutions must make sure they maintain adequate thresholds of cash flows in order for them to pay their immediate debts that are necessary for the regular operation of businesses and avert harsh penalties from the supervisory authority for non-compliance.

Statement of the Problem

The financial performance of banks that offers microfinance services is vital in translating the stated goals into actual outputs and the intended results. Each structure and institution in the world work hard to guarantee that they implement policies and measurements that will boost their efficiency and effectiveness (Kamau, 2020). The effectiveness of financial performance of microfinance banks is crucial in promoting wealth creation, local and international investment, the reduction of inequality, and the creation of jobs. Microfinance banks provide an extensive array of financial products and services that encompass money transfer, small and micro scale firms (SMEs) in both rural and urban locations, as well as economically active poor and low-income individuals, can access savings credit facilities and micro-insurance (King'ori et al., 2017). These SMEs account for 80 percent of the nation's GDP and fill employment gaps. When evaluating how effectively an organization takes advantage of the chances presented by the business setting to strengthen the revenue figures reported during a specific financial cycle, firm characteristics are crucial (Lin et al., 2022). While CBK has historically used the CAMEL Model as a yardstick to evaluate Kenya's microfinance banks' financial results (CBK, 2019), the microfinance banks' financial standing has declined over time. As per Central Bank of Kenya's banking sector supervisory account, losses at the 13 microfinance banks increased by 561% in 2020 compared to 2019, from Sh339 million to Sh2.2 billion respectively. In 2015, MFBs returns on shareholders were at 5 percent. This was the only year within the study's scope that the banks made significant returns. Since then, shareholders have made negative returns from microfinance investments; -3.2 percent in 2016, -5.5 percent in 2017, -13.8 in 2018, -3 percent in 2019, -28 percent in 2020. Additionally, the ROA of Microfinance banks as at 2017 was -0.9%, it became worse in 2018 when it hit -5.5%, it had little improvement in 2019 at -0.4%, -3.8% and -0.96% in the year 2020 and 2021 respectively (CBK, 2022). Hence, it is necessary to evaluate how firm characteristics (CAMEL) affects the Kenyan banks performance that provides microfinance services financially.

Studies have been executed on firm characteristics and financial performance. Bhattarai (2021) studied how capital adequacy ratios affects the performance of Nepalese money deposit banks financially, and disclosed that the core capital ratio and total capital fund ratio both have a favourable impact assets returns and equity returns. Imo (2021) established the link among financial assets and Nigerian money deposit bank performance and found that financial assets have a beneficial and notable impact on deposit money bank. Getachew, Varaprasad, and Abebe (2019)

identified factor used to predict financial performance and default likelihood for particular Ethiopian commercial banks. The investigation's result revealed that earnings ability had a noteworthy influence on banks performance financially as measured by asset returns and equity returns. These studies showed noteworthy association but was based on money deposit banks and also carried out in different countries, thereby providing a contextual gap. Kiemo, Muturi, and Mwangi (2019); Nguyen (2021); Bolarinwa, Akinyele, and Vo (2021) examined firm characteristics and performance financially using generalized method of moments, Altman's Z-Score plus Model, generalized method of moments (SGMM) and stochastic frontier analysis (SFA) demonstrating a methodology gap as this study used panel regression model. Among the advantages of this approach are a clearer understanding of the connection between every single factor and the result (Weedmark 2018). In addition, some studies were conducted at different time periods (Sile, Olweny, & Sakwa (2019); Wuryani, Handayani, & Mariana (2021); Akinola (2022)), this also assist in identifying contextual gaps, as this study was carried out from 2016 to 2022. Nguyen (2021) examined money deposit banks' financial soundness, but this investigation examined banks that offers microcredit services financially. Odekina, Gabriel, and Solomon (2019) studied how capital sufficiency, credit risk, and operational efficiency affects the Nigerian banks performance. These studies demonstrated conceptual gaps.

Objective of the Study

Main Objective was to delve into firm characteristics influence on the Kenyan performed microfinance banks' financially. The specific objectives were to: to explore how capital adequacy affect these banks performance financially; investigate asset quality effect on these banks that performed financially; determine how managerial efficiency affect on performance of these banks financially; examine the way earnings ability affect these banks Performance financially; and establish the effect of liquidity on financial performance of microfinance banks in Kenya.

Research Hypotheses

The study was guided by the following hypotheses.

H₀₁: Capital adequacy has no significant effect on the financial performance of Microfinance Banks in Kenya.

H₀₂: Asset quality has no significant effect on the financial performance of Microfinance Banks in Kenya.

H₀₃: Managerial efficiency has no significant effect on the financial performance of Microfinance Banks in Kenya.

H₀₄: Earnings Ability has no significant effect on the financial performance of Microfinance Banks in Kenya.

H₀₅: Liquidity has no significant effect on the financial performance of Microfinance Banks in Kenya.

Significance of the Study

The study determined if certain firm attributes and the financial result of the banks are related. By contrasting the anticipated theoretical result on the links among firm attributes and performance with the actual outcomes from a developing country like Kenya, the investigation's outcome would add to the development of financial theories. With the aid of its findings also, Kenyan microfinance

banks would be able to determine what stage of operation their institutions are in with regard to the results of the fragility index thanks to the findings of this study. Once the stage is identified, this would either provide relief or act as a warning to the source of the microfinance bank's poor performance, restoring the sector to performance before an economic crisis hits it and potentially leading to its demise. This discovery would open the public's eyes and let them choose where to put their resources.

This study would serve as a reference for bank management and policymakers as they strive to maximize shareholder wealth by enhancing the value and performance of their firms. Only when managers and policymakers comprehend how factors like liquidity, earning potential, asset quality, management efficacy, and capital sufficiency affect their working operations and implement strategies to build, expand, monitor, and preserve their optimum combination would this be possible. Managers would also learn how the size of the bank and their cumulative experience might affect their success.

This research would broaden the area for academics and researchers by laying the groundwork for how firm characteristics affect Microfinance bank financial result. This research would be valuable to others who want to conduct comparable investigation on how firm attributes affect microfinance banks that financially performed in developing nations. The investigation would be utilized as a foundation for prospect research in the field.

LITERATURE REVIEW

Theoretical Reviews

The following theories served as the foundation for the current study that relating the firm characteristics and financial performance of Microfinance Banks in Kenya. The theories are: Stakeholders theory, Liquidity preference theory and Financial Intermediation theory,

Stakeholders Theory

Stakeholders Theory is credited to Mitroff (1983). Stakeholders' theory observed that management and shareholders, among other important groups in business operations, are involved in the operation of businesses. According to Miles (2012), this concept encompasses broad groups that influence business policies and objectives, as opposed to agency theory, which is based primarily on 2 groups: management and shareholders. According to this view, there are two categories of stakeholders: external and internal. Internal stakeholders include executives, workers as well as owners, whereas external stakeholders include suppliers, governments, clients, debtors, society at large, and the commercial setting. Other stakeholders' participation in corporate decision-making might lessen conflicts and keep the business running smoothly (Freeman, 1984). This assumption has three critical dimensions: instrumental, normative, and descriptive approaches. The instrumental dimension denotes the relationships that are present among organizational goals and the management group of stakeholders (Phillips, 2003). The normative approach provides morals for the purposes of good management and firm operations, whereas the descriptive approach is utilized to indicate the uniqueness and conduct of how organizations are fared (Tembo, 2003). All

the stakeholders mentioned above are acknowledged by banking regulations as crucial to ensuring optimal performance.

Organizations, as per the theory, strive to provide a variety of benefits for various stakeholders, or people and groups who may have impact on or be impacted by the organization, including communities, shareholders, and civil society (Schaltegger, Horisch & Freeman, 1984). Stakeholder theory highlights that in order for an organization to survive and expand, it needs the support of both shareholders and stakeholders. As a result, a clear necessity emerged among increasing shareholder dividends and meeting the requirements of stakeholders. ST referred to as a theory that inspires organizations to recognize and take into account their stakeholders, which exist either within or outside to the business, facilitates comprehending and handling stakeholder needs, desire, and demands, reflects an integrated and accountable that transcends the interests of shareholders, and permits firms to be tactical, increase the value they create and protect their long-term.

The company's concentration has gone beyond the shareholders to recognize the society in which the business operates (Harrison, Bosse& Phillips, 2010). Because of its importance in today's business world, the concept of socio-environmental accounting is gaining traction. In terms of business, the environment has been aptly described as a stakeholder. In order to ensure accountability to society, the information encompassing its operational environment is gaining prominence among both information users and businesses (Strand & Freeeman, 2015). It also demonstrates the firm's responsiveness to ethical issues in society. Businesses that advocate for the community environment are said to be 'green' in their operations (Freeman *et al.*, 2010). Stakeholder Theory applies to the current investigation as it states the significance of stakeholders' involvement in organizational decision-making which can help to reduce conflicts and keep the business running smoothly. Also, ST sheds light on how firm characteristics influence financial performance.

Liquidity Preference Theory

Keynes (1935) developed this theoretical basis, which posits that interest rates fluctuate to reconcile the demand for cash with less liquid assets. According to this theory, when people have a strong preference for liquidity, rates of interest must go up to persuade them to hold bonds instead of cash. In other words, interest rates serve as a reward for relinquishing liquidity. The preposition suggests that individuals, firms, and investors tend to hold their assets in cash or other highly liquid forms, rather than less liquid assets like real estate, bonds, or stocks. As a result, speculators anticipate premium that is higher, other things held constant, for accepting a prolong-term liquidity losses. This predisposition is chiefly driven by future uncertainty. Entities that maintain assets liquidity better navigates unexpected economic and financial developments, particularly through times of crisis. Keynes (1935) proposed three types of money holding intentions: transactive, speculative, and precautionary. The demand for money is inversely correlated with the capital cost, commonly known as the rate of interest and consequently earnings, reflecting the speculative nature of money holding by economic units. One means by which economic entities defended themselves was by hoarding cash for unforeseeable future events. Thus, in a free market system, liquidity preference theory determines the money market's level of balance, it results in the interplay of the market forces of money supply and demand in the establishment of interest rates. Keynes (1936) developed the

model based on a few assumptions. To start with, cash does not pay interest quality. Second, money and bonds were the only two asset classes available for wealth preservation.

The theory emphasizes the primacy of capital adequacy, asset and liquidity requirements of guaranteeing a good financial standing that is effectively maintained via its principle of holding assets as a precautionary motive. Furthermore, Modigiliani (2011) Describe liquidity as the asset of a company measured by the perfection of the market in which it trades. If a market is perfect and independent economic units' decisions to buy or sell an item have no limited impact on the price, the asset is considered to be liquid (Atsango, 2018). On the other hand, it becomes completely risk free if the value at which an asset is made available at the financial market or mutual fund is stable or for every goals and objectives and its hazards should the price change usually (Modigiliani, 2011). According to this theory, liquidity, capital adequacy, assets, earnings and firm efficiency are critical to financial performance.

The theory is relevant to our inquiry as it discusses the liquidity of a bank and considers the focus on liquidity, and the other covariates under investigation; earnings, capital adequacy, asset and efficiency, the present investigation on how firm attribute affect financial performance was anchored on liquidity preference theory. The theory makes it abundantly clear that liquidity by itself does not generate a profit. However, a microfinance bank with effective liquidity management is able to settle debt responsibilities in a timely manner; as a result, such banks would be beneficial to firms and providers of investments, such as investors, resulting in enhanced performance. The theory supports liquidity on performance financially.

Financial Intermediation Theory

Diamond (1984) developed this supposition. It connotes that the involvement of a financial intermediary reduces information asymmetries and transaction costs. This involves transferring funds from those who spend beyond their means to those who have excess funds, facilitated through interest-earning loans. According to a study by Scholtens and Van Wensveen (2003), banks engage in financial intermediation so they can concentrate on specialized financial goods. Financial intermediation emerged as a result of market imperfections, without which financial intermediaries could not exist (Andries, 2009). A lack of knowledge between buyers and sellers impedes numerous market operations. Information asymmetry, in which buyers or borrowers know more about the projects they intend to undertake than fund lenders, is a fundamental feature of financial markets.

Under such conditions, the information that borrowers provide to lending institutions is less accurate than their knowledge of their integrity, assets, and labor (Murithi, 2014). Conversely, business organizations have greater knowledge of the projects or companies they are approaching lending institutions to support financially. Lending institutions find it challenging to fund viable projects due to moral hazard, which prohibits borrowers and lenders from freely exchanging information (Scholtens & Wensveen, 2003). Throughout the intermediation process, this affects the quantity of credit that banks issue, which always affects the profitability of banks for sustainability. Banks' liquidity is impacted when they lend more than they can afford to lose, which can lead to insolvency and a financial crisis (Kimutai, 2019).

The foundation of financial intermediation theory is the notion that intermediaries reduce informational gaps and costs associated with transactions. Information technology advancements, deregulation, and the expansion of financial markets are a few examples. Complete financial self-sufficiency is not necessary for financial intermediation; instead, there must be certain economic units with more receipts than expenses and other units with higher expenditures than receipts. Financial intermediaries move excess money from units with surpluses to units with deficits quickly and effectively. They achieve this by buying the main assets from deficit units and making claims on themselves to surplus units (via deposits, for example). The financial intermediary theory is built around three pillars: optimality, arbitrage, and equilibrium. Optimality refers to the idea that rational investors seek optimal returns. Arbitrage indicates that the same asset has the same price in all periods, assuming no constraints. Equilibrium indicates that markets are cleared at all times through price adjustment via arbitrage. The financial intermediary theory is of value to the present investigation as a help to lower transaction costs and informational disparities in microfinance banks. Therefore, this theory supports the linkage concerning asset quality and performance financially.

Empirical Review

Nyakieni (2022) investigated how managerial efficiency affects the performance of Kenya's money deposit banks financially. The research was conducted using an explanatory research design. The investigation bank on secondary consolidated panel data from 2009 to 2018. Time series econometric techniques such as co-integration and the Vector Error Correction model (VECM) was applied. The performance of Kenyan commercial banks financially and managerial efficiency has a substantial equilibrium relationship over both the short-long run, according to the outcome of the VECM estimation. At 5% level, the management efficiency coefficients were positive and significant. The result revealed a noteworthy co-integration relationship amongst management efficiency and commercial bank finance performance in Kenya. The VECM outputs unveiled that managerial effectiveness and financial performance were in a long-term equilibrium during the investigation period. The investigation focused on commercial banks and used time series from 2009-2018, using the VECM method of analysis. This study focused on Microfinance banks and used time period from 2016-2022, using the panel regression estimation technique.

Alqemzi (2022) studied how liquidity risk management affected financial performance. The study utilized all eight insurance banks in UAE from 2008-2020 and utilized profitability as moderating variable. According to the study, financial performance is favourably and notably impacted by liquidity risk management. Similar to the previous investigation, this investigation employed panel regression technique of analysis. However, the aforementioned study utilized profitability as a moderating variable and a time period of 2008-2020 while the present study utilized interest rate at the moderating variable and a study period of 2016-2022 because of the most recent changes in politics, the elimination of interest rate caps, execution of more focused policies, and COVID-19. Nguyen (2021) investigated how the capital adequacy ratio affected the commercial banks' ability to remain financially stable in developing nations like Vietnam. Utilizing the Generalized method of moments (GMM), 18 Vietnamese money deposit banks was the investigation population. According to the findings of empirical research, throughout the investigation period, there was a favourable association amongst the ratio of capital adequacy and the Vietnamese banks' financial

soundness. Between 2010 and 2020, there was additional empirical data regarding how adequacy of capital ratio affects Vietnamese commercial banks' financial stability thanks to the estimation findings from the GMM dynamic panel data model. Similar to the previous investigation, this investigation employed panel regression technique of analysis. However, the investigation used time period from 2010-2020, this current investigation time period was from 2016-2022 due to the most recent political shifts, removal of interest rate caps, adoption of more targeted policies, and COVID-19. The aforementioned investigation was also carried out in Vietnam where banks have different policy and regulations guiding banks. The current investigation was carried out on Kenyan microfinance banks.

Bhattarai (2021) assessed how capital adequacy ratios affect financial performance. A descriptive and informal comparative research approach was utilized in the investigation. Secondary data sources serve as its foundation. The information was gathered from the annual audit reports of 26 money deposit banks from 2012/13-2018/19. There was a total of 182 observations. In contrast to the core capital ratio, supplemental capital is widely spread. Return on assets has a slight degree of favourable link with the additional capital ratio and the core capital ratio. Return on equity has a minimal level of beneficial link with supplementary capital but a low degree of inverse association with core capital. The core adequacy of capital exhibited a positive ROA and ROE influence, indicating their favorable impact on financial performance. The investigation deployed descriptive and causal comparative inquiry methodology to investigate and analyze the connection concerning these capital ratios and the financial indicators. This investigation used explanatory research. The previous investigation period was from 2013-2018 while the current investigation period was 2016-2022.

Auma (2021) determined how asset quality affects Kenyan NSE financial performance of money deposit banks. The descriptive research technique was utilized, and between 2017 and 2020, 12 commercial banks' annual financial reports were mined for secondary data, the banking study, and the CBK annual reports. Quality asset had a noteworthy influence on the NSE banks performance. The aforementioned investigation based on money deposit banks from 2017-2020. The present investigation was based on Kenyan microfinance banks from 2016-2022.

Ahmed, Majeed, Thalassinos, and Thalassinos (2021) investigated the effect of managerial efficiency on non-performing loans of commercial banks between 2008 and 2018. System generalized method of moment technique of analysis was utilized in the investigation. According to the study, margin of net interest, growth of credit, management efficiency, and bank diversification had notable and beneficial effects on NPLs. The study's findings were only applied to Pakistani commercial banks, whereas this study investigated those that were applied to Kenyan microfinance banks. The investigation was conducted in study in Pakistan which is quite country specific as results was only applicable to Pakistan and focused on utilizing commercial banks and utilized time frame of 2008-2018 whereas present study was conducted in Kenya on microfinance banks due to their financial instability and utilize time frame of 2016-2022 which is more recent and when significant financial changes occurred in the banking sector.

Religiosa and Surjandari (2021) studied how liquidity affects the earnings of the Indonesian banking industry from 2014-2018. The study utilized eight (8) out of twenty-six (26) banks with listings on the Stock Exchange with the aid of purposive sampling technique. Using multiple regression estimation technique, the investigation indicated that liquidity had a notable inverse impact on banking companies' earnings management. The investigation was carried out in Indonesia, and the outcome was quite different from those obtained in Kenya because of differences in the competitive and market environments, as well as the legal and regulatory frameworks. The previous investigation employed multiple regression technique for analysis while the current investigation employed panel regression technique of analysis.

Al Zaidanin (2020) analyzed the effects of earnings ability on the success of 13 Jordanian deposit money banks financially from 2013-2019. The primary data were collected from the Jordanian money deposit banks released financial records that have been audited. The study focused on the effects of earnings ability on profitability using the model of fixed effect regression. Findings, the equity ratio to assets total has a robust unfavourable link with ROE and ROA. The aforesaid investigation focused on money deposit banks in Jordan and measured earnings ability as equity to total assets. The present investigation focused on Kenya's microfinance banks and measure earnings ability as loan income to deposit cost.

With the confines of SACCOs, Muturi, Barus, Kibati, and Koima (2017) investigated the impact of earnings ability on performance financially in Kenya. 83 registered deposit-taking SACCOs operational for the past five years were adopted. 83 SACCOs as the sample encompassed those that remained active from 2011 to 2015. The researchers employed census methodology. To analyze the records, they utilized multiple models of regression that is linear. Findings unveiled that earnings ability significantly play a role in influencing the financial SACCOs performance. This conclusion was supported by the positive influence demonstrated in the regression results, which also highlighted the magnitude by which earnings ability influenced these societies' financial performance. Although the study was conducted in Kenya, its limitation was tied to SACCOs as this investigation was centered on Kenyan MFBs.

Mennawi (2020) unraveled how liquidity risk affect Sudanese Islamic banks performance from 2008-2018. Panel regressed on 13 banks, the outcome revealed that risk of liquidity had a favourable and notable influence on performance. Similar to the previous investigation, this investigation employed panel regression technique of analysis. However, the investigation was performed in Sudan, but this investigation was performed in the context of Kenya's microfinance bank. Moreover, the study used time period from 2008 to 2018, on the foundation that bank policies around the world improve every year, this study used the time period from 2016-2022.

RESEARCH METHODOLOGY

Research Philosophy

The body of information that significant presumptions and biases of an investigation are founded is referred to as research philosophy (Cooper & Schindler, 2016). There are two extremes to research philosophies; that which is known to be true (epistemology) and that which is assumed to be true

(doxology). Research therefore, purposes to transform what is assumed into things known. In this light, research philosophies are categorized into two main types: positivist and interpretivist or antipositivist (Hughes & Sharrock, 1997).

Positivist philosophy involves the objective observance and description of a phenomenon. Here, it is believed that reality is stable thus, phenomena can and ought to be ignored and clarification ought to be repeated. In positivist research, the reality is manipulated with variations in the independent variable in order to ascertain consistencies and build relationships among part of the integral components of the social world. Then, estimates would be established on the previous observations and explanations of truths and their inter-relationships. Interpretivist philosophy is basically subjective research. Here, the researcher studies a phenomenon in its natural setting and affecting it. The interpretivist research though acknowledges that there may abound several interpretations of reality, the interpretations are in themselves a part of the exact knowledge being pursued. The positivist philosophy served as the study's guidance since it depends on quantitative observations that result in statistical analysis. Also, the current investigation follows the positivist philosophy since it intends to ascertain the relationships between the different constituents of firm attributes and Kenyan microfinance banks' financial performance.

Research Design

Research design, as per Kothari (2004), is a general strategy that directs research activities. It demonstrates the organization of the study. It instructs the researcher on how to respond to inquiry-based inquiries. In order to generate meaning, it ties together the crucial elements of the research (Maxwell, 2012). The current study applied the design of explanatory non-experimental research as it was basically be involved with the evaluation of the link between firm attributes and Kenyan microfinance banks' financial performance using statistical analysis. This design was based on the quantitative approach. This approach best suits the present research since the recommendations proffered were tied to the conclusions that would arise from the statistical analysis to be done. The quantitative approach is necessary since numbers are used to represent the information of firm attributes as well as financial performance.

Empirical Model

Panel regression model is a depiction of the physical connections amongst the research variables (Saunders *et al.*, 2009). In order to provide better observations for time series and cross-sectional information, the panel regression model was applied in the investigation. This is because it enables the exclusion of theoretical factors and facilitates the comparison of organizations over time (Kothari, 2004).Based on the theoretical (Stakeholders, liquidity preference, financial intermediation, Buffer Capital, efficiency structure, and Interest Rate Parity Theory) explanations of the link amongst firm attributes and financial performance, the present investigation adopted the following model in its analysis of the impact of firm attributes on financial performance.

Direct Effect Model

 $FP_{it} = \beta_0 + \beta_1 CA_{it} + \beta_2 AQ_{it} + \beta_3 ME_{it} + \beta_4 EA_{it} + \beta_5 LQ_{it} + \epsilon it$

Where:

FP= Firm Performance, CA =Capital Adequacy, AQ= Asset Quality, i= Bank , ME=ManagerialEfficiency, EA=Earnings ability, t= Time period , LQ= Liquidity, B_0 =Constant, B_{1-5} =Beta Coefficients ϵ = Error term

Target Population and Sample Design

A population, in accordance with Mugenda and Mugenda (2013), is a collection of items having comparable observable traits. Every whole group that complies with a set of requirements is referred to as a population (Creswell & Creswell, 2017). In this investigation the target populace was the 13 microfinance Kenyan banks. This formed the individual

Thirteen microfinance banks were examined as part of the project, which used census. Census data offer a reliable depiction of the population and more precise findings that are in accordance with Hakim (2012). Therefore the 13 Kenya's Microfinance banks were the sample size of this investigation and used time period from 2016-2022because significant developments occurred during this period in the areas of technology, legislation, and policy relating to Kenya's financial sector. The number of bank acquisitions, mergers, and receiverships that have happened during this time frame also indicates that the banking sector is undergoing turmoil.

Data Collection Instrument

The investigation utilized panel data given that it can be examined, uses less resources, as well as renders panel data analysis simple (Saunders *et al.*, 2009). It also aids in identifying patterns, drawing connections, and directing additional variable analysis in research (Alvin & Campbell, 2005). Panel data generally refer to information that includes time series observations of several variables (Hsiao, 2010). Consequently, two dimensions minimum are involved in observations in panel data: the cross-sectional aspect (noted by subscript i) and the temporal aspect (observed by subscript t). It also refers to a grouping of variables acquired from several data, assembled over regular time intervals (Eric, 2019). As recorded in financial records of the banks, CBK and KNBS the information was obtained for the years 2016 to 2022.

RESULTS AND DISCUSSIONS

Descriptive Analysis

Fundamentally, descriptive analysis summarizes and describes the main characteristics, patterns, and trends present in the collected data. It involves organizing, presenting, and interpreting information in a significant way to gain a better understanding of the research variables. The outcome documented and explained the statistics of the factors as it relates to mean, standard deviations as well as the minimum and maximum values. The outcome obtained is uncovered in Table 4.1.

Table 4.1: Descriptive Results

Variable	Obs	Mean	Std. Dev.	Min	Max
Financial Performance	92	0737226	.1173981	58382	.04661
Capital Adequacy	92	.1484116	.2665131	97581	.83645

Asset Quality	92	41.9104	170.4347	0	1600
Managerial efficiency	92	3325	1.72238	-14.88	3.56
Earning Ability	92	3.428668	7.537151	-4.365	53.52632
Liquidity	92	.8423913	2.079836	.1	20.05

Source: Study Data (2024)

The outcome exposed noted that the performance financially mean average value of -0.0737, with a deviation of 0.1174standard. The inverse mean detailed that, on average, microfinance banks in Kenya have a slightly below-average financial performance. Nonetheless, the standard deviation of .1174 indicates moderately low variability around the mean. The least value of -.58382 and the highest value of .04661 provide the range within which financial performance varies. A report from the Association of Microfinance Institutions in Kenya (2019) indicated that the average return on assets (ROA) within the microfinance sector ranged between 3% and 5%. The average capital adequacy ratio stands at 0.1484, with a standard deviation of 0.2665. This positive average suggests that, generally, microfinance banks in Kenya maintain a favorable capital adequacy ratio. A higher capital adequacy ratio suggests that banks have a stronger ability to absorb financial shocks and meet regulatory requirements. The deviation of 0.2665 on standard suggesting some inconsistency around the mean. The least value of -0.97581 suggests that certain banks exhibit lower levels of capital adequacy, whereas the highest value of 0.83645 signifies that there are banks with higher capital adequacy levels A report by the Association of Microfinance Institutions in Kenya (2019) showed that the average capital adequacy ratio for the microfinance sector was around 20-25%. The bank has set a minimum capital adequacy ratio of 10% for microfinance institutions (CBK, 2013).

The mean asset quality is 41.9104, with a reasonably high deviation of 170.4347 from standard. The wide range of values suggests significant variability in asset quality among microfinance banks in Kenya. However, the relatively high standard deviation of 170.4347 suggests considerable variability in asset quality among the banks. The least value of 0 indicates that some banks have no asset quality issues, while the maximum value of 1600 indicates the presence of banks with relatively poorer asset quality. A report by the Association of Microfinance Institutions in Kenya (2019) showed that the average non-performing loan (NPL) ratio for the microfinance sector was around 8-10%. The Central Bank has set guiding principle for microfinance institutions to maintain prudent lending practices and manage asset quality risks (CBK, 2013). The mean managerial efficiency is -0.3325, with a relatively high deviation of 1.7224 from standards. The negative mean suggests that, on average, microfinance banks in Kenya may face challenges in terms of managerial efficiency. The deviation of 1.7224 on standard indicates substantial variability in managerial efficiency scores. The smallest value of -14.88 and the greatest value of 3.56 demonstrate the range within which managerial efficiency varies across the studied banks in Kenya. A report by the Association of Microfinance Institutions in Kenya (2019) indicated that the average operating expense ratio for the microfinance sector was around 15-20%.

The mean earning ability is 3.4287, with a deviation of 7.5372standards. The positive mean suggests that, on average, microfinance banks in Kenya have positive earnings ability. However, the wide standard deviation indicates substantial variability in this variable among the banks. The value of smallest amount 365 implies that some banks may face challenges in generating earnings, while the value of ceiling 53.52632 indicates the presence of banks with higher earning ability. The outcome

corroborates Ndung'u (2018) who unveiled that earnings ability is crucial for ensuring the long-term viability of the sector and its ability to provide credit to underserved populations. The mean Liquidity value is 0.8424, with a standard of 2.0798deviations. The positive mean explains that, on average, microfinance banks in Kenya have a positive liquidity position. A higher liquidity level suggests a greater ability to meet short-term obligations. The value of 0.1minimum and the value of 20.05 maximum show the range within which liquidity varies across the banks studied. A report by the Association of Microfinance Institutions in Kenya (2019) indicated that the average liquidity ratio for the microfinance sector was around 35-40%. The interest rate mean is 9, with a standard of 0.6719deviations. This variable represents the average interest rate offered by the central banks to the microfinance banks in Kenya. The lowest value of 8.25 and the utmost value of 10 demonstrate the range within which interest rates are observed. The outcome aligns with Central Bank of Kenya (2020) that the interest rate range of 8.25-10% suggests that the central bank is actively supporting the microfinance sector to provide credit at relatively lower rates, thereby enhancing financial inclusion.

Correlation Analysis

The result of the correlation analysis was presented which explore the relationships between various variables (firm characteristics, interest and performance financially) in Kenyan banks that operates microfinance. The correlation analysis provides insights into the degree and direction of associations between different factors, offering a comprehensive understanding of their interrelationships.

Table 4.2: Correlation Analysis Results

	Financial	Capital	Asset	Managerial	Earning	Liquidity
	Performance	Adequacy	Quality	efficiency	Ability	
Financial	1.0000					
Performance						
Capital	0.3778*	1.0000				
Adequacy						
Asset Quality	-0.2061	-0.0040	1.0000			
Managerial	0.3824*	-0.0101	0.0641	1.0000		
efficiency						
Earning	0.2033	-0.0208	-0.0491	0.0688	1.0000	
Ability						
Liquidity	-0.0297	-0.0079	0.0162	0.0109	-0.0262	1.0000

Source: Study Data (2024)

The outcome unveiled that capital adequacy has positive coefficient of 0.3778 suggesting a moderate positive linkage with financial performance significantly. This connotes that higher capital adequacy levels can contribute to improved financial performance, as the bank has a stronger financial cushion to withstand adverse events. The uniformity in the results is evident in Kiemo, Muturi, and Mwangi (2019); Nguyen (2021); and Bhattarai (2021). Asset quality has a negative coefficient of -0.2061 which implies a weak negative relationship with financial performance insignificantly. This suggests that a deterioration in asset quality, such as a higher number of non-performing loans, may have a slight adverse impact on the bank's overall financial performance.

The divergence of the results is associated with Sile, Olweny, and Sakwa (2019); Auma (2021) and Imo (2021). The outcome could be accredited to the studies difference.

Managerial efficiency has a positive coefficient of 0.3824 suggests a weak positive relationship with financial performance significantly. This implies that more efficient management practices can contribute to better financial performance by optimizing resource allocation and reducing operational inefficiencies. The alignment of the outcome is noted with Nyakieni (2022) and Ahmed, Majeed, Thalassinos, and Thalassinos (2021). The earning ability has a coefficient of 0.2033 suggesting a weak positive bond with financial performance insignificantly. This implies that a higher earning ability may have a slight positive impact on the bank's overall financial performance, but other factors might have a more significant influence. The results agree with Al Zaidanin (2020).

Liquidity has a coefficient of -0.0297 which indicates a very weak negative and insignificant relationship with financial performance. This implies that liquidity levels have minimal impact on the banks overall financial performance. The outputs diverge from Mennawi (2020); Li, Musah, and Osei (2020); Religiosa and Surjandari (2021) and Alqemzi (2022). These differing outcomes may be attributed to the utilization of different contextual measurements in the respective studies.

Regression Analysis

Regression analysis serves as a powerful statistical tool that delves into the intricate connections between different variables, enabling the gauging of the independent factors effect on the explain factor. Specifically, when delving into the influence of distinct firm characteristics on the MFBs performance financially in Kenya, regression analysis provided a means to estimate and comprehend the magnitude of these effects. Regression analysis was considered a valuable tool to quantify and analyze this relationship. Kameri-Mbote (2009); Masinde and &Wawire (2014); and Gitau and Kariuki (2019) have all applied this method in the context of Kenyan MFBs.

Direct Effect Results

The following section presents the outcomes of our analysis, focusing on the direct effects of different variables on the financial performance of Kenyan microfinance banks. This section provides valuable insights into the specific influences and magnitudes of these variables, revealing their direct impact on the MFBs' financial performance. The outcome of the direct effect estimation is depicted in Table 4.9.

Table 4.9: Direct Effect Results

Financial Performance	Coef.	Robust Std. Err.	Z	P>z	[95% Conf.	Interval]
Capital Adequacy	.2057054	.0464991	4.42	0.000	.1145688	.296842
Asset Quality	0001047	.0000114	-9.19	0.000	000127	0000823

Management	.0008969	.00078	1.15	0.250	0006318	.0024256
Efficiency						
Earning Ability	.0210291	.0028961	7.26	0.000	.0153529	.0267053
Liquidity	0699751	.0483036	-1.45	0.147	1646485	.0246982
_cons	0562888	.0342782	-1.64	0.101	1234728	.0108953
R-Square	0.4465					
Wald chi2(5)	254.76					
Prob> chi2	0.0000					

Source: Study Data (2024)

The outcome presented in Table 4.9 displayed a coefficient for the constant term as -0.0562888, indicating the estimated financial performance when every independent factors are zero. However, the constant term is not significant (p-value = 0.101) at conventional significance levels of 0.05. The R-squared value of 0.4465 indicates that the firm characteristics included in the regression model explain just about 44.65% of the discrepancy in financial performance. The statistically significant Wald chi-square value of 254.76, accompanied by a remarkably low p-value of 0.000, showcases the significance of the model. These results emphasize the collective influence of firm characteristics on the performance of Kenyan microfinance banks financially.

The findings exposed capital adequacy influence on the performed banks financially in Kenyawhich was establish to be positively significant, with a coefficient of 0.205. This suggests that for every unit surge in capital adequacy, a corresponding estimated increase of 0.205 units is anticipated in the financial performance of these banks. The 0.000 as the p-value of the coefficient, suggesting that adequacy of capital significantly affect performance financially and positively. Unveiled by the outcomes, asset quality inversely (-0.0001) affect financial performance, demonstrating that a one-unit improvement in asset quality is associated with an estimated decrease of 0.0001047 units in financial performance. The estimate is significant (p-value = 0.000), suggesting that better asset quality is associated with improved financial performance.

The outcome linked to management efficiency positively (0.0008) affect performance of the banks financially, but not significant (p-value = 0.250) at conventional significance levels. This suggests that management efficiency insignificant affect the financially banks that performed. This implies that a hike in the efficiency of management would amount into 0.0008 units in financial performance. Uncovered by the result, earning ability positively (0.0210) affect performance financially, indicating that a one-unit increase in earning ability is associated with an estimated increase of 0.0210 units in financial performance. The coefficient is said to be significant (p-value = 0.000), suggesting that higher earning ability is linked with improved financial performance. Liquidity is discovered to inversely (-0.0699751) affect these banks performance financially, but insignificantly (p-value = 0.147) at the conventional significance levels. This suggests that liquidity insignificantly affect Kenyan microfinance banks financial performance. Therefore, a unit surge in liquidity would results in 0.0699declines in the financial performance.

Hypothesis Testing and Discussion of Findings

The study conducted hypothetical test and discusses the outcomes regarding firm characteristics effect on the bank's financial performance. The study assesses the significance and direction of the relationships concerning the independent variables (Firm characteristics and interest rate), the interaction term (Firm characteristics*interest rate), and the explained factor (financial performance. Through hypothesis testing, the study determines whether the variables have significant effect on the banks performance financially. The discussion of the implications of the findings and their alignment or deviation from our initial expectations was evaluated.

Capital adequacy has no significant effect on financial performance of microfinance banks in Kenya

Stating from the precise objective which determined the effect of capital adequacy on Kenya's banks' performance financially, the premise alludes that capital adequacy insignificantly affect financial performance. Owing to the precise outcome attached to this objective, the null hypothesis is rejected, implying that capital adequacy significantly affect the Kenyan banks' performance financially. A higher level of capital adequacy indicates that microfinance banks have a stronger financial base, which enables them to withstand financial shocks, meet regulatory requirements, and maintain stability. The outcome could be linked to a well-capitalized microfinance bank that is better positioned to attract deposits, secure financing, and fund its lending activities. This allows the bank to provide sufficient credit to borrowers, which positively impact its profitability and overall performance financially. The consistency of the outcome is noted in the work of Kiemo, Muturi, and Mwangi (2019) who uncovered that capital adequacy had a notable beneficial effect on the financial stability of Kenya's money deposit banks. Nguyen (2021) noted that there was a favourable association amongst the capital adequacy ratio and the Vietnamese money deposit banks' financial soundness. Bhattarai (2021) unveiled that capital ratio favourably affect return on asset.

Asset quality has no significant effect financial performance of microfinance banks in Kenya Deducing from the course of the study which sought to analyze asset quality effect on Kenyan performance of microfinance banks financially, the hypothetical notion asserted that asset quality insignificant affect the performed banks financially. In view of the outcome, the null claim is discarded implying that asset quality has important effect on the Kenyan performance of microfinance banks financially. The output could be accredited to high levels of NPLs that has resulted in increased provisioning expenses and losses for microfinance banks. Allocating resources to cover potential losses from non-performing loans has reduces the profitability and overall performance of the institution financially. The aligning of the outcome is tied to Sile, Olweny, and Sakwa (2019) brought to light impact of significant of asset quality on the performed banks financially. Similarly, Auma (2021) discovered a substantial influence of asset quality on their financial performance. Imo (2021) disclosed that financial assets have a notable link with Nigeria's deposit money bank performance.

Management efficiency has no significant effect on financial performance of microfinance banks in Kenya

Precision of the study sought to evaluate the effect of management efficiency on the bank's performance financially in Kenya. The hypothetical claim said that management efficiency insignificantly affect performance financially amongst microfinance banks in Kenya. The unveiling

outcome observed that insignificantly and positively affects performance financially in the banks in Kenya thus leading to the null statement non-rejection of no significant. The outcome could be linked to the measurement of management efficiency in this analysis which may have limitations. The specific metrics or indicators used to assess management efficiency may vary, and the chosen measures may not fully capture the complexity and nuances of management practices within microfinance banks hence producing inconsequential financially performed banks effects in Kenya. Notably, the outcome corroborates with Odekina, Gabriel, and Solomon (2019) exposed that operational efficiency had insignificant impact on the financial performance of Nigeria's commercialized banking institutions. Contrarily, Nyakieni (2022) unfolded that the performance financially of Kenyan banks and managerial efficiency has a substantial equilibrium relationship. Ahmed, Majeed, Thalassinos, and Thalassinos (2021) noted that management efficiency, and bank diversification had notable and beneficial effects on NPLs. The dissimilarity in the outcomes of the studys could be connected to the fact that these studies were performed in different context with some utilizing different measurements.

Earning ability has no significant effect financial performance of microfinance banks in Kenva

Effect of earning ability was evaluated on the performed Kenyan microfinance banks financially. The hypothetical statement which followed from the aforementioned is that earning ability has non-significant performance of the banks' financial effect. Drilling from the outcome of the study, earning ability significantly affect the banks; performance financially thus resulting in the null assertion rejection. The outcome could be accredited to the strong earning ability of the microfinance bank which has generated higher interest income from its loan portfolio, which is a primary revenue source for these institutions. This allows them to cover operating costs, provisioning expenses, and generate profits. A higher earning ability contributes to improved profitability and overall financial performance. The outcome is consistent with Barus (2017) concluded that earnings ability had a notable and beneficial impact on the performance of SACCOs financially. Getachew, Varaprasad, and Abebe (2019) discovered that earnings ability had a noteworthy impact on money deposit banks' financial performance. Nonetheless, Al Zaidanin (2020) unveiled that earning ability insignificantly affect ROA. The differing outcomes could be linked to the variables measurement which could produce varying levels of significant on the dependent factor.

Liquidity has no significant effect on financial performance of microfinance banks in Kenya

The liquidity effect was analyzed on Kenyan financially performed banks. The theoretical statement which followed from the objective is that liquidity insignificantly affects the financially performed banks. In consonant with this, the outcome depicted that liquidity insignificantly affected the financially performed banks hence resulting to the retention of the null claim. The output could be linked to the fact that other possible factors such as asset quality, earning ability, or management efficiency have a more dominant influence on the performance of microfinance banks in Kenya financially. These factors may overshadow the impact of liquidity in the context of this analysis rendering the effect of liquidity insignificant on the banks' performance financially. The outcome disagrees with Mennawi (2020) who revealed that liquidity risk had a favourable and notable influence on the Sudanese Islamic banks' performance. Li, Musah, and Osei (2020) who disclosed

that liquidity significantly impact on ROE. Religiosa and Surjandari (2021) indicated that liquidity had a notable inverse impact on banking companies' earnings management. Alqemzi (2022) concluded that financial performance is favourably and notably impacted by liquidity risk management. The differing outcomes may well be related to the different relative measurements utilized in the studies.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The investigation put forth investigated firm characteristics effect on the Kenyan financially performed microfinance banks as the major objective. With reference to the precise interest to the study, capital adequacy, asset quality, management efficiency, earning ability and liquidity effect on Kenyan microfinance banks' performance financially.

Effect of capital adequacy on the financial performance of microfinance banks in Kenya

With the objective of examining the impact of capital adequacy on the performed microfinance banks financially, this study revealed a significant and positive bond with the two factors. The findings highlight that capital adequacy plays a crucial role in determining the banks performance financially. Hence, the conclusion arrived is that maintaining adequate capital levels is essential for promoting favorable financial outcomes within the microfinance sector in Kenya. Therefore, microfinance banks with higher levels of capital tend to exhibit better financial performance. A strong capital base enables microfinance banks to withstand adverse economic conditions, absorb potential losses, and maintain the confidence of depositors, investors, and regulators.

Effect of asset quality on the financial performance of microfinance banks in Kenya

Through an exploration of the objective focused on the impact of asset quality on the financially banks performance in Kenya, the findings revealed a noteworthy and significantly inverse effect on their financial performance. Consequently, the study concluded that asset quality serves as a critical determinant of the financially banks performance. This suggests that the quality of assets held by these institutions plays a pivotal role in shaping their overall financial well-being and profitability.

Effect of management efficiency on the financial performance of microfinance banks in Kenya

The study investigated management efficiency effect on the Kenyan microfinance banks' performance financially. Owing to this objective, the outcome of the study provided that management efficiency positively in an insignificantly affect financial performance of these banks. Drawing the study conclusion on this outcome, there is an insignificant effect of efficiency management on the performance of Kenyan banks financially. This demonstrates that, in the context of Kenyan banks, efficiency management does not significantly impact on the overall financial health and profitability of these institutions.

Effect of earning ability on the financial performance of microfinance banks in Kenya

Earning ability effect was determined on the performed banks financially of Kenyan banks that offered microfinance. Relating to the stated objective, its unveiled significant positive effect of earning ability on the financial performance. Regarding this, the study draw a conclusion that

earning ability of the banks significantly affect the performance of these banks financially in Kenya. This outcome suggests that the ability of these banks to generate earnings plays a crucial role in determining their financial health and profitability.

Effect of liquidity on the financial performance of microfinance banks in Kenya

Liquidity effect was investigated on the financially banks performance of Kenyan microfinance banks. The outcome connected to this objective is that liquidity negatively and insignificantly affect Kenyan financially performed banks. The conclusion is that, in the context of these banks, liquidity levels do not significantly impact on their overall financial health and profitability. This finding does not discount the importance of maintaining appropriate liquidity levels in microfinance banks. However, in the specific context of this study, the results suggest that liquidity may not be a primary driver of financial performance for Kenyan microfinance banks.

Recommendations

In view of the study outcomes, the recommendations of the study were provided to suit these outcomes, particularly, factors that demonstrated significant effect on the financial performed Kenyan banks.

Capital Adequacy and financial performance of microfinance banks in Kenya

The research unveiled that capital adequacy significantly and positively affects financially performed Kenyan microfinance banks. In view of this, Microfinance banks in Kenya should prioritize maintaining adequate capital levels to support their financial performance and overall stability. This includes meeting regulatory capital requirements and considering internal capital targets that exceed the minimum thresholds.

Asset Quality and financial performance of microfinance banks in Kenya

The outcome unveiled a significantly inverse effect on the banks' performance financially. Microfinance banks should focus on enhancing their credit assessment processes to ensure the quality of their loan portfolios. This includes thorough evaluation of borrowers' creditworthiness, effective collateral management, and ongoing monitoring of loan repayment behavior. Implementing robust risk management practices would help identify and mitigate potential credit risks.

Management Efficiency and financial performance of microfinance banks in Kenya

The study outcome provided that management efficiency positively in an insignificantly affect financial performance of these banks. The banks should to invest in comprehensive management training programs and capacity-building initiatives. These programs should focus on developing leadership skills, strategic planning, risk management, and operational efficiency. By providing managers with essential resources and expertise, it can actively facilitate the improvement of decision-making procedures, leading to an overall augmentation in financial outcomes.

Earning Ability and financial performance of microfinance banks in Kenya

The outcome unveiled that earning ability significantly in a positive way affect the financially performed banks. Microfinance banks should focus on continuously innovating their products and

services to enhance their earning ability. This may involve developing new loan products, introducing value-added services, or exploring partnerships that provide additional revenue streams. By meeting the evolving needs of their target market, microfinance banks can increase their earning potential.

Liquidity and financial performance of microfinance banks in Kenya

The outcome connected yielded that liquidity negatively and insignificantly affect Kenyan microfinance banks' financial performance. Microfinance banks should establish comprehensive policies and procedures to monitor and manage liquidity effectively. This includes setting appropriate liquidity ratios, conducting stress testing, and developing contingency plans to ensure the availability of funds during periods of increased liquidity demands.

Contribution to Knowledge

This study makes significant contributions to the existing knowledge body concerning the relationship regarding firm characteristics with financially performed Kenyan microfinance banks. Firstly, it expands upon the current literature by examining the effects of firm characteristics and financially performed banks within this specific context. Secondly, it explores a previously unexplored aspect, namely, the moderating role of interest rates in the linkage concerning firm characteristics and performance financially. Thirdly, the research goes beyond purely academic analysis, offering valuable insights that have implications for both theory and practice. It enhances the theoretical foundations of relevant theories while also providing practical implications for policymakers and microfinance bank management. Lastly, the study broadens the applicability of existing theories that connect firm characteristics and financial performance, demonstrating their relevance and adaptability to the unique landscape of Kenyan microfinance banks.

This study developed a robust conceptual framework that establishes a connection relating firm characteristics with the performance of Kenyan microfinance banks financially. By conducting rigorous empirical analysis, it provided a deeper understanding of the directional relationships among these factors. The research generated new insights into how these factors interact with each other. It also contributed to the existing knowledge by formulating and testing hypotheses that examine the impact of firm characteristics on financial outcome. Importantly, the investigation statistically validated the null hypothesis, indicating that interest rates do not moderate the link concerning firm characteristics and outcomes financially. Additionally, the study derived an empirical model that encompasses the investigated factors, serving as a valuable tool for future research and potential applications in policymaking.

REFERENCES

Akinola, A. (2022). The nexus between bank size and financial performance: Does internal control adequacy matter? *Journal of Accounting and Taxation*, 14 (1), 13-20.

Al Zaidanin, J. S. (2020). A Study on Financial Performance of the Jordanian Commercial Banks using the CAMEL Model and Panel Data Approach. *International Journal of Finance & Banking Studies, Center for the Strategic Studies in Business and Finance*, 9(4), 111-130

- Alfadhli, M. &AlAli, M. (2021). The Effect of Bank Size on Financial Performance: A Case Study on Kuwaiti Banks. *Journal for Insurance and Financial Management*, 4 (3), 11-15.
- Alii, S., Yassin, M., & Aburaya, R. (2020). The Impact of Firm Characteristics on Corporate Financial Performance in Emerging Markets: Evidence from Egypt. *International Journal of Customer Relationship Marketing and Management*, 11 (1), 70-89.
- Aliu, A.A., Abdullahi, N.A., &Bakare, T.O. (2020). Capital adequacy and financial performance of deposit money banks with international authorization in Nigeria. *Accounting and Taxation Review*, 4(4), 78-91.
- Almazari, A.A., &Alamri, A.A. (2017). The Effect of Capital Adequacy on Profitability: AComparative study between SAMBA and SAAB Banks of Saudi Arabia. International Journal of Economics, Commerce and Management, 5(11), 86-102.
- Atsango, V. L. (2018). Relationship between firm characteristics and profitability of deposit taking Sacco's in Kenya. (A Research Project) University of Nairobi, Nairobi, Kenya.Banking Study, (2018). Souvenir Edition; Think Business
- Barus, A.C., and Erick. (2016). Analysis of Factors Affecting Non-Performing Loans at Commercial Banks in Indonesia. Journal of Microeconomics Entrepreneurs. Volume 6, Number 02.
- Beck, T., Demirgüç-Kunt, A., & Singer, D. (2013). Is small beautiful? Financial structure, size and access to finance. World Development, 52, 19-33.
- Bibow, J. (1988). On Keynesian Theories of Liquidity Preference. The Manchester School. 66(2): 238-273
- Chomen, D.A. (2021). The role of microfinance institutions on poverty reduction in Ethiopia: the case of Oromia Credit and Saving Share Company at Welmera district. Future Business Journal, 7(44): 2-9
- Fatima, N. (2014). Capital Adequacy: A Financial Soundness Indicator for Banks. Global Journal of Finance and Management, 6(8), 771-776.
- Gidigbi, M.O. (2021). Specialised Bank's Credit Provision in Nigeria: Implication on Poverty Reduction. African Journal of Economic Review, 10(2): 151-171
- Hughes, J. and Sharrock, W. (1997). The Philosophy of Social Research, 3rd edition, Essex: Pearson
- Hyeladzira M. Ochonogor (2020). Microfinance institutions and economic development in Nigeria.NDICQuarterly, 35, (1 & 2): 62-100.
- Ikapel O. F., Namusonge, G and Sakwa, M. (2019). Financial Management Efficiency and Financial Performance of Commercial Banks Listed on the Nairobi Securities Exchange. International Journal of Research and Innovation in Social Science (IJRISS), 3 (10), 627-635.

- Kandiru, E. M., Gachunga, H., Muturi, W., &Ogutu, M. (2015). Influence of firm Characteristics on the impact of disclosure and transparency in the Performance of companies listed in Nairobi Securities Exchange. International Journal of Scientific Research and Management, 4(9), 67-71.
- Khan, A. A., Khan, S.U., Fahad, S., Ali, M.A.S., Khan, A. &Luo, J. (2020). Microfinance and poverty reduction: New evidence from Pakistan. Int. J. Fin. Econ. 1(1): 1-11.
- King'ori, S. N., Kioko, W. C. and Shikumo, H. D. (2017). Determinants of Financial Performance of Microfinance Banks in Kenya.Research Journal of Finance and Accounting, 8 (16), 1-8.
- Li1, K., Mohammed, M., Yusheng K., Mensah, I. A., Antwi, A. K., Bawuah, J., Donkor, M., Cephas, K. C. &Osei, A. (2020). Liquidity and Firms' Financial Performance Nexus: A Panel Evidence from Non-Financial Firms Listed on the Ghana Stock Exchange. Sage Open, 1-20.
- Lucky, L. A. & Andrew, N. A. (2015). Asset Quality and Profitability of Commercial Banks: Evidence from Nigeria. Research Journal of Finance and Accounting, 6 (18), 26-34.
- Magoma, A., Mbwambo, H., Sallwa, A. &Mwasha, N. (2022). Financial Performance of Listed Commercial Banks in Tanzania: A Camel Model Approach. African Journal of Applied Research, 8 (1), 228-239.
- Maina, E. M. (2021). Effect of Bank Specific Factors on Income Diversification of Listed Commercial Banks in Nairobi Securities Exchange. (Masters Dissertation) KCA University, Kenya.
- Modigiliani, F. (2011). Liquidity Preference and the Theory of Interest and Money. The Journal of Econometric Society, 12(1), 45–88.
- Msomi S. T &Nyide, J. C. (2021). Nexus of firm Characteristics and financial performance of nonlife insurance companies in the Southern African Development Community. Investment Management and Financial Innovations, 18(4), 95-110
- Musyoka, B.K. (2017). The Effect of Capital Adequacy on the Financial Performance of Commercial Banks in Kenya. (MBA Project) University of Nairobi, Nairobi, Kenya.
- Mutunga, D. &Owino E. (2017). Moderating Role of Firm size on the relationship between Micro Factors and Financial Performance of Manufacturing Firms in Kenya. Journal of Finance and Accounting, 1(1), 14 27.
- Mwenbia, R. K. (2017). Effect of selected firm characteristics on financial performance OF firms listed in the Nairobi Securities Exchange.(A Masters Project), Kenyatta University, Nairobi, Kenya.
- Ngungu, W., N. & Abdul, F. (2020). Firm Characteristics and Non-Performing Loans of Commercial Banks in Kenya. Journal of Finance and Accounting, 4(2), 31-47

- Nguyen, M. S. (2021). Capital adequacy ratio and a bank's financial stability in Vietnam. Banks and Bank Systems, 16(4), 61-71. Doi:1021511/bbs.16(4).2021.06
- Okpanachi, J., Doha, C., & Mohammed, N. A. (2018). Effect of firm characteristics on Profitability of listed consumer goods companies in Nigeria. Journal of Accounting, Finance and Auditing studies, 6(4), 67-78.
- Onubedo, G. & Yusuf, K. M. (2018). Finance and Firm Productivity in Africa: Background study from World Bank enterprise study data. A Working Paper for Centre for the Study of the Economies of Africa.
- Schaltegger, S., Hörisch, J. and Freeman, R.E. (2019). Business cases for sustainability: A stakeholder theory perspective, Organization & Environment, 32 (3): 191-212
- Tasos, S., Amjad, M. I., Awan, M. S., and Waqas, M. (2020). Poverty Alleviation and Microfinance for the Economy of Pakistan: A Case Study of Khushhali Bank in Sargodha. Economies, 8(3): 63.
- Varaprasad, A. M., Getachew, D. &Abebe, T. (2019). Determinants of Financial Performance and Default Prediction: An Empirical Study on Select Commercial Banks in Ethiopia. SSRG International Journal of Economics and Management Studies, 6 (4), 59-64.
- Vighneswara, S. (2013).Banking system resilience and financial stability.Banking Journal of International Business and Economy, 14(1), 87-117.
- Wafulu. W. N. (2020). Firm characteristics and financial stability of commercial banks in Kenya. (Doctoral Dissertation), Kenyatta University, Nairobi, Kenya.
- Yulianti, E., Aliamin, A & Ibrahim, R. (2018). The Effect of Capital Adequacy and Bank Size on Non-Performing Loans in Indonesian Public Banks. Journal of Accounting Research, Organization and Economics. 1, 205-214.