EFFECT OF FINANCIAL SOUNDNESS INDICATORS ON THE PERFORMANCE OF LISTED INSURANCE COMPANIES IN KENYA.

BY

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MASTER OF SCIENCE IN COMMERCE

(FINANCE AND ECONOMICS)

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DECLARATION

I attest that this research project is entirely unique and has not been disseminated or submitted for an academic qualification at any location. Furthermore, I affirm that it encompasses solely my own contributions, excluding situations in which proper citation and referencing have been made to acknowledge the content published by others.

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I do hereby confirm that I have examined the master's dissertation of

Fridah Lelei

In addition, I have certified that all revisions that the dissertation panel and examiners recommended have been adequately addressed.

Sign: …………………......... **Date: …………………**

DR. CHRISTINE NANJALA

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ABSTRACT

This study investigates the impact of financial soundness indicators on the performance of listed insurance companies in Kenya. Drawing from Shareholder's Theory, Capital Buffer Theory, and Portfolio Theory, the study aims to evaluate the effects of capital adequacy, managerial effectiveness, earning potential, and liquidity on the performance of insurance firms. Utilizing a descriptive research design, dynamic panel data from 2008 to 2022 is employed for analysis. The target audience comprises six insurance firms as of December 2022, all included in the study through a census approach due to the small sample size. The findings reveal significant insights into the relationship between financial soundness indicators and the performance of insurance firms. Firstly, capital adequacy emerges as crucial for ensuring the financial stability of insurance firms, with ample capital facilitating smoother operations amidst the sector's inherent volatility. This aligns with previous research indicating a positive correlation between capital levels and financial stability. However, managerial effectiveness is found to have a counterproductive effect, potentially due to increased operational costs in the short term. This finding contrasts with studies in the banking sector, suggesting differences in business dynamics between insurance and banking. Moreover, earning potential is identified as a key determinant of performance, emphasizing the importance of sustainable returns and earning quality for insurance firms. The study underscores the need for firms to continually assess and adapt to environmental risks to maintain financial standing. Interestingly, liquidity is found to have a negative impact on performance, as high liquid asset holdings limit opportunities for profitable investments, unlike findings in the banking sector. In conclusion, this research highlights the complex interplay between financial soundness indicators and insurance firm performance in Kenya. It emphasizes the significance of capital adequacy and earning potential while acknowledging the nuanced effects of managerial effectiveness and liquidity. Based on these findings, recommendations are made for insurance firms to prioritize capital management, sustainable earnings, and prudent liquidity strategies to enhance overall performance and long-term sustainability in the dynamic insurance landscape of Kenya.

Keywords: Capital Adequacy, Managerial Effectiveness, Earning Potential, Liquidity.

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DEDICATION

I dedicate this research paper to my family for their love, care and moral support throughout the entire research period as they enabled me to attain my targets and objectives.

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ACRONYMS AND ABBREVIATIONS

ASE: Amman Stock Exchange

BSC: Balanced Scorecard

CAR: Capital Adequacy Ratios

CBK: Central Bank of Kenya

CMA: Capital Market Authority

CRSP: Center for Research in Securities Prices

CSP: Corporate Social Performance

CSR: Corporate Social Responsibility

EPS: Earnings Per Share

IRA: Insurance Regulatory Authority

MBNQA: Malcolm Baldrige National Quality Award

NACOSTI: National Commission for Science, Technology & Innovation

NIM: Net Interest Margin

NSE: Nairobi Securities Exchange

ROA: Return on Assets

ROE: Return on Equity

SPSS: Statistical Package for Social Sciences

VECM: Vector Error Correction model

VIF: Variance Inflation Factor

CHAPTER ONE

INTRODUCTION

1.1 Background

Kwon and Wolfrom (2017) argue that the insurance sector is essential to economic growth because it facilitates the transfer of risk from people and businesses to third parties via insurance and reinsurance. This field has emerged as a vital part of the banking system because to its substantial contributions to GDP development and consequential effects on investors and other stakeholders (Haiss and Sümegi, 2008). Traditional wisdom held that insurance companies were safer than banks because they faced less liquidity risk. However, in recent decades, deregulation of the financial system, globalization and novel financial innovations have all combined to make the operations of financial intermediaries more complex and potentially riskier (Caporale, Cerrato, & Zhu, 2020). The collapse of insurance companies might have significant ripple effects across the financial system and the economy, but these consequences may not be as severe as they were during the 2008 financial crisis. In light of this, it is clear that insurance company solvency is crucial to the health of the economy as a whole as well as the financial system and its constituents (Pasiouras & Gaganis, 2013).

The presence of thriving businesses is essential for the progress of emerging countries. Economists use them as a proxy for a country's potential economic, social, and political growth, drawing parallels to an engine. Every company has to be performance-based to make it in today's business world. Successful businesses provide new employment opportunities, pursue sustainable wage increment, utilize efficient manufacturing facilities, provide better-quality goods to clients and facilitate general economic growth (Taouab & Issor, 2019).

The global insurance industry, like other financial sectors, saw the effects of the pandemic beginning in 2019, with the worst of the effects being seen in 2020, when numerous industries shrank (Babuna, et al., 2020). Above-trend real growth in total premiums is expected to increase the sector by 3.4% in 2021. Despite challenges brought on by the aftereffects of the pandemic, worldwide non-life premiums increased by 3.3% in real terms in 2021 (Ertuğrul & Külekçi, 2022). Ertuğrul & Külekçi indicated that (2022) non-life premiums grew nominally by 8.7 percent; however, this figure was offset by the significant increase in inflation, especially in developed countries. In 2021, due to de-tariffication rate decreases, automobile premiums in China are predicted to fall by 7.1 percent, further highlighting the global trend of sluggish premium growth (He & Jiang 2021). Furthermore, He & Jiang (2021) argued that motor premiums uptake is predicted to increase in China and around the globe in 2022, after a decline of 0.4 percent in real terms in 2021. Association of Kenya Insurers (2021) predicts that actual non-life premium increase will be 3.7 percent worldwide in 2022, and 3.3 percent in Kenya.

The African insurance industry, a crucial component of the continent's financial landscape, boasted a substantial worth of approximately $75.3 billion in 2021 (Africa Insurance Industry, 2021). This figure, while impressive, signifies just the tip of the iceberg when it comes to the industry's potential growth and impact across the continent. A deeper dive into the East African region reveals a complex landscape, characterized by various challenges that the insurance sector faces as it strives to expand its reach and relevance in this dynamic part of Africa (Nyandwi et al., 2023). One of the primary obstacles confronting insurance providers in the East African region is the issue of low penetration rates (Africa Insurance Industry, 2021). While the industry's overall value might be substantial, the percentage of the population covered by insurance policies remains dismally low (Africa Insurance Industry, 2021). Many individuals in East Africa remain either underinsured or completely uninsured, leaving them vulnerable to various risks and uncertainties (Ameh et al., 2021). This low penetration rate can be attributed to a combination of factors, including a lack of awareness about insurance benefits, misconceptions about its affordability, and a general lack of trust in insurance companies (Africa Insurance Industry, 2021). Consequently, the insurance sector faces the arduous task of not only expanding its market but also educating the public about the advantages of insurance in safeguarding their financial well-being.

Complicated insurance products further compound the challenges facing the East African insurance sector (Roselyne, Mackton & Kiganda, 2022). Insurance policies are often viewed as complex and difficult to understand, discouraging potential customers from investing in them (Fattinger, 2018). The terminology, fine print, and diverse coverage options can be overwhelming for the average person. Simplifying product offerings, using plain language, and offering clear explanations of policy terms could go a long way in making insurance more accessible and attractive to the East African population (Roselyne, Mackton & Kiganda, 2022). High costs of living and doing business in the East African region are another significant hurdle for the insurance industry (Kassegn & Endris, 2021). Kassegn & Endris (2021) further viewed that the cost of living in many East African countries is on the rise, which means that people have less disposable income to allocate towards insurance premiums. Additionally, insurance companies grapple with high operating costs due to factors such as regulatory requirements, infrastructure limitations, and administrative expenses. These cost-related challenges make it challenging for both insurance providers and potential clients to find common ground. Creative solutions like microinsurance, which offers more affordable coverage tailored to the local context, could be part of the answer to this conundrum (Roselyne, Mackton & Kiganda, 2022).

As of the end of the third quarter of 2022, the Kenyan insurance industry exhibited notable developments and transformations that underscored its growing significance in the country's financial landscape (Kahonga & Kariuki, 2020). The industry's gross written premium for this period reached a substantial Ksh. 238.90 billion, marking a significant increase of 11.4 percent compared to the corresponding period in 2021 when it stood at Ksh. 213.53 billion (Insurance Regulatory Authority, 2022). This noteworthy rise in gross written premiums indicates the increasing trust and reliance of Kenyan consumers on insurance products and services to protect their financial well-being. One of the most remarkable changes within the Kenyan insurance sector during this period was the reduction in underwriting losses within the general insurance segment. In the third quarter of 2021, underwriting losses in the general insurance sector amounted to Ksh. 4 billion, causing concern and raising questions about the sector's sustainability (Insurance Regulatory Authority, 2022). However, in the third quarter of 2022, these losses notably decreased to Ksh. 2.26 billion, reflecting a more financially stable and resilient sector (Insurance Regulatory Authority, 2022). This remarkable improvement is a testament to the industry's ability to adapt and make necessary adjustments in response to the evolving landscape of risks and claims.

The general insurance sector continued to be a dominant force within the Kenyan insurance industry, accounting for a substantial 56 percent of all premiums paid by policyholders (Insurance Regulatory Authority, 2022). This sector's significance was further emphasized by the sources of its premium revenue. An impressive 62 percent of the total premium revenue in the general insurance sector was attributed to the auto insurance and health insurance segments, highlighting the importance of these lines of business in meeting the needs of Kenyan policyholders (Insurance Regulatory Authority, 2022). In a remarkable demonstration of strength and growth, the reinsurance business in Kenya exhibited substantial expansion during the period from 2021 to Q3.

Moreover, reinsurance sector recorded an impressive growth of Ksh. 21 billion during this timeframe, signaling an increasing demand for risk transfer services among insurance companies (Insurance Regulatory Authority, 2022). The general reinsurance underwriting turnover saw a remarkable surge of 29 percent, reaching a significant Ksh. 28.06. This surge in reinsurance activity is an indicator of the increased complexity and scale of risks being managed by insurance companies, as well as their commitment to diversify and safeguard their portfolios effectively (Insurance Regulatory Authority, 2022).

1.1.1 Financial Health Indicators

Sugiyarto (2015) define financial health indicators as quantitative methods that classify financial systems under the five areas of interest: asset quality, liquidity, earnings, capital adequacy, and market risk sensitivity. Davies, Podpiera, and Dasm (2003) developed the CARAMELS framework-based financial soundness evaluation, which was subsequently approved by the IMF for use by the supervisory and regulatory authority. In 2005, the IMF published a working paper titled "Insurance & Issues of Financial Soundness" that detailed the ratio-based method for evaluating management efficiency in the insurance industry. This manual was created in collaboration with the World Bank. The acronym "CARAMELS" is derived from the words "capital adequacy," "asset quality," "reinsurance," "adequacy of claims and actuarial," "management soundness," "earnings and profitability," "liquidity," and "sensitivity to market risk" (Ali, Chanar, Ghauri, & Obaid, 2019).

Capital adequacy is a fundamental concept in the world of finance and business management, essential for the stability, security, and profitability of organizations. Scholars and researchers have provided various perspectives on this critical aspect of financial management, shedding light on its multifaceted nature and significance. Chioma, Okoye, Chidume, and Nnenna

(2021) offer a concise yet comprehensive definition of capital adequacy. They describe it as the state in which an organization possesses sufficient capital to effectively safeguard all customer deposits. This definition immediately underscores the paramount importance of capital adequacy in the context of financial institutions. Customer deposits represent a vital trust relationship that institutions must maintain, and the sufficiency of capital is the linchpin in securing this trust.Olalekan and Adeyinka (2013) delve deeper into the concept of capital adequacy by characterizing it as the quantity of financial resources an organization must maintain to ensure not only profitability but also long-term security. In this sense, capital adequacy is not merely about surviving in the present but also thriving and enduring in the future. Olalekan emphasizes that the availability of sufficient funds is critical to counterbalancing losses and, by extension, averting insolvency. This perspective aligns capital adequacy with risk mitigation and resilience, emphasizing its role as a protective buffer against financial adversity.

Almazari and Alamri (2017) provide a unique dimension to the definition of capital adequacy by emphasizing its link to risk management and strategic decision-making. According to their view, capital adequacy reflects an organization's ability to assess and manage the risks it faces. It, therefore, extends beyond the realm of pure finance and enters the domain of strategic planning. Adequate capital empowers a company to make informed decisions, particularly in terms of setting prices and maximizing profits from its operations. In this context, capital adequacy is not just a safeguard but also a strategic asset, enabling companies to navigate the complex landscape of risk and competition effectively.

Asset quality, or loan quality, is another pivotal element in the broader framework of financial management, particularly for financial institutions. This concept is integral to understanding the risk profile of an organization's holdings and, consequently, the provisions it must make to mitigate potential losses. Nzoka (2015) contributes to this discourse by explaining that asset quality is often assessed using numeric risk scores, enabling risk managers to conduct comprehensive evaluations. It serves as a tool for quantifying the level of risk associated with an organization's assets.

The relationship between capital adequacy and asset quality is intrinsic (Chandrasegaran, 2020). Chandrasegaran (2020) stated that adequate capital not only bolsters the organization's ability to cover losses but also plays a role in maintaining the quality of its assets. Moreover, when an organization possesses sufficient capital, it can better address issues related to asset quality, making it easier to set aside provisions for potential losses or even invest in risk mitigation strategies. In this way, capital adequacy and asset quality are intertwined, and their collective management is essential for an organization's financial health and longevity. In practice, capital adequacy ratios and asset quality assessments are crucial tools employed by regulators and financial institutions to monitor and ensure the stability and soundness of the financial system. Regulatory bodies, such as central banks, often set minimum capital adequacy requirements for financial institutions to safeguard the interests of depositors and maintain the overall health of the financial sector (Bichsel, 2019). This regulation helps prevent situations where organizations lack the necessary capital to cover losses, ultimately protecting the financial ecosystem from systemic risks.

For financial institutions, such as banks, the relationship between capital adequacy and asset quality is particularly significant. Adequate capital enables banks to absorb losses without jeopardizing their operations or customer deposits (Elbadry, 2018). At the same time Elbadry, (2018) contented that, sound asset quality ensures that the risk associated with the loans and investments held by the bank remains within acceptable bounds. In this context, capital adequacy is not only about financial prudence but also about the broader trust and stability of the financial system. Elkamhi (2019) also presents that diverse and complementary perspective on these crucial topics. Capital adequacy is not merely about having sufficient funds but also about using them strategically, managing risks effectively, and ensuring long-term stability (Elkamhi, 2019). Asset quality, on the other hand, is pivotal for assessing and quantifying the risk associated with an organization's holdings. The intersection of these two concepts is where financial stability, regulatory compliance, and sound risk management converge, making them indispensable for the health and resilience of the financial system.

Lima Santos, Gomes, Malheiros, and Lucas (2021) argue that, company's liquidity is a measure of its ability to meet short-term financial obligations and an indication of the management's degree of safety in the face of adversity. By maintaining a portion of its assets in liquid form, the company can readily meet its short-term obligations. However, due to their low returns, liquid assets incur a penalty (Akenga, 2015). However, if the company does not have sufficient cash on hand, it may find itself in a bind and unable to satisfy its short-term financial obligations. This may be costly for the company due to penalties or the need to quickly convert illiquid assets into cash. Therefore, the organization must evaluate the advantages and disadvantages of maintaining a surplus of liquid assets. A company's performance can be enhanced by maintaining a robust level of liquidity at all times. Too much or too little reliance on liquid assets can be detrimental to a company's performance and costly (Kariuki, Muturi, & Njeru, 2021).

Effective financial management is a critical component of a company's success, as it strives to allocate its funds in the most productive and profitable manner possible (Villegas, 2015). This function plays a pivotal role in steering a business toward its strategic goals and maintaining its financial stability. A wide array of financial management methods, as highlighted by Zada, Yukun, and Zada (2021), are essential tools that enable companies to navigate the complex financial landscape. These methods encompass areas such as working capital management, investment strategies, finance management, accounting information systems, financial reporting, and financial analysis. Each of these facets contributes to an organization's ability to optimize its financial resources, ensuring they are deployed efficiently and effectively.

One vital aspect of financial management is the assessment of earnings and profitability, a process that involves the examination of various ratios and metrics. Among these, interest margin to gross income, noninterest expenses to gross income, return on equity (ROE), and return on assets (ROA) are pivotal in evaluating a deposit taker's effectiveness in generating interest income, reducing expenses, and maximizing its capital and assets (Sugiyarto, 2015). The interest margin to gross income ratio plays a crucial role in determining the profitability of a financial institution. It measures the difference between the interest earned on loans and investments and the interest paid on deposits and other liabilities concerning the gross income. A higher interest margin indicates that the institution is adept at generating revenue from its interest-earning assets while minimizing the costs associated with its interest-bearing liabilities (Zada, Yukun & Zada, 2021). Consequently, a well-managed financial institution will strive to maintain a healthy interest margin, thus enhancing its overall profitability.

Non-interest expenses to gross income ratio are another pivotal metric in financial management. It calculates the proportion of non-interest expenses, such as operating costs, overhead, and administrative expenses, concerning the institution's gross income (Cetin, 2018). This ratio is critical in determining an institution's efficiency in managing its operating costs and overhead. A lower noninterest expenses to gross income ratio signifies that an institution is effectively managing its expenses and, consequently, improving its profitability. Return on equity

(ROE) and return on assets (ROA) are two essential ratios that measure a deposit taker's profitability and efficiency in using its capital and assets (Villegas, 2015). Return on equity evaluates the institution's ability to generate profits relative to its shareholders' equity, while return on assets assesses its efficiency in generating earnings concerning its total assets (Amalia, 2022). Higher ROE and ROA ratios are indicative of effective capital utilization and asset management, ultimately leading to increased profitability.

1.1.2 Performance

Firm performance is a concept that holds great significance in the business world, as it serves as a barometer of a company's overall success and effectiveness. Taouab and Issor (2019) described firm performance as the measure of how well a company is able to achieve its social, political, and economic objectives. This multifaceted definition underscores the fact that a company's performance is not solely determined by its financial achievements, but also by its ability to make meaningful contributions to society and navigate the intricate web of political dynamics. It's a holistic perspective that goes beyond profit margins and delves into the broader implications of business activities. Nguyen et al. (2021) offered a complementary perspective by emphasizing the allocation of resources as a crucial aspect of firm performance.

According to their definition, firm performance is essentially the company's capability to efficiently distribute its human and material resources in a manner that aligns with its predefined goals (Jayasinghe, 2022). This view highlights the strategic management of resources as a critical determinant of how well a company can perform. Effective resource allocation ensures that the right people are in the right positions and that materials are used optimally, ultimately contributing to the company's success. In contrast to the expansive definitions offered by Taouab and Issor (2019) and Nguyen et al. (2021), Fernando et al. (2019) put a more explicit emphasis on financial outcomes in their definition of performance. They defined performance as the degree to which a corporation is capable of generating profits from its operations while effectively accomplishing its objectives using the resources at its disposal. This perspective is in line with the traditional understanding of performance, where profit generation is a key yardstick for success.

For many, financial performance remains a central aspect of a company's overall health and vitality (Mishra, 2023: Ateino, 2023: Yuniawati & Farman, 2023: Mihai,2023). The various definitions provided by these scholars shed light on the multifaceted nature of firm performance. It is clear that there is no one-size-fits-all approach to measuring and evaluating performance. The nuances in these definitions reflect the diverse range of goals and objectives that companies pursue. Some companies may prioritize social responsibility and ethical behavior as their primary objectives, while others may focus on profit maximization. In many cases, firms seek a balance between these elements, aiming to be profitable while adhering to ethical standards and fulfilling societal responsibilities (Nalbantoğlu, 2021). Measuring firm performance is a complex and dynamic process (Oduro, 2021). It involves assessing a company's achievements against its own set of goals, which can vary significantly depending on the industry, market conditions, and company culture. Some key performance indicators (KPIs) commonly used to evaluate firm performance include financial metrics like revenue, profitability, and return on investment (Oduro, 2021).

Additionally, non-financial metrics such as customer satisfaction, employee engagement, and sustainability practices are essential in assessing performance from a broader perspective. The role of leadership and management in shaping firm performance cannot be overstated (Chen et al., 2021). Effective leaders set the tone for the entire organization, establish clear objectives, and create a culture that fosters innovation, collaboration, and a strong work ethic. In contrast, poor leadership can have detrimental effects, leading to misaligned goals, inefficiencies, and low morale among employees. The competitive landscape in which a company operates also significantly impacts its performance (Mubeen et al., 2022). Mubeen et al. (2022) indicated that industries characterized by intense competition and rapid technological advancements demand constant adaptation and innovation. Therefore, Companies must stay agile and responsive to remain competitive, which further underscores the dynamic nature of firm performance. Furthermore, external factors, such as economic conditions, regulatory changes, and market trends, can greatly influence a company's performance. The ability to navigate these external influences while staying true to one's defined objectives is a testament to a company's resilience and adaptability (Mubeen et al., 2022).

Companies are assessed using a variety of generic models. The BSC model was developed by Robert Kaplan and David Norton in the 1990s (Betto, 2022). It's a method for turning an organization's stated goals and objectives into quantifiable metrics in both financial and qualitative areas. It has been shown that (Horvath et al., 2004) The evolution of BSC has made it feasible to connect many points of view to goals, indicators, and strategic moves. The Balanced Scorecard serves as a template for the review process by converting strategic goals and objectives into measurable indicators of success (Teichgräber, 2021). Financial, customer, innovation and learning, and internal process are the four pillars upon which the BSC model rests to illustrate a company's success.

The perspective from which a company is evaluated can greatly impact its success and sustainability (Stame, 2022). Four key perspectives are commonly used in business analysis: the financial perspective, customer perspective, internal processes perspective, and the innovation and learning perspective (Sarunova et al., 2023). Sarunova et al. (2023) further revealed that each of these perspectives provides a unique lens through which an organization can be assessed and improved. In this discussion, we will delve deeper into each of these perspectives, exploring their significance and how they are interconnected to ensure the continued growth and success of a company. The financial perspective is vital as it analyzes the company from the shareholders' point of view (Shylo & Toporkova, 2022). Shylo & Toporkova (2022) stated that Shareholders are the owners of the company, and their primary concern is to see a return on their investment. To achieve this, it's imperative for a company to maintain stringent financial regulations. These regulations include managing costs effectively, ensuring revenue growth, and optimizing the use of assets (Shylo & Toporkova, 2022). Without proper financial management, a company risks its very survival, as a failure to generate profits and return on investment can result in a loss of investor confidence and, ultimately, bankruptcy (Sarunova et al., 2023). Therefore, consequently shareholders expect their investments to grow and be rewarded, making it crucial for companies to prioritize financial health.

On the other hand, the customer perspective provides insight into the company from the perspective of the consumer. A successful business understands not only the present but also future product quality, pricing, and availability requirements of its customer base (Yang & Zhang, 2022). This perspective involves tailoring products and services to meet and exceed customer expectations, leading to customer satisfaction and loyalty. It is about building a strong relationship with customers, addressing their needs and concerns, and constantly adapting to market changes and customer preferences. A satisfied and loyal customer base can be a significant source of sustainable revenue, and their feedback is invaluable for product and service improvements (Utami, 2023).

The internal processes perspective shifts the focus inward, identifying the areas where a business must excel to deliver value to customers and achieve financial success (Djordjevic, 2022). This perspective is crucial as it highlights the company's ability to streamline and optimize its operations. Efficient internal processes not only reduce costs but also contribute to higher quality products and services (Pantić,2023). Therefore, businesses must assess their processes, from production and supply chain management to customer service, and continuously seek opportunities for improvement. Streamlining internal operations can lead to cost savings, increased productivity, and enhanced product or service delivery, directly impacting the company's bottom line. The innovation and learning perspective are forward-looking and concentrates on a company's growth and service enhancement capabilities. Innovation is a driving force behind a company's ability to stay competitive in a rapidly evolving market. Companies that fail to innovate risk becoming stagnant and losing market share. Therefore, fostering a culture of innovation and continuous learning is essential. This perspective emphasizes the importance of investing in research and development, embracing new technologies, and encouraging employees to expand their knowledge and skills. By doing so, a company can adapt to changing market dynamics and create new opportunities for growth. Moreover, these four perspectives are interconnected and interdependent.

As noted by Taouab and Issor (2019), the success of a company in its customer, internal process, and financial aspects is inextricably linked to the organization's capacity to educate and develop its human resources and innovation system. To illustrate this, let's consider a scenario in which a company focuses solely on the financial perspective, neglecting the other three. While it may generate short-term profits, it risks alienating its customer base due to poor product quality and service. This, in turn, affects internal processes as customer complaints and returns increase, putting further strain on the financials. Without a commitment to innovation and learning, the company remains vulnerable to market disruptions and competitive pressures (Ambulkar et al., 202). Conversely, a company that prioritizes all four perspectives creates a holistic approach to business management. By investing in employee training and development, it fosters innovation and improvements in internal processes, resulting in a better customer experience. Satisfied customers are more likely to remain loyal, leading to increased revenue and stronger financial performance. This positive cycle continues as financial success enables further investments in innovation and learning, ultimately driving long-term sustainability.

The Performance Prism was created by a group of performance evaluation consultants and academicians (Neely, Adams, & Kennerley, 2002). Neely, Adams, and Crowe (2001) provided a comprehensive description of a measurement system that addresses crucial business issues and is applicable to a wide range of businesses. According to Michael et al. (2012), the performance prism is a second-generation PM system. After identifying the most significant strategic concerns, management teams may use this method to guide their deliberations. Stakeholder Contribution, Capabilities, Processes, and Strategies are the five lenses (Taouab & Issor, 2019) through which it is viewed.

In 1987, a pivotal moment in the history of American business practices occurred with the establishment of the Malcolm Baldrige National Quality Award (MBNQA) by the U.S. Commerce Department (Edgeman & Eskildsen, 2023). This award was created with a lofty mission in mind - to inspire American businesses and other organizations to embrace the pursuit of effective quality control in their goods and services, to rigorously assess their efforts in enhancing quality, and to shine a spotlight on and celebrate the endeavors of those organizations that had achieved remarkable success in these areas (Lima Santos, Gomes, Malheiros & Lucas, 2021). Over the past two decades, the Malcolm Baldrige National Quality Award has cast a profound and enduring influence on the landscape of American industry. Tens of thousands of businesses, both large and small, spanning various sectors and industries, have wholeheartedly embraced the principles and practices advocated by this award (Lima Santos, Gomes, Malheiros & Lucas, 2021). The MBNQA has emerged as an indispensable framework for businesses to instill a culture of quality, relentless improvement, and customer-centricity.

Report by Kaplan and & Norton (1996). States that at its core, the Malcolm Baldrige National Quality Award stands as a beacon of excellence, seeking to provide companies with an unwavering and trustworthy benchmark against which they can measure and assess their performance. It does not merely focus on superficial measures of success but delves deep into the ethos of quality management. By doing so, it offers organizations the critical tools and insights needed to navigate the complex and ever-evolving business landscape. As Harvard Business School professor David Garvin wrote in his 1991 paper, the MBNQA was explicitly designed to serve as a guiding light, steering organizations towards achieving success by adhering to a set of well-defined principles (Lima Santos, Gomes, Malheiros & Lucas, 2021). The fundamental beliefs and guiding principles embedded within the Malcolm Baldrige National Quality Award epitomize the essence of effective enterprises (Jayaraman & Management, 2023). These principles are not isolated; rather, they form an intricate web that binds organizations to the highest standards of quality and performance. Seven interconnected areas best illustrate these principles, as articulated by Taouab and Issor (2019).

The Malcolm Baldrige National Quality Award (MBNQA) offers a comprehensive and holistic framework for organizations to evaluate and enhance their operations across various key areas (Edgeman & Eskildsen, 2023). Firstly, leadership stands as the cornerstone of organizational success, emphasizing visionary, ethical, and effective leadership that guides the organization's mission and cultivates a culture of excellence. Clear direction, goal alignment, and an environment conducive to employee growth and contribution are paramount. Strategic planning is highlighted as essential for organizations to navigate purposefully, avoiding aimless endeavors (Velikikh, 2022). The MBNQA stresses the importance of a well-defined strategic framework that directs actions, resource allocation, and decision-making processes.

Customer focus is central, emphasizing not only meeting but surpassing customer expectations to foster enduring and mutually beneficial relationships (Setiyaji, 2022). Customer satisfaction and loyalty are paramount in driving organizational success. Measurement, analysis, and knowledge management are championed, recognizing the value of data-driven decision-making, performance evaluation, and innovation (Luo, 2022). Systematic approaches to measurement and analysis are essential for continual improvement.

The significance of a motivated and skilled workforce is underscored, encompassing recruitment, training, development, and creating a supportive work environment (nor, 2023). Employees are recognized as invaluable assets to the organization. Operational excellence is crucial, with the MBNQA highlighting the importance of efficient, effective, and continually improving processes and operations in driving overall quality and performance (Anastasiadou, 2023). Ultimately, results serve as the ultimate gauge of organizational success. The MBNQA evaluates achievements across key performance areas, advocating for systematic tracking and benchmarking against industry standards and organizational goals.

The Malcolm Baldrige National Quality Award's enduring legacy can be seen in the transformative impact it has had on American businesses (Edgeman & Eskildsen, 2023). It has not only raised the bar for quality and performance but has fostered a culture of continuous improvement that transcends industries. Beyond just promoting excellence, it has created a spirit of competition and collaboration, where organizations are motivated to outdo themselves and learn from one another (Jokipii & Milne, 2011). By fostering an environment of excellence, the MBNQA has enabled organizations to innovate and adapt to the evolving marketplace, ultimately bolstering their competitiveness on a global scale (Anastasiadou et al., 2023). It's not just about an award; it is about a philosophy of excellence that is deeply ingrained in the DNA of organizations that embrace it.

In the wake of the MBNQA's introduction, numerous organizations have achieved unprecedented levels of success (Anastasiadou et al, 2023). They have harnessed the principles and practices advocated by this award to fuel their growth and prosperity. By adopting the principles of leadership, strategic planning, customer focus, measurements, analysis, and knowledge management, workforce focus, operations focus, and results, organizations have been able to redefine their paradigms and enhance their market positions (Anastasiadou et al, 2023). For instance, some notable recipients of the Malcolm Baldrige National Quality Award have gone on to become industry leaders and household names. Companies like Motorola, Cadillac, Ritz-Carlton, and IBM have not only won the prestigious award but have also become synonymous with excellence in their respective sectors. The success stories are not limited to large corporations. Small and medium-sized enterprises (SMEs) have also reaped the benefits of embracing MBNQA principles (Balogun, 2022). These businesses have discovered that quality and performance excellence is not exclusive to industry giants (Anifowose, 2022). By infusing the guiding principles of the award into their operations, SMEs have managed to carve out their niches and compete effectively in a crowded marketplace.

Moreover, the Malcolm Baldrige National Quality Award has also made a significant impact in the public and nonprofit sectors (Anastasiadou et al, 2023). Government agencies, healthcare organizations, educational institutions, and nonprofit entities have all found value in the award's principles. They have used the framework to improve services, streamline operations, and fulfill their missions more effectively. One remarkable aspect of the MBNQA's influence is its dynamic adaptability. The principles advocated by the award have not remained static; instead, they have evolved to reflect the changing landscape of business and society (Anastasiadou et al, 2023). In an era marked by technological disruption, sustainability concerns, and shifting consumer expectations, the MBNQA has continued to provide relevant and forward-thinking guidance (Anastasiadou et al, 2023). The MBNQA has adapted to address the challenges of the digital age, emphasizing the importance of data-driven decision-making, technology integration, and cybersecurity. It has also incorporated sustainability and environmental stewardship as key elements of its framework, recognizing the imperative for organizations to operate responsibly and contribute to a sustainable future.

Another pivotal facet of the Malcolm Baldrige National Quality Award's impact is its role in driving global competitiveness (Anastasiadou et al, 2023). The principles and practices it champions have not only elevated the performance of American organizations but have also positioned them as formidable players in the international arena. By setting a high standard for quality, the MBNQA has driven American businesses to excel, innovate, and conquer global markets. In a world characterized by an increasingly interdependent global economy, the Malcolm Baldrige National Quality Award has been a catalyst for strengthening the American industrial base (Anastasiadou et al, 2023). It has contributed to the development of American industry's capabilities, thereby enabling it to better compete with foreign counterparts. The award's emphasis on quality, efficiency, and innovation has propelled American businesses to the forefront of various industries. As a result, American-made products and services have gained a reputation for reliability and excellence worldwide.

Furthermore, the MBNQA has fostered a culture of learning and continuous improvement. Organizations that have embraced its principles are inherently more adaptable and resilient (Ingram, 2023). They have developed a capacity to weather economic downturns, technological disruptions, and market fluctuations. In times of crisis, such as economic recessions or global health emergencies like the COVID-19 pandemic, organizations well-versed in MBNQA principles have demonstrated remarkable agility in adjusting their strategies and operations to meet the challenges at hand. The Malcolm Baldrige National Quality Award has not only impacted the business world but has also had a profound effect on the quality of life for consumers (Parast, 2022). The emphasis on customer focus, one of its core principles, has resulted in products and services that better align with the needs and expectations of the end-users. Consumers have benefited from improved product safety, reliability, and customer service, all driven by organizations striving for MBNQA standards (Wan, 2021).

Moreover, the MBNQA has played a crucial role in fostering a culture of ethics and social responsibility within organizations. Its principles encourage organizations to operate with integrity, transparency, and a strong commitment to societal well-being. This ethical foundation has led to increased corporate social responsibility (CSR) efforts, including community involvement, sustainability initiatives, and fair labor practices (Wan, 2021). The impact of the Malcolm Baldrige National Quality Award also extends into the realm of education. Educational institutions have recognized the value of implementing its principles to enhance the quality of their programs and services (Mbaeri, Uwalake & Gimba, 2021). By integrating MBNQA principles, schools and universities have been able to provide more effective learning experiences, thereby contributing to the academic and personal growth of their students. The MBNQA has influenced the healthcare sector as well. In an industry where the quality of care can be a matter of life and death, healthcare organizations have embraced the award's principles to improve patient outcomes, reduce medical errors, and enhance the overall patient experience. The focus on measurements, analysis, and knowledge management has been particularly valuable in driving data-driven decision-making in healthcare, resulting in better-informed treatment and care strategies.

Beyond the business and organizational context, the Malcolm Baldrige National Quality Award has had a notable impact on government agencies at the federal, state, and local levels (Anastasiadou et al, 2023). These entities have used the award's criteria to improve their services, enhance efficiency, and increase accountability. The application of MBNQA principles in the public sector has resulted in cost savings, streamlined operations, and more effective governance (Mohammed, Ali & Mhmood, 2022). In the nonprofit sector, organizations have leveraged the MBNQA framework to enhance their mission-driven work. Nonprofits have benefited from the guidance provided by the award's principles, allowing them to make a more significant impact and deliver services efficiently to their target populations. The legacy of the Malcolm Baldrige National Quality Award can also be seen in the international arena. The success of American organizations that have embraced its principles has inspired businesses worldwide to adopt similar quality management practices (Wan, 2021). In some cases, other countries have developed their own national quality awards, taking cues from the MBNQA's framework. This global diffusion of quality management principles has contributed to raising the bar for organizations on an international scale.

The Malcolm Baldrige National Quality Award's impact extends to academia and research as well. The principles and practices championed by the award have generated a substantial body of academic research and literature (Anastasiadou et al, 2023). Scholars and practitioners have explored and expanded upon these principles, resulting in a deeper understanding of what it takes to achieve and sustain excellence in organizational performance (Duarte, Lisboa & Carreira, 2022). Furthermore, the award has fostered a network of professionals and experts dedicated to the pursuit of quality and continuous improvement. Conferences, workshops, and seminars centered around MBNQA principles have become forums for the exchange of best practices and the development of new ideas in the field of quality management.

As the MBNQA approaches its fourth decade, its relevance remains undiminished. In fact, its principles are more pertinent than ever in a world characterized by rapid technological advancements, complex global supply chains, and shifting consumer expectations. Organizations that continue to embrace and evolve with the principles of the Malcolm Baldrige National Quality Award are better equipped to thrive in this dynamic environment (Eladly, 2021). To remain effective, the MBNQA has adapted to encompass the challenges and opportunities presented by the digital age (Charness,2022). Emphasizing the importance of data analytics, information security, and technological integration, it has provided guidance for organizations navigating the digital transformation journey. Additionally, sustainability and environmental stewardship have gained prominence within the framework, recognizing the imperative for organizations to operate responsibly and contribute to a more sustainable future.

The Performance Pyramid is a further practical paradigm. Cross and Lynch (1992) first proposed the concept. The performance pyramid seeks to integrate an organization's strategy with its operations by translating top-down objectives (based on customer priorities) and bottom-up metrics (Tangen, 2004). Taouab and Issor's (2019) Performance Pyramid divides the internal and external success of an organization into four distinct categories. The BSC model will be utilized to assess the effectiveness of Kenya's publicly traded insurance companies.

1.1.3 Listed Insurance Companies in Kenya

ICEA, APA, Jubilee, Lion General, CIC, and Britam Insurance control the majority of Kenya's 58 insurance companies and reinsurers. General insurance provides for the majority (60%) of the company's premiums. On Kenya's Nairobi Securities Exchange, there are currently six insurance companies (Nairobi Securities Exchange, 2023). Jubilee Insurance, Liberty Kenya Holdings Ltd, CIC Insurance Group, Britam Holdings Ltd, Kenya Reinsurance Corporation Ltd, and Sanlam Kenya PLC are examples of such companies.

As of 2022, the insurance landscape in Kenya presents a unique and challenging scenario, as highlighted in a report by PricewaterhouseCoopers (PWC) (Kisuya, 2023). Kenya, a country with immense potential and economic growth, finds itself grappling with a significant issue - a severely underpenetrated insurance market (Kisuya, 2023). In fact, Kenya's insurance penetration rate, standing at a mere 17 percent, is the second lowest in Sub-Saharan Africa, surpassed only by South Africa (Mutembei, 2022). This statistic alone raises several pressing questions about the underlying factors and dynamics that have contributed to this situation (Caporale, Cerrato & Zhang, 2017). One of the most intriguing aspects of this issue is the perception of insurance among the majority of Kenyans. For many, insurance is considered a luxury item, something 'nice-to-have' but easily discarded when finances become tight (Habtemariam et al., 2021). This attitude creates a substantial barrier to the growth of the insurance sector in the country. It is a significant challenge, as insurance, in all its forms, is an essential tool for risk management and financial security. However, in Kenya, it often remains a secondary consideration for individuals and businesses alike.

In Kenya, as in many other developing countries, certain insurance categories dominate the market. These include automobile insurance, fire insurance, industrial insurance, and personal accident coverage, primarily in the form of group medical insurance policies (Habtemariam et al., 2021). These types of policies are seen as more tangible and immediate, and therefore, they have found greater acceptance among the Kenyan populace. Nonetheless, the more long-term and individual-oriented insurance products, such as life insurance, struggle to gain a foothold in the market (Brasliņš & Arefjevs, 2014). This study delves deeper into the factors that contribute to this relatively low insurance penetration in Kenya. These factors combine to paint a pessimistic outlook for the growth of individual insurance policies in the country. Firstly, the economic realities faced by the majority of Kenyans play a pivotal role (Brasliņš & Arefjevs, 2014). The population's modest discretionary incomes, coupled with the fact that approximately fifty percent of Kenyans live below the poverty line, create a formidable financial challenge. For many, insurance is a luxury they cannot afford when their daily needs and survival are at stake. This limited economic capacity of the population hampers the growth of the insurance market, particularly for more comprehensive and potentially higher-cost individual policies.

Secondly, there is a notable absence of tax incentives for the middle class to invest in life insurance products (Kisuya, 2023). Tax incentives can be a powerful driver for insurance uptake, as they make these products more financially appealing. In Kenya, however, such incentives have yet to be sufficiently introduced or promoted. This lack of fiscal support further impedes the expansion of the insurance sector, as potential clients find little financial motivation to invest in insurance policies (Hagos,2022). Another critical aspect is the saving culture, or rather the lack thereof, in Kenya. While insurance is, in essence, a form of long-term saving, Kenyan society traditionally relies on other methods of financial security and investment. This lack of a culture of saving and long-term financial planning has contributed to the reluctance to engage with individual insurance policies, which require a degree of commitment and long-term perspective (Caporale, Cerrato & Zhang, 2017). Finally, public mistrust in the insurance industry plays a crucial role in limiting its growth. Concerns about the industry's transparency, reliability, and, crucially, the ease of claims payment, have significantly eroded trust in the sector. Without trust, individuals and businesses are understandably hesitant to invest in insurance products, fearing that they may not receive the promised support when needed most.

1.2 Problem Statement

By controlling the flow of capital to different economic sectors, the insurance business ensures the safety of individuals and their assets, which in turn strengthens national economies across the world (Kinyua, Muchemi, & Kiiru, 2021). Azarenkova, Shkodina, Samorodov, and Babenko (2018) argue that insurance companies can play a significant role in maintaining the security of financial systems because they are major investors in financial markets, have growing ties to banks, and protect the financial security of households and businesses by insuring risks.

The insurance sector has been underperforming significantly despite its critical role in the national economy. The Cytonn (2022) study notes a decline in the performance of the insurance industry as a whole, with the high loss ratios being mostly to blame. These ratios have worsened as the number of claims has increased at a faster pace than premiums have. General insurance claims reached Kshs 37.1 bn in H1'2022, up 14.5% from H1'2021. General insurance premiums, on the other hand, increased by just 8.2% from H1'2021 to H1'2022, from Kshs 85.4 bn to Kshs 92.4 bn. As a consequence, the general insurance industry's loss ratio climbed from 66.8% in

H1'2021 to 68.1% in H1'2022. According to Pasiouras and Gaganis (2013), the financial industry and different stakeholders, as well as the economic stability of the nation as a whole, depend critically on the health of insurance businesses. Despite accounting for just 28.1 percent of general insurance company premiums, claims from the motor classes of insurance business accounted for 48.3 percent of the total.

This research investigates the connection between multiple measures of financial soundness and the profitability of publicly listed insurance businesses in an effort to fill this knowledge gap. Talibong and Simiyu's (2019) research concentrated on deposit-taking microfinance institutions in Kenya. The effect of capital adequacy on the earnings of Kenyan insurance firms was studied by Mutumira (2019). The research conducted by (Kariuki et al. 2021) set out to analyze the role that liquidity plays in determining the fate of Kenyan insurance companies. To fill this information gap, this study examines how financial soundness requirements affect the bottom lines of Kenya's publicly listed insurance firms.

1.3 Research Objectives

1.3.1 General Objectives

The primary objective of the research was to determine the effect of financial soundness indicators on the performance of listed insurance companies in Kenya.

1.3.2 Specific Objectives

The specific objectives of the study were:

i. To evaluate the impact of capital adequacy on the performance of listed insurance firms in Kenya.

ii. To evaluate how managerial effectiveness affect the performance of listed insurance firms in Kenya.

iii. To assess the impact of earning potential on the performance of listed insurance firms in Kenya.

iv. To ascertain how liquidity affect the performance of listed insurance firms in Kenya.

1.4 Research Questions

i. What is the impact of adequate capital on the performance of listed insurance firms in Kenya?

ii. How managerial effectiveness does affect the performance of listed insurance firms in Kenya?

iii. What is the impact of earning potential on the performance of listed insurance firms in Kenya?

iv. How does liquidity affect the performance of listed insurance firms in Kenya?

1.5 Justification of the Study

The significance of the insurance sector cannot be watered down due to the critical role it plays in the growth of the economy, this is through hedging of risks that prevents the policy holders from sinking after the occurrence of a loss as well as in ensuring that the policy holders have the peace of mind before and after the occurrence of a loss thus enhancing their productivity in their daily undertakings. This study aims at determining the effects on the financial soundness indicators on the financial performance of listed insurance firms in Kenya which go a long way in sustaining the operations undertaken by the insurance company. The researcher therefore developed deep interest in the area under study.

1.6 Significance of the Study

This study provides significant insights on best practices to implement to ensure efficient management to Kenyan insurance companies their organization's outstanding performance. The findings of this study may persuade management to place greater emphasis on financial stability before disseminating a product to the public.

Equally, the research highlights the gaps in existing literature that require further study. In this regard, researchers, academics, and students might stem on these study recommendations to supplement the existing body of knowledge. The researchers and academicians were able to focus on the findings of the study which might gave rise into new areas of future studies in the insurance sector.

The Insurance Regulatory Authority (IRA) serves as the guardian of the insurance industry, ensuring that it operates in a manner that is fair, transparent, and beneficial to both the insurers and the insured. In this role, the IRA plays a critical part in maintaining financial stability within the industry, safeguarding the interests of policyholders, and promoting the overall growth and development of the insurance sector. This regulatory body shoulders the responsibility of creating and enforcing prudential guidelines that dictate the financial soundness indicators and have a substantial impact on the performance of insurance companies. The insurance sector is a multifaceted industry, with a complex web of operations, risk management, and financial strategies. It is, therefore, imperative for the IRA to possess a deep and comprehensive understanding of this intricate ecosystem.

Research that delves into the inner workings of the industry can be an invaluable asset for the regulator. By gaining insights into the industry's inner mechanisms, the IRA can better equip itself to formulate regulations that are both effective and adaptable to the ever-evolving landscape of the insurance business. The data and findings generated from such research can serve as a foundation for crafting regulations that cater to the specific needs and challenges faced by insurance companies. Prudential guidelines that are grounded in empirical research are more likely to be effective in safeguarding the industry's financial stability. This, in turn, creates an environment where policyholders can have confidence in the insurance they purchase, knowing that the regulator is actively working to protect their interests. Furthermore, the knowledge acquired from this research may help the IRA anticipate the future trends and challenges within the insurance industry.

As the world undergoes continuous economic, technological, and social transformations, the insurance sector is not immune to change. New risks emerge, consumer behaviors evolve, and financial instruments become more sophisticated. The IRA's ability to anticipate these shifts is crucial for maintaining a regulatory framework that remains relevant and effective. With the findings from this research in hand, the IRA may be better positioned to forecast upcoming changes in the insurance landscape. This foresight can aid the regulator in adopting a proactive approach to regulatory changes, rather than a reactive one. By staying ahead of the curve, the IRA can ensure that its regulatory framework is agile and responsive to the needs of both insurers and policyholders. Moreover, this research can help the IRA align itself with innovative ideas and best practices in the industry, potentially paving the way for reforms that enhance the overall regulatory framework governing the insurance business.

The findings from this study adds significant value to the government through its legislative arm i.e parliament as they were able to understand the factors that contribute to the soundness of the insurance sector and thus make laws that are aimed at sustainability of the entire sector.

The agents and brokers also benefited from the findings of the study as they seek to implement the company policies to their customers as it significantly influenced financial soundness of the insurance firm at hand such as management efficiency or even the liquidity. This can only be enacted by the agents and brokers through the understanding of how they influence the wellness of the insurance firms which were largely brought out in the findings for this study.

1.7 Scope of the Study

The research was seeking to narrow into the capital structure, asset quality, management effectiveness, prospective profits, and liquidity and how these factors affected performance of Insurance firms listed on the NSE. The demographic sample for this research consisted of the six insurance firms that are listed at the NSE. The study is based on secondary resources published from 2008 to present, most of them being published annual reports from the listed companies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides a comprehensive analysis of the existing literature that was used to interpret the study's findings and address its limitations. Beginning with an analysis of the theoretical underpinnings of these concepts, the chapter then examines the empirical research conducted on the topics, provides critiques of the existing literature, and identifies research gaps. A conceptual framework and operationalization table for the study variables are also provided.

2.2 Theoretical Review

2.2.1 Shareholder’s Theory

Based on the shareholder hypothesis, a company's main responsibility is to increase profits for its shareholders. Since many investors purchase stock only to increase their financial gain, this has long been considered the corporation's ultimate goal. According to shareholder theory, management's only responsibility is to maximize dividends and stock price appreciation for the benefit of shareholders. Managers owe it to their owners ethically to maximize profits.

The concept of corporate management's core responsibility, as outlined by the shareholder theory, is to prioritize profit generation for the company's investors. This principle establishes profit maximization as the preeminent objective, surpassing any other stakeholder group's interests in the financial well-being of the organization. In the context of preserving and expanding a business's assets, the management team and the board of directors of a corporation bear a fundamental obligation, according to the shareholder theory, to place the interests of the firm's shareholders as their foremost priority (Thornhill, Saunders & Lewis, 2009). The shareholder theory posits that the value of a company's shares is predominantly determined by the stock price and the dividends it disburses to its shareholders. Consequently, it follows that management must enact strategies and policies geared towards augmenting both the quantity of dividends distributed and the stock's overall value.

However, the shareholder theory's unswerving focus on financial performance tends to overlook the possibility that shareholders and corporations might also have non-financial objectives. This multifaceted perspective underscores the importance of acknowledging that businesses often place value on fostering innovation and entrepreneurship, as well as making positive contributions to their local communities. This perspective is not a novel idea and has roots dating back to Berle's work in 1932. Berle's insights were groundbreaking, suggesting that corporations have a broader societal role and should not be confined to the pursuit of financial gains alone. In more recent years, this perspective has gained significant traction, reflecting a growing trend towards considering non-financial aspects in corporate operations. Notably, ethical investment funds have surged in popularity, underscoring the increasing importance of integrating ethical and socially responsible practices within business strategies. This evolving landscape signifies a shift in how both shareholders and potential investors perceive their involvement in a company's operations.

The importance of corporate social responsibility (CSR) has risen, with a growing emphasis on businesses actively engaging in ethical, environmental, and social initiatives. Consequently, in the current climate, the shareholder theory is being viewed through a more holistic lens, considering not only financial returns but also the broader societal and environmental impact of corporations. Now, let us delve into the shareholder theory's application in the specific context of the insurance industry. Insurance companies play a critical role in the financial ecosystem, providing risk mitigation and financial protection for individuals and businesses (Nnubia, Okafor & Okegbe, 2022). They collect premiums from policyholders, invest these funds, and pay out claims when needed. In essence, they act as financial intermediaries, managing and distributing risk. For insurance companies, the shareholder theory may appear to hold a unique set of challenges and opportunities. The primary goal, consistent with this theory, remains the same: to maximize profits for investors. However, the landscape in which insurance companies operate introduces complexities. Unlike other industries, the financial success of insurance firms relies heavily on their ability to accurately assess, price, and manage risk.

In the context of insurance, the shareholder theory necessitates that companies focus on underwriting and investing policies that generate a substantial return on investment for shareholders. This means they must meticulously evaluate the premiums they charge, carefully manage the reserves, and invest those funds in a way that optimizes returns while meeting regulatory requirements. In essence, the shareholder theory's application in the insurance sector emphasizes the importance of financial integrity, prudence, and risk management (Thompson, Kim, Aloe & Becker, 2017). These aspects are critical for an insurance company's long-term viability and its ability to meet its obligations to policyholders and shareholders alike. When insurance companies prioritize these financial aspects, they are more likely to remain stable, solvent, and capable of meeting their obligations. However, the shareholder theory in the insurance industry does not operate in isolation. The contemporary business environment, as previously discussed, increasingly acknowledges the broader societal impact of corporations. Insurance companies are no exception. They are expected to go beyond the traditional focus on profitability and incorporate ethical considerations, customer welfare, and community well-being into their operations.

In practice, this means that insurance companies are not only responsible for pursuing financial returns but also for delivering fair and equitable services to policyholders. This includes transparent and ethical underwriting practices, responsive claims processing, and considerations of the broader societal impact of their investments. In essence, insurance companies are required to balance the profit motive with a commitment to corporate social responsibility. The ongoing concern for many insurance companies is how to effectively reconcile these two seemingly divergent goals—profitability and social responsibility. Striking the right balance is critical for sustaining the trust of policyholders, regulatory authorities, and the broader community (Nguyen, Nguyen, Nguyen, 2021). Companies that can demonstrate a commitment to both financial integrity and societal well-being are likely to gain a competitive advantage in a world where ethical and socially responsible practices are increasingly valued by consumers and investors. As a result, the shareholder theory's application in the insurance industry is undergoing a transformation. While profit maximization remains a central objective, it is increasingly recognized that financial integrity is not an isolated goal. Instead, it is intertwined with ethical, social, and environmental considerations. Insurance companies are now challenged to navigate the intricate landscape of balancing the interests of shareholders with those of policyholders, regulators, and the society at large.

2.2.2 Capital Buffer Theory

Brasli and Arefjevs (2014) define capital buffer as the difference between a bank's Capital Adequacy Ratios (CAR) and the regulator-mandated minimum. (Wong et al., 2008) A sufficient capital buffer may function as a protective barrier, absorbing a variety of hazards. CAR from the preceding quarter may trigger the high and low capital buffer. If the CAR was high in the preceding period, it may be possible to maintain a large capital buffer in order to maintain performance in accordance with statutory requirements. If the CAR for the preceding period was low, the capital buffer would also be low, but institutions may attempt to increase it. The capital buffer hypothesis (Jokipii & Milne, 2011) proposes that an increase in capital above and beyond what is necessary reduces risk. The theory implies that a financial institution's performance could be enhanced by a capital reserve. The buffer hypothesis proposes that insurance companies will continue to keep a capital surplus above and beyond what is technically necessary. It is expensive to operate with inadequate capital in both the direct and indirect senses.

In the realm of financial regulation and insurance practices, Buser et al. (1981) delved into the intricate dynamics of regulatory actions designed to curtail excesses within the insurance industry. Their research highlighted the notion that regulation, while serving as a safeguard against recklessness, might inadvertently introduce hidden costs. These concealed expenses are often connected to punitive measures such as fines and limitations imposed by regulatory authorities in response to rule violations. The severity of these measures may escalate to the point where they threaten the very existence of an insurance business, potentially leading to its closure. One key aspect that emerges from the study by Buser and his colleagues is the fundamental connection between regulatory capital and the broader concept of capital buffers. Regulatory capital is essentially a protective barrier that insurers are required to maintain as a safety net against unexpected losses. This safety net is meant to ensure the solvency and stability of the insurance industry. The capital buffer hypothesis not only explores the relationship between regulatory capital and visible capital but also distinguishes between the short-term and long-term implications of capital on risk-taking behavior.

The concept of capital buffers plays a pivotal role in understanding the impact of regulatory capital on risk selection within insurance firms. Regardless of the method used to assess risk, be it through risk weighting or other metrics, the influence of regulatory capital is inherently temporary. In the short term, it is challenging to determine whether the relationship between the capital cushion and risk exposure is positive or negative. It is important to note that this relationship is complex and subject to various external factors. Jokipii and Milne (2011) contribute to this discourse by emphasizing that in the short run, an increase in capital requirements imposed by regulatory authorities can have a similar effect as a reduction in the size of the capital buffer. This concept is crucial in shaping the foundation of what constitutes capital adequacy in the insurance industry. It underscores the dynamic nature of the regulatory environment and its influence on risk management.

In this context, the relationship between regulatory capital and risk selection can be likened to a delicate balance. Regulatory capital requirements act as a critical lever that insurers must constantly manage to ensure their ongoing operations. While excessive capital requirements may impede the flexibility of insurers and discourage risk-taking, too lenient regulations may expose the industry to greater risks and vulnerabilities. The interplay between regulatory actions and an insurer's risk appetite is dynamic and subject to ongoing scrutiny. Moreover, the medium-term outlook is heavily dependent on the degree of capitalization. The level of regulatory capital held by insurance firms can significantly influence their risk-taking behavior over an extended period. A well-capitalized insurer is better equipped to absorb losses and withstand economic shocks, which can lead to more prudent risk management practices. Conversely, an undercapitalized insurer may take on excessive risks to compensate for its capital shortfall, potentially putting the firm and its policyholders at risk. The regulatory environment in the insurance industry is a complex interplay of rules, capital requirements, and risk management practices. As Buser et al. (1981) and Jokipii and Milne (2011) have highlighted, the relationship between regulatory capital,

capital buffers, and risk-taking is multifaceted and evolves over time. In the quest for an optimal balance, regulators and insurers alike must continuously adapt their strategies to ensure the long-term stability of the industry while fostering an environment that promotes responsible risk-taking and innovation.

2.2.3 Portfolio Theory

The modern portfolio theory was initiated by Harry Markowitz (1952), the theory holds that investors aim at maximizing portfolio expected return for a given amount of portfolio risk or minimize the risk for a given level of return. This is applicable in the insurance sector as it determines the earning potential of the specific firm.

According to Markowitz (1952), the managers are assumed to be risk averse and therefore will always prefer the less risky portfolio. However, risk assessment and analysis aim at reducing the risk on a specified policy given to the customer and thus improve the returns which enhance the sustainability and growth of insurance firms. In addition, portfolio theory suggests that the manager/investor will only take increased risk if compensated by higher expected returns which is probably through increased interest rates.

The management of risky asset portfolios in the banking sector has long been a subject of concern for both researchers and regulators. Peltzman's 1970 study underscores the critical need for supervisory attention from regulators when monitoring the balance sheet of the bank. In a world where financial institutions often seek to capitalize on high-risk assets to generate increased returns, the role of regulators becomes even more pivotal. The delicate balancing act involves bank managers being sensitive to risk while simultaneously leveraging these high-risk assets for potential gains. This sensitivity is reliant on accurate assessments of the risk level, particularly by scrutinizing the frequency of customer losses. As articulated by Markowitz in his seminal work from 1952, it is evident that increased risk without a commensurate return is unrealistic and unsustainable in the long run. This principle laid the foundation for Modern Portfolio Theory, which aimed to guide investors and managers in optimizing their portfolios. The concept revolved around diversification and the efficient frontier, with the goal of achieving the highest possible return for a given level of risk or, conversely, the lowest level of risk for a desired return.

However, modern studies have raised questions and objections to the traditional Markowitz portfolio theory, particularly when applied to the dynamic and sometimes turbulent world of finance. These studies argue that many firms, including banks, operate within inherently risky environments due to the nature of their business. This line of thought challenges the traditional paradigm of risk aversion and suggests that, in such contexts, it is essential for managers to embrace and even seek out risky decisions. This perspective identifies managers as risk-takers rather than risk-averse investors. It asserts that banks, in particular, can often take on risk with ease and agility, which may lead to frequent alterations in their portfolio composition. The consequence of this approach can result in portfolios that are frequently illiquid and challenging to value, as noted by Becht, Bolton, and Roell in 2011. The swift shifting of positions in response to market dynamics may lead to a lack of transparency and liquidity, making it difficult to accurately assess the overall risk exposure.

In the face of these complexities and criticisms surrounding the modern portfolio theory, it remains crucial to underscore that risk management is an imperative for financial institutions. Whether managers are characterized as risk-takers or risk-averse individuals, the objective is the same: to minimize risk exposure and ensure the stability and resilience of their portfolios. This underscores the need for the adoption of proper assessment and analysis techniques for insurance policies.

One approach to achieving this is through a rigorous and robust risk management framework that encompasses various facets of the institution's operations. This framework should include methods for assessing and quantifying risk, monitoring portfolio performance, and implementing risk mitigation strategies. By utilizing quantitative models and analysis tools, banks can gain insights into their portfolio's risk exposure and make informed decisions to optimize their risk-return trade-offs.

Moreover, risk management in the banking sector extends beyond quantitative analysis and also involves strategic planning and contingency measures (Seyedi & Abdoli, 2019). A comprehensive risk management strategy incorporates stress testing and scenario analysis to evaluate the resilience of portfolios under adverse conditions. Furthermore, diversification, which was a cornerstone of Markowitz's work, remains a crucial element in risk management. Diversifying across asset classes, geographies, and sectors can help mitigate concentration risk and enhance portfolio stability. Regulators play a pivotal role in ensuring that banks adhere to prudent risk management practices. They set the regulatory framework and guidelines, enforce capital adequacy requirements, and conduct periodic examinations to assess a bank's risk management processes. This supervisory role is essential to maintaining the stability and integrity of the financial system.

2.3 Empirical Review

2.3.1 Capital Adequacy and Performance

Mutumira (2019) analyzed how profitable insurance firms in Kenya fared in relation to their access to sufficient capital. This study was carried out by use of a survey research approach. The researchers used data from 54 different insurance providers operating in Kenya between 2014 and 2018. The yearly audited financial accounts of the insurance businesses were analyzed for more details. Forty-six insurance companies were selected at random across three strata. The information was analyzed using a panel data approach. Researchers found that the more capital insurance firms in Kenya had, the better off they were financially.

Odongo (2021) intended to learn more about how well capitalized Kenyan general insurance businesses were. The study collected data from 2017 through 2019 using a longitudinal research design. The 32 operational general insurers were the intended audience. The records of the Insurance Regulatory Authority (IRA) were mined for data. The information was analyzed using a panel data regression. Adequate capital has been shown to improve the financial success of general insurance firms.

To determine the impact of the capital adequacy ratio on the performance of publicly traded commercial banks in Nigeria between 2014 and 2019, Mbaeri et al. (2021) studied the returns on capital used by these institutions. The analysis was performed using panel regression, using data gathered from the annual financial reports of the several commercial banks used for this study over the relevant time periods. The study found that for publicly traded Nigerian commercial banks, the capital adequacy ratio significantly affects the profitability of their capital expenditures.

Nnubia et al. (2022) looked on the viability and effectiveness of Nigerian deposit money institutions. This study set out to answer the question, "Does the capital adequacy ratio correlate with deposit money banks' performance in Nigeria?" The Nigerian Stock Exchange (NSE) provided users with connections to eight different deposit money institutions. Ten years' worth of secondary data (2009-2018) were compiled by looking at main sources including the designated bank's annual reports and the Nigerian Stock Exchange fact book. In order to analyze the data, the Pearson correlation matrix was used. Additional trials were conducted using the ordinary least squares regression method. According to the results, a positive coefficient was found in the correlation matrix between the capital adequacy ratio and bank performance (ROA and ROE).

2.3.2 Management Efficiency and Performance

Ikapel et al.'s (2019) research set out to examine the connection between sound fiscal management and the success of Kenya's commercial banks. The research looked at commercial banks trading on the Nairobi Securities Exchange from 2006 to 2017. Financial success, as gauged by ROA and ROE, served as the dependent variable in this analysis. Market capitalization, enough capital, liquidity, financial leverage, and prudent financial management were the predictors. Descriptive research methods were used in this investigation to determine a connection between the study's variables of interest via the use of both primary and secondary sources of information. We ran our numbers through SPSS (Statistical Package for the Social Sciences) to get an accurate picture of the data. The findings showed a strong positive relationship between commercial banks' financial success and the honesty of their financial management.

Cho and Lee (2019) examined the relationship between management effectiveness and the financial, social, and social returns on investment for businesses. The sample consists of businesses that appeared in the CRSP monthly returns file, the CompStat annual file, and the KLD database between 2003 and 2011. For data analysis, a regression was performed. Despite the fact that the relationship between managerial efficacy and prospective changes in Corporate Social Performance (CSP) is minimal at the level of total CSP, the study discovered that it exists. According to the study's findings, effective managers also tend to be more engaged in CSR efforts that contribute to a company's bottom line.

The purpose of Ali and Siddiqui's (2020) study was to determine if effective management influences the success of Pakistani businesses. The information for this study was extracted from annual reports submitted by 30 Pakistan Stock Exchange-listed companies between 2009 and 2018. Using a symmetrical panel and the fixed effect regression model, the data were analyzed. The results demonstrated that ineffectual management is the primary factor affecting the performance of a company over its entire lifespan.

Nyakieni et al. (2022) looked at how effective management affected the earnings of Kenya's commercial banks. The research method used was explanatory. For this study, we used secondary consolidated panel data on forty commercial banks in Kenya collected by the International Monetary Fund and the Central Bank of Kenya between 2009 and 2018. The structure of the time series data and the equilibrium connection between the variables were identified using time series econometric approaches including cointegration and the Vector Error Correction Model (VECM). The Vector Error Correction Model estimates that the managerial efficiency coefficient of Kenyan commercial banks has a substantial short-run and long-run equilibrium link with their financial performance.

2.3.3 Earnings Ability and Performance

Utami et al. (2019) compared state-owned enterprises and private banks in Indonesia to assess the effect of earnings quality on profitability. In this analysis, we looked at the discretionary accruals, earnings persistence, return on equity, loan rate return, and total asset turnover to gauge the quality of profits. Total asset turnover, return on assets, return on equity, rate of return on loans, and return on loans were used to assess financial performance. Data from 2006-2018 was analyzed, and the emphasis was on eight conventional banks, four of which were government institutions and four of which were private banks. The data was examined by using the Partial Least Squares Multigroup Moderation Approach. This study's results showed that banks' profitability significantly affects their financial health.

To what extent can high-quality profits affect a company's long-term viability? That was the question that drove Saleh et al.'s (2020) research. The research built an econometric model using actual data to find out what factors are related to high-quality profits and how they affect a company's bottom line. Using a panel data analytic approach, this research analyzed the performance of all industrial public shareholding businesses trading on the Amman Stock Exchange between 2010 and 2018. Return on assets, return on equity, and earnings per share are just a few of the KPIs that have been found to change depending on the quality of earnings.

In the realm of financial analysis and banking, understanding the intricate relationship between the financial stability of commercial banks and their overall performance is of paramount importance. In their comprehensive study conducted in 2022, Kirimi and his team delved into this complex web of dynamics, shedding light on critical insights that shape the Kenyan banking landscape. This research was conducted over the course of 12 years, spanning from 2009 to 2020, a period that witnessed significant economic and financial sector shifts. The research employed a dynamic panel model to meticulously scrutinize data sourced from various commercial banks within Kenya. To evaluate the fiscal fitness of these institutions, Kirimi et al. (2022) applied the CAMEL framework, which assesses banks across five key factors: Capital Adequacy, Asset Quality, Management Quality, Earnings Quality, and Liquidity. These factors serve as essential markers of a bank's overall soundness and viability.

In assessing financial performance, the researchers considered several fundamental measures. Net interest margin, which reflects the profitability of lending operations, was a pivotal metric. Earnings per share, a fundamental indicator of shareholder value, provided a perspective on the bank's capacity to distribute profits to its investors. Return on assets (ROA) and return on equity (ROE) offered a comprehensive view of the bank's profitability and effectiveness in managing shareholders' equity. One of the notable findings of Kirimi et al.'s study was the nuanced relationship between earnings quality and various performance measures. While earnings quality demonstrated a modest influence on both ROA and ROE, it exerted a substantial impact on net interest margin. This suggests that the quality of earnings plays a more pronounced role in determining the profitability derived from lending activities, an insight of paramount significance for banks seeking to optimize their lending strategies and enhance their bottom line.

Earnings quality was studied by Duarte et al. (2022) to determine its effect on a business's bottom line. A panel data study of 237 Portuguese mold businesses using yearly data from 2010-2018 was carried out. Profit quality was determined by looking at a number of different metrics, including accruals quality (a proxy for earnings management), earnings persistence, earnings predictability, earnings fluidity, earnings timeliness, and earnings conservatism. An econometric model with fixed or random effects estimation was decided upon. The data suggests that increased earnings might improve a company's financial standing.

2.3.5 Liquidity and Performance

The effect of liquidity on the financial results of Nigerian deposit money institutions was studied by Onyekwelu et al. (2018). This investigation made use of an after-the-fact research strategy. Five financial institutions were selected at random for the study. For ten years starting in 2007, businesses contributed secondary data. The information was analyzed using a multivariate regression method. Liquidity was shown to have a beneficial effect on all measures of bank profitability, but especially Return on Capital Employed.

Seyedi and Abdoli (2019) analyzed the factors influencing the banking sector's stability. Through the creation of a questionnaire, information was gathered. The research method employed a descriptive-correlational strategy. The data were analyzed with R-test, and hypotheses were examined with confirmatory factor analysis. The indicators were ranked using the TOPSIS methodology from the perspective of senior banking management. It was determined that liquidity is the most significant factor affecting institutions' ability to manage their finances.

Kenyan insurance firms were studied by Kariuki et al. (2021) who looked at the connection between liquidity and earnings. Correlational empirical research was used as the research approach for this study. The study's primary objective was to conduct interviews with key personnel at all 53 insurance companies operating in Kenya in 2018. The study found that having access to cash made a significant difference in both asset and stock returns.

The research conducted by Mohammed et al. (2022) constitutes a significant contribution to our understanding of the factors that play a pivotal role in ensuring the continued financial health of organizations. In an era marked by economic volatility and global financial uncertainties, it is of paramount importance for businesses to maintain their financial stability, and this study endeavors to shed light on the key drivers behind such stability. The primary objective of the research was to comprehensively investigate and identify the various factors influencing the financial health of organizations. In particular, the study had a two-fold focus: firstly, to measure and analyze the impact of profitability indicators on achieving financial stability, and secondly, to draw meaningful conclusions based on the results of these evaluations. To achieve these goals, the researchers delved into an in-depth analysis of several financial institutions, most notably the Ashur International Bank, the Gulf Commercial Bank, and the Commercial Bank of Iraq.

The importance of profitability in maintaining financial stability cannot be overstated, and it was the focal point of this research. The study employed advanced statistical software, EViews 10, to meticulously examine the relationship between profitability and financial stability within the aforementioned banks (Sugiyarto, 2015). The findings of this analysis unequivocally underline the crucial role of profitability in sustaining the financial well-being of these institutions. One of the key findings of the research, as revealed by the statistical software EViews 10, was the significant impact of profitability on the financial stability of the examined institutions. This discovery has profound implications for financial institutions and businesses across the board. It underscores the fundamental importance of generating profits and maintaining a healthy profit margin as a means of ensuring long-term financial viability and resilience. By doing so, organizations can better weather economic downturns and unforeseen challenges.

Additionally, the study revealed that increasing liquidity is another essential factor in securing financial stability. Liquidity, in the context of financial institutions, refers to the ease with which an organization can convert its assets into cash. The more liquid an organization is, the better equipped it is to handle financial crises or sudden, unexpected expenses. In this regard, the research findings advocate for financial institutions to focus on not only profit generation but also optimizing their liquidity levels. Achieving a balanced approach between profitability and liquidity management is, therefore, vital in ensuring financial stability (Villegas, 2015). The significance of these findings cannot be understated, particularly when considering the broader implications for financial institutions and businesses worldwide. In an increasingly interconnected and fast-paced global economy, maintaining financial stability is a paramount concern. This research conducted by Mohammed et al. offers invaluable insights that can guide organizations in their decision-making processes. Furthermore, the study's inclusion of multiple financial institutions, such as the Ashur International Bank, the Gulf Commercial Bank, and the Commercial Bank of Iraq, lends robustness and generalizability to the findings. These institutions represent a diverse cross-section of the financial sector, and the fact that the research findings are consistent across them lends credibility to the conclusions drawn.

2.4 Summary of Literature Review and Research Gaps

In the reviewed literature, it was revealed that for majority of the studies, financial soundness positively affects performance (Onyekwelu et al., 2018; Ikapel et al., 2019; Mbaeri et al., 2021; Odongo, 2021; Duarte et al., 2022; Nnubia, Okafor et al., 2022; Roselyne et al., 2022). However, some studies such as Talibong and Simiyu (2019) and Eladly (2021) established a negative relationship between financial soundness indicators and performance.

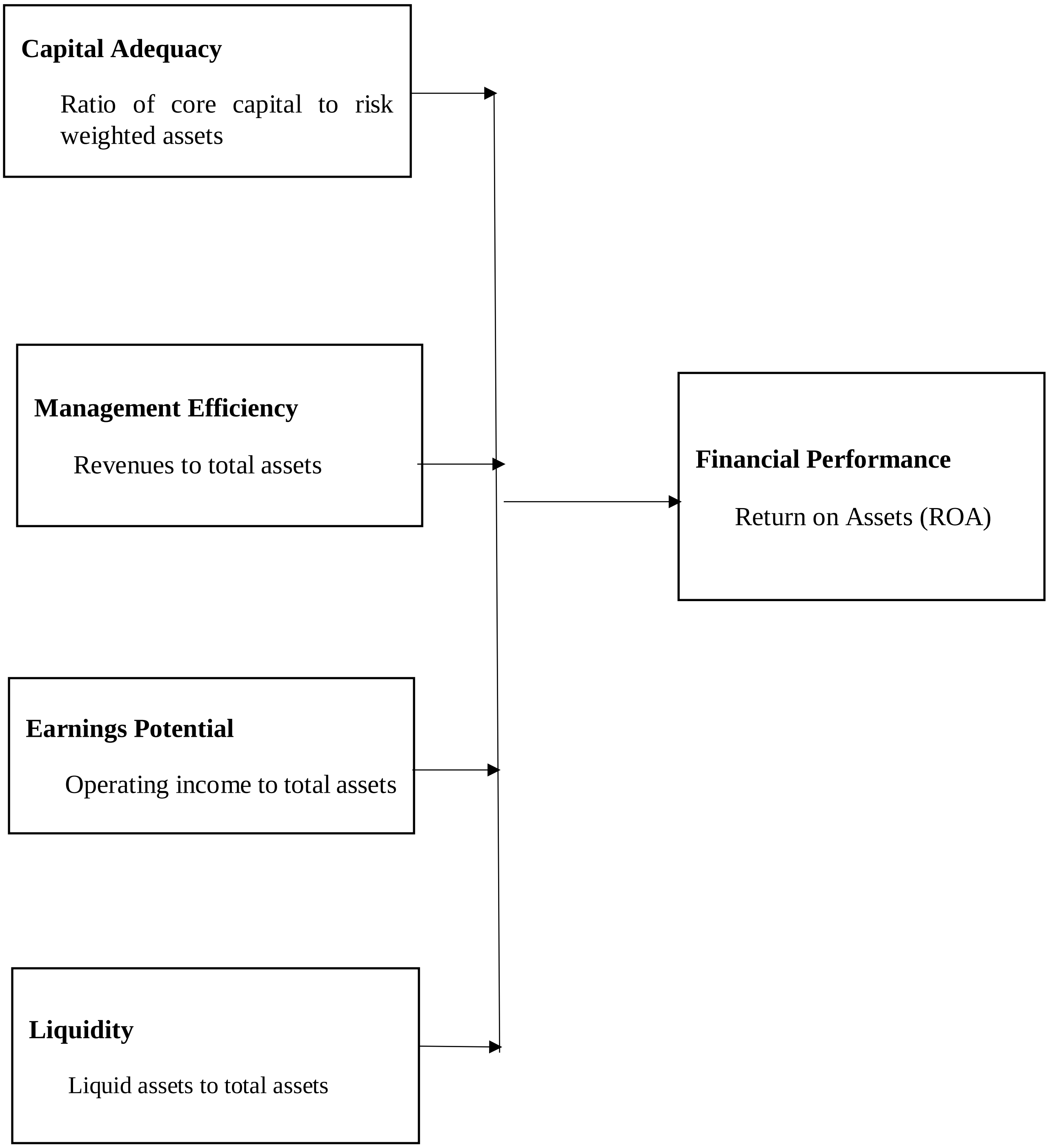
In spite of this, most of the studies that were reviewed were conducted in other sectors such as in commercial banks (Nyakieni et al., 2022; Kirimi et al., 2022) and microfinance banks (Talibong & Simiyu, 2019). Moreover, studies conducted in the insurance industry were specific to general insurance companies and none narrowed down to those insurance companies listed at NSE. It was also noted that in all the studies, panel data and panel data regression were conducted which this study will also implement in order to study the effect of financial soundness indicators on the performance of the 6 listed insurance companies over a period of time.

2.5 Conceptual Framework

Figure 1 below depicts the hypothesized connection between the independent variables and the dependent variable. Capital adequacy, management efficacy, earnings capacity, and liquidity are the independent factors. The financial performance of listed insurance companies in Kenya is the dependent variable.

Figure 1

Conceptual Framework



Source: Researcher (2023)

2.6 Operationalization of the Study Variables

Table 1

Operationalization of the Study Variables

Factor	**Formulae**	**Resource**	**Data Analysis**	**Supporting Literature**
Capital adequacy	Ratio of core capital to risk weighted assets	Financial Statements	• Regression and correlation analysis • Descriptive statistics	Umoru and Osemwegie (2016)
Management Efficiency	Revenues to Total Assets	Financial Statements	• Regression and correlation analysis • Descriptive statistics	Boigues (2016)
Earnings Potential	Operating income to total assets	Financial Statements	• Regression and correlation analysis • Descriptive statistics	Demerjian, Lev, Lewis, and McVay, (2013).

Liquidity	Current Assets to Total Assets	Financial Statements	• Regression and correlation analysis • Descriptive statistics	Gulyani et al. (2018)
Profitability (ROA)	Net profit to Total Assets	Financial Statements	• Regression and correlation analysis • Descriptive statistics	Kaplan and Norton (1996).

Source: Researcher (2023)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The research approach is described in this chapter. The chapter specifically discuss the study design, target audience, data gathering techniques, and processes. The chapter also provide an overview of the data analysis and presentation.

3.2 Research Design

A strategy for doing research is called a research design (Etika & Bala, 2017). Descriptive research design was used in this investigation. The method was suitable for establishing causal relationships between variables (Rahi, 2017). This research intended to evaluate how Kenyan listed insurance firms perform in relation to financial soundness parameters. Determining the relationship between the two variables was thus made easier by the descriptive research design. Descriptive design gave a detailed explanation and therefore suitable in the study at hand.

3.3 Target Population

According to Kothari (2004), the target population is defined as all respondents who match the predetermined criteria. According to Mugenda & Mugenda (2003), the target group contains characteristics that may be utilized to generalize research. The target audience for the study consisted of six specific insurance firms identified as of December 2021 (CMA, 2022). All six of these insurance companies were included in the study. Due to the small number of firms, a census was conducted.

Therefore, the unit of analysis is the insurance firms themselves , they are the entities being analyzed in relation to financial soundness parameters. The unit of observation, on the other hand, would be the individual data points or variables collected from each of the six insurance firms, such as financial ratios, performance metrics, and other relevant data used to assess their financial soundness being that the census sampling technique is appropriate.

3.4 Data Collection Method

The research utilized dynamic panel data from 2008 to 2022. The choice of study period is influenced by dynamics of the capital market over the last 15 years. The information is extracted from each registered insurance company's annual financial report. The acquisition of information adhered to a data collection template (see Appendix 1). It consists of rows and columns, with each row representing the research period in years and each column representing a study variable. Utilizing secondary data was preferable because it saved time and money.

3.5 Data Collection Procedures

Data collection procedures are the step-by-step processes that guide a researcher on how to conduct the survey or how to gather information for the study (Cox & Hassard, 2010). A letter of introduction authorizing the collection of data was acquired from KCA university.

3.6 Data Analysis and Presentation

Data obtained was checked for completeness and analyzed with the aid of STATA software. To explain the characteristics of the study variables, descriptive statistics like mean and standard deviation were employed. To determine the relationship between the study variables, correlation and regression analysis was performed under the fixed effect model. Data was presented in graphs, charts and tables. The multivariate regression model is as shown below:

3.6.1 Regression Model

$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \varepsilon_{it}$

Where,

β_0 = Constant

Y_{it} = ROE (Dependent variable value for individual i at time t

X_{1it} = Capital adequacy (Independent variable 1 value for individual i at time t)

X_{2it} = Management efficiency (Independent variable 2 value for individual i at time t)

X_{3it} = Earning Potential (Independent variable 3 value for individual i at time t)

X_{4it} = Liquidity (Independent variable 4 value for individual i at time t)

ε_{it} = Error term due to residuals

$\beta_0, \beta_1, \beta_2, \beta_3$ and β_4 = Regression coefficients

3.7 Diagnostic Tests

Diagnostic tests are conducted to ensure that the analysis' findings are reliable (Field, 2009). In this study, key diagnostic tests were conducted including multicollinearity, normality, and heteroscedasticity and autocorrelation test.

3.7.1 Multicollinearity Test

Multicollinearity was tested using the Variance Inflation Factor (VIF) (Thompson et al., 2017). A multicollinearity issue is indicated by a VIF value greater than 5 as opposed to one that is indicated by a VIF value less than 5.

3.7.2 Normality Test

The normality test ensured that the data is normally distributed, which enhanced the regression model. The P-Norm, Q-norm as well as hist residual tests were used to check for normality of the data. A probability value larger than 0.05 is the requirement for data that are normally distributed (Thornhill et al., 2009).

3.7.3 Heteroscedasticity Test

There is heteroscedasticity in the data if the error variance is not constant. Skewed parameter estimates rose from running the regression model without considering heteroscedasticity. Levene's change fairness test is used to assess the homogeneity of variations (Parra-Frutos, 2013). P value >0.05 implies no heteroscedasticity.

3.7.4 Hausman Test

Hausman test was used to select between random effect and fixed effect model where, if this value is < 0.05; reject Ho – meaning use FE. If it is >0.05 Accept Ho – use RE model. From the above table Prob>chi2 = 0.0246 which is < 0.05 and therefore the study adopted fixed effect model in explaining the effect of financial soundness factors on the performance of insurance firms in Kenya.

3.8 Ethical Considerations

Ethical considerations are fundamental principles that underpin the conduct of research across various fields, demanding a commitment to moral standards throughout the entire research process (Fellows & Liu, 2015). To uphold these ethical standards, researchers must obtain the necessary authorization, ensuring that their work adheres to strict ethical guidelines. In this context, the university provided researchers with the required permissions to carry out their investigation, an essential step in maintaining the ethical integrity of the study. One of the primary ethical imperatives in research is the obligation to protect the confidentiality of sensitive information. In this case, the researchers demonstrated a commendable commitment to ethical standards by safeguarding the confidentiality of their data. This ensured that personal and sensitive information gathered from study participants remained inaccessible to external parties, including insurance companies. Such measures are vital not only for preserving the privacy and trust of research participants but also for upholding the credibility and integrity of the research itself.

Another ethical principle integral to research is the avoidance of data manipulation. In this study, the researchers upheld this ethical standard by refraining from any form of data tampering or manipulation. This commitment to data integrity ensures that the results accurately reflect the realities uncovered during the research process, free from any distortions that might compromise the validity of the findings. Such diligence in adhering to ethical principles bolsters the credibility and trustworthiness of the research. Furthermore, the researchers-maintained transparency in their work by reporting their findings based on the original data. This transparency is a key ethical requirement, ensuring that readers, reviewers, and the wider scientific community can assess the research's reliability and validity. By faithfully representing their findings without alteration or embellishment, the researchers further demonstrate their ethical commitment to conducting research with integrity and honesty.

CHAPTER FOUR

DATA ANALYSIS & INTERPRETATION

4.1 Introduction

In this chapter we outline the research design applied in the analysis of the data pertaining to the variables being studied i.e., return on asset, management effectiveness, earning potential as well as liquidity. This is partly exploratory and descriptive in nature. Exploratory design is used to bring out trend analysis while descriptive statistics helps to determine the quantitative measure on the effect between the dependent and independent variables. The analysis aims at determining the effect of financial soundness factors on the performance of insurance firms in Kenya. Tables as well as graphical output from. STATA software was used to present the findings.

4.2 Summary statistics

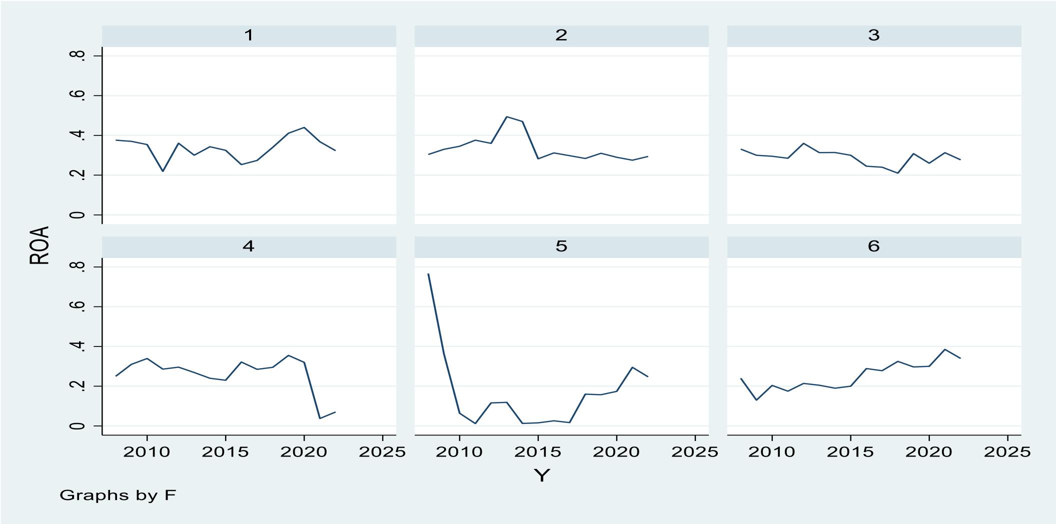
4.2.1 Exploratory Analysis

The macro panel data was strongly balanced which allowed the researcher to proceed with other testing in order to ensure that the output is robust. This was enhanced through the use of trend plots and overlain plots.

4.2.1.1 Growth Plots

Figure 2

Growth Plots



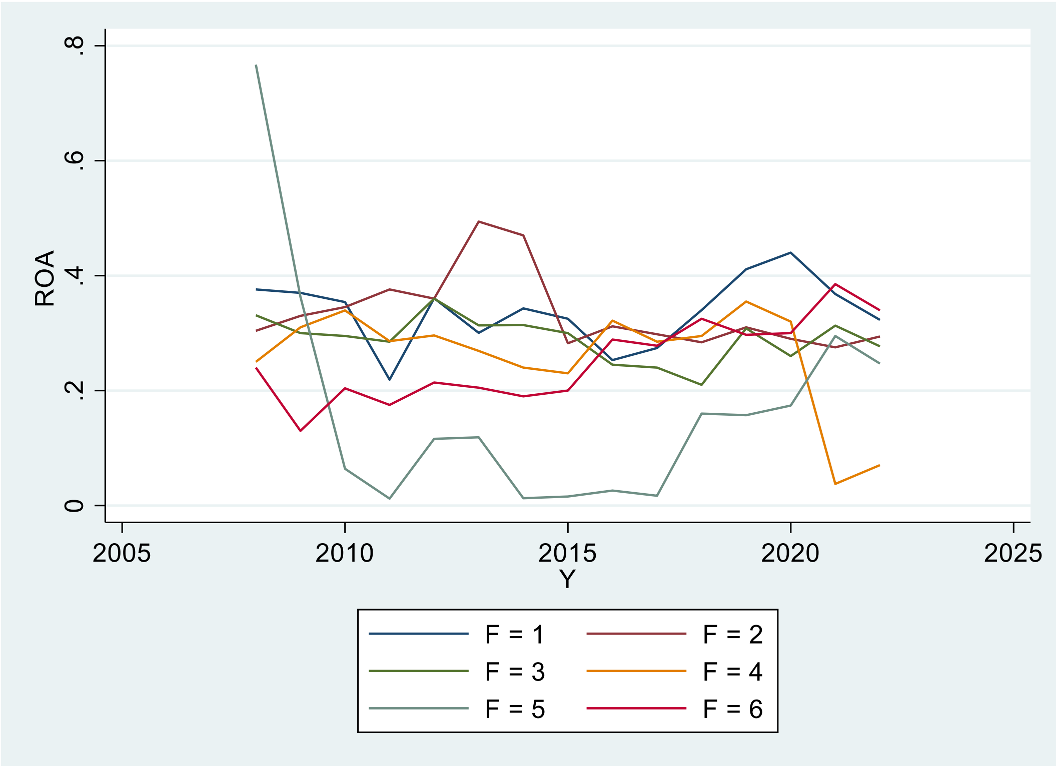
Source: Researcher (2023)

The trend plots above show the visual effect of the dependent variable (ROA) for each of the firm across the study period. It is significant especially to note that the performance for Kenya Reinsurance corporation Ltd as measured by Return on asset (ROA) declined significantly from the period between 2008 all the way to 2011 before rising again. In addition, Jubilee Insurance declined between 2019 to 2021 which could be due to explainable factors that are related to covid-19 which struck the country in early 2020.

4.2.1.2 Overlain Plots

Figure 3

Overlain Plots



Source: Researcher (2023)

From the above figure the variations of dependent variable seem not to have huge variance across the firms throughout the period under study (15 years). This supports the efficacy of the data in the determination of the effects of financial soundness factors on the performance of insurance firms in Kenya. However, this was extended to the use of statistical analysis tests such as unit root test and correlation test to ensure robustness.

4.3 Descriptive statistical analysis

4.3.1 Summary Statistics

Figure 4

Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	90	.2739489	.1141508	.012	.767
CA	90	.1814582	.1429694	.0219492	1.471415
ME	90	.0488813	.0250051	.00446	.114201
EP	90	.4173226	.3400737	.07351	2.394204
LD	90	1.164616	.113038	.8756	1.7852

Source: Author 2023

The data contained in the above table is a summary of both the dependent and independent variables undertaken in the study at hand. Return on asset has a mean of 0.2739 and a standard deviation of 11.4%, capital adequacy has a mean of 0.181 and a standard deviation of 14.2 %, management effectiveness with the lowest mean and standard deviation of 0.489 and 2.5% respectively. The earning potential was 0.4173 on average and a deviation of 34%. Liquidity on the other side recorded the highest mean of 1.164 and standard deviation of 11.3%, this is in line with the nature of the insurance business where the firm must maintain a significant level of liquidity to hedge against the insured losses.

4.4 Diagnostic Tests

4.4.1 Multicollinearity Test

Figure 4

Correlation Between Variables

	ROA	CA	ME	EP	LD
ROA	1.0000				
CA	0.1229	1.0000			
	0.2483				
ME	-0.4669*	-0.1523	1.0000		
	0.0000	0.1518			
EP	-0.0397	0.0152	-0.0844	1.0000	
	0.7100	0.8869	0.4293		
LD	-0.1418	0.0642	-0.0782	-0.0117	1.0000
	0.1826	0.5476	0.4636	0.9129	

Source: Author 2023

The table above shows the relationship between the independent and dependent variables under study where capital adequacy has a low positive correlation on ROA. Management effectiveness has a low negative correlation. Earning potential as well as liquidity expressed low negative correlation. There is no any observable high correlation between an independent variable and ROA which is good for the study.

4.4.2 Variance Inflation Factor (VIF) Mean Test

Figure 5

VIF Test

Variable	VIF	1/VIF
ME	1.04	0.965219
CA	1.03	0.974037
LD	1.01	0.990736
EP	1.01	0.992537
Mean VIF	1.02	

Source: Author 2023

The findings from the above test shows that the independent variables are not highly correlated and therefore increases the predictability of the effects being sought. VIF > 5 shows that there is high correlation, however, the mean VIF outlined above <5 I.e 1.02 and thus the data is reliable.

4.4.3 Unit Root Test

Figure 6

Unit Root Test ROA

```
Levin-Lin-Chu unit-root test for ROA
------------------------------------
Ho: Panels contain unit roots             Number of panels  =      6
Ha: Panels are stationary                 Number of periods =     15

AR parameter: Common                      Asymptotics: root(N)/T -> 0
Panel means:  Not included
Time trend:   Not included                Cross-sectional means removed

ADF regressions: 1 lag
LR variance:     Bartlett kernel, 7.00 lags average (chosen by LLC)
------------------------------------------------------------------------------
                    Statistic      p-value
------------------------------------------------------------------------------
 Unadjusted t        -3.5880        0.0002
 Adjusted t*         -3.4438        0.0003
------------------------------------------------------------------------------
```

Source: Author 2023

The unit root test above is used to test on whether the data is stationary or stochastic where the results rules out the presence of unit root. Absence of unit roots means that the panel data is stationary (p-value < 0.05 I.e 0.0003 thus we Reject Ho).

Figure 7

Unit Root Test For Capital Adequacy

```
Levin-Lin-Chu unit-root test for CA
-----------------------------------
Ho: Panels contain unit roots             Number of panels  =      6
Ha: Panels are stationary                 Number of periods =     15

AR parameter: Common                      Asymptotics: N/T -> 0
Panel means:  Included
Time trend:   Not included

ADF regressions: 1 lag
LR variance:     Bartlett kernel, 7.00 lags average (chosen by LLC)
------------------------------------------------------------------------------
                      Statistic      p-value
------------------------------------------------------------------------------
 Unadjusted t          -7.5503
 Adjusted t*           -4.7310        0.0000
------------------------------------------------------------------------------
```

Source: Author (2023)

The unadjusted t-statistic is -7.5503, and the adjusted t-statistic is -4.7310 with a p-value of 0.0000. These results provide strong evidence against the null hypothesis of unit roots, indicating that the panels are stationary.

Figure 8

Unit Root Test For Management Efficiency

```
Levin-Lin-Chu unit-root test for ME
-----------------------------------
Ho: Panels contain unit roots             Number of panels  =      6
Ha: Panels are stationary                 Number of periods =     15

AR parameter: Common                      Asymptotics: N/T -> 0
Panel means:  Included
Time trend:   Not included

ADF regressions: 1 lag
LR variance:     Bartlett kernel, 7.00 lags average (chosen by LLC)
------------------------------------------------------------------------------
                      Statistic      p-value
------------------------------------------------------------------------------
 Unadjusted t          -4.6151
 Adjusted t*           -2.1627        0.0153
------------------------------------------------------------------------------
```

Source: Author (2023)

The unadjusted t-statistic is -4.6151, and the adjusted t-statistic is -2.1627 with a p-value of 0.0153. These results suggest that there is some evidence against the null hypothesis of unit roots, indicating that the panels may be stationary, albeit with less certainty compared to stronger significance levels.

Figure 9

Unit Root Test For Earnings Ability

```
Levin-Lin-Chu unit-root test for EP
-----------------------------------
Ho: Panels contain unit roots           Number of panels  =      6
Ha: Panels are stationary               Number of periods =     15

AR parameter: Common                    Asymptotics: N/T -> 0
Panel means:  Included
Time trend:   Not included

ADF regressions: 1 lag
LR variance:     Bartlett kernel, 7.00 lags average (chosen by LLC)
------------------------------------------------------------------------------
                    Statistic      p-value
------------------------------------------------------------------------------
 Unadjusted t        -3.8960
 Adjusted t*         -0.2866        0.3872
------------------------------------------------------------------------------
```

Source: Author (2023)

The unadjusted t-statistic is -3.8960, and the adjusted t-statistic is -0.2866 with a p-value of 0.3872. These results indicate that there is no significant evidence against the null hypothesis of unit roots, suggesting that the panels may be non-stationary.

Figure 10

Unit root Test for Liquidity

```
Levin-Lin-Chu unit-root test for LD
───────────────────────────────────
Ho: Panels contain unit roots           Number of panels  =      6
Ha: Panels are stationary               Number of periods =     15

AR parameter: Common                    Asymptotics: N/T -> 0
Panel means:  Included
Time trend:   Not included

ADF regressions: 1 lag
LR variance:     Bartlett kernel, 7.00 lags average (chosen by LLC)
──────────────────────────────────────────────────────────────────────
                    Statistic      p-value
──────────────────────────────────────────────────────────────────────
 Unadjusted t         -8.3441
 Adjusted t*          -4.5053       0.0000
──────────────────────────────────────────────────────────────────────
```

Source: Author (2023)

The unadjusted t-statistic was -8.3441, and the adjusted t-statistic was -4.5053 with a p-value of 0.0000. These results indicate strong evidence against the null hypothesis of unit roots, suggesting that the panels are stationary.

4.5 Model Fitting & Selection

4.5.1 Fixed Effect Model

Figure 11

Fixed Effect Model

```
Fixed-effects (within) regression               Number of obs     =         90
Group variable: F                               Number of groups  =          6

R-sq:                                           Obs per group:
     within  = 0.2777                                         min =         15
     between = 0.0891                                         avg =       15.0
     overall = 0.2298                                         max =         15

                                                F(4,80)           =       7.69
corr(u_i, Xb)  = -0.0125                        Prob > F          =     0.0000

------------------------------------------------------------------------------
         ROA |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          CA |   .0767997   .0674724     1.14   0.258    -.0574747    .2110742
          ME |  -1.972555   .4151417    -4.75   0.000    -2.798713   -1.146396
          EP |   .0290978   .0334375     0.87   0.387    -.0374449    .0956405
          LD |  -.1605763    .085016    -1.89   0.063    -.3297636     .008611
       _cons |   .5313005   .1045104     5.08   0.000     .3233182    .7392828
-------------+----------------------------------------------------------------
     sigma_u |   .0597055
     sigma_e |  .08845208
         rho |   .3130124   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0: F(5, 80) = 5.92                       Prob > F = 0.0001
```

Source: Author 2023

The above result represents the fixed effect model after regressing the independent variables on the return on assets (ROA). The model is suitable as prob> F = 0.0000 which is below 0.05. This shows that the model can be adopted to explain the effects of the studies variables. This will be possible after a scrutiny of the best model between the fixed effect model and random effect model through the Hausman test.

4.5.2 Random Effect Model

Figure 12

Random Effect Model

```
Random-effects GLS regression                   Number of obs     =         90
Group variable: F                               Number of groups  =          6

R-sq:                                           Obs per group:
     within  = 0.2528                                         min =         15
     between = 0.3100                                         avg =       15.0
     overall = 0.2607                                         max =         15

                                                Wald chi2(4)      =      29.90
corr(u_i, X)   = 0 (assumed)                    Prob > chi2       =     0.0000
```

ROA	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
CA	.0521099	.0749258	0.70	0.487	-.0947419	.1989617
ME	-2.178038	.4318561	-5.04	0.000	-3.02446	-1.331615
EP	-.025385	.031486	-0.81	0.420	-.0870965	.0363265
LD	-.1842932	.0939966	-1.96	0.050	-.3685232	-.0000633
_cons	.596183	.1151247	5.18	0.000	.3705428	.8218232
sigma_u	.00597686					
sigma_e	.08845208					

Source: Author 2023

The random effect model presented above indicate high level of suitability where Prob>chi2 = 0.0000 which is lower than the 0.05.

4.5.3 Model Selection - Hausman test

Figure 13

Hausman Test

	Coefficients (b) fixed	Coefficients (B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
CA	.0767997	.0521099	.0246898	.
ME	-1.972555	-2.178038	.2054832	.
EP	.0290978	-.025385	.0544828	.0112559
LD	-.1605763	-.1842932	.0237169	.

```
                   b = consistent under Ho and Ha; obtained from xtreg
    B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test:  Ho:  difference in coefficients not systematic

              chi2(4) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                      =       11.18
            Prob>chi2 =      0.0246
            (V_b-V_B is not positive definite)
```

Source : Author 2023

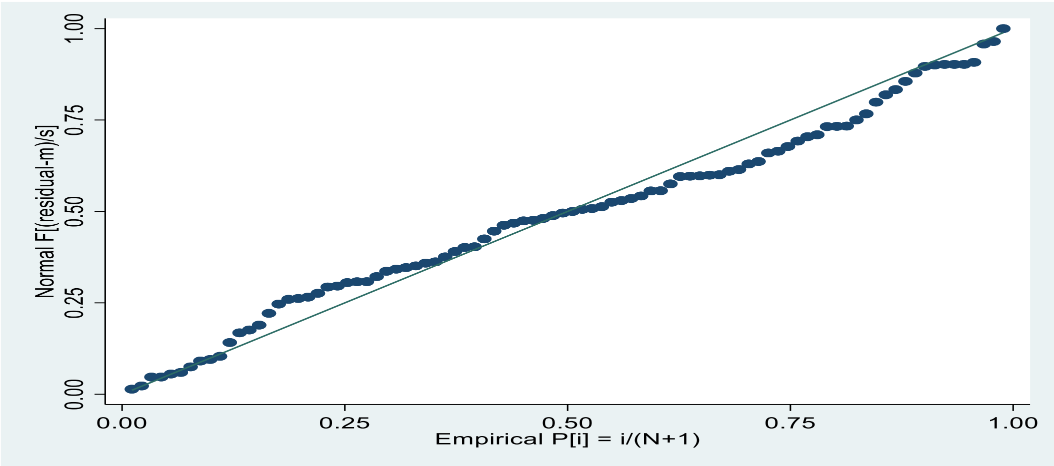
Hausman test was used to select between random effect and fixed effect model where, if this value is < 0.05; reject Ho – meaning use FE. If it is >0.05 Accept Ho – use RE model. From the above table Prob>chi2 = 0.0246 which is < 0.05 and therefore the study adopted fixed effect model in explaining the effect of financial soundness factors on the performance of insurance firms in Kenya.

4.6 Prediction of residuals

4.6.1 P-Norm Test

Figure 14

P- Norm Test

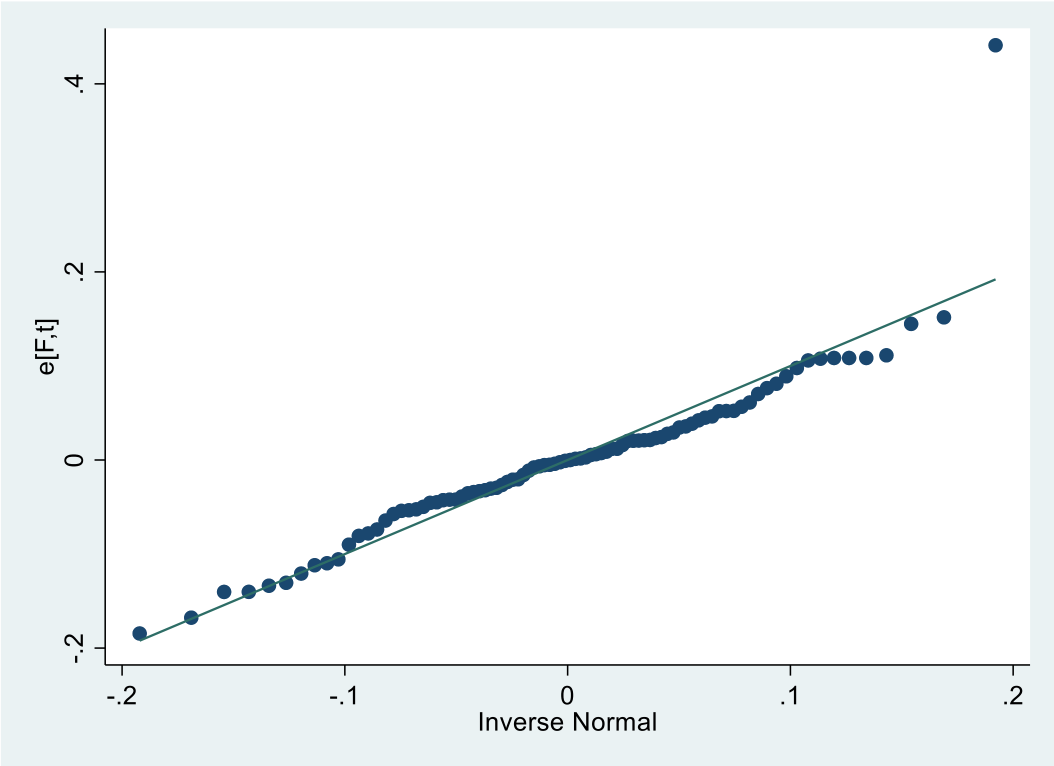


Source: Researcher (2023)

4.6.2 Q- Norm Test

Figure 15

Q- Norm Test



Source: Researcher (2023)

4.6.3 Histograph Residual Test

Figure 16

Hist Residual Test

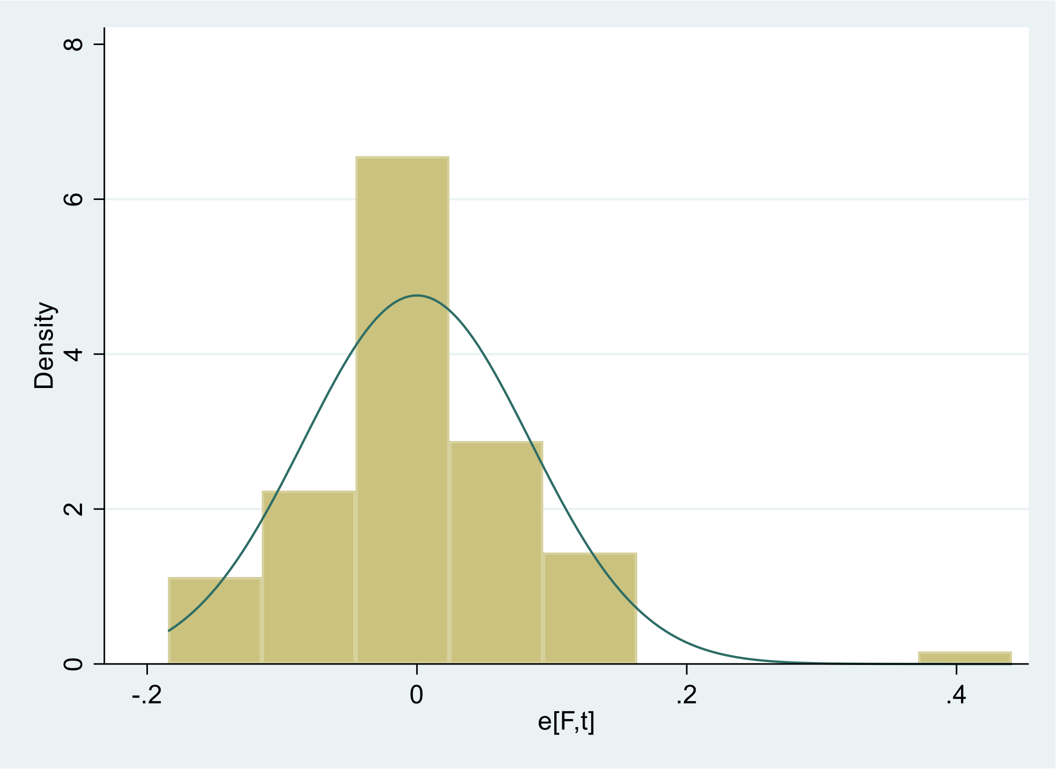


Figure 3,4&5 above are indicative of the model potential to predict the relationship between the independent and dependent variables. The residuals are normally distributed along the line of best fit thus reducing the error term.

4.7 Study Variables

Figure 17

Fixed Effect Model

```
Fixed-effects (within) regression               Number of obs     =         90
Group variable: F                               Number of groups  =          6

R-sq:                                           Obs per group:
     within  = 0.2777                                         min =         15
     between = 0.0891                                         avg =       15.0
     overall = 0.2298                                         max =         15

                                                F(4,80)           =       7.69
corr(u_i, Xb)  = -0.0125                        Prob > F          =     0.0000

------------------------------------------------------------------------------
         ROA |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          CA |   .0767997   .0674724     1.14   0.258    -.0574747    .2110742
          ME |  -1.972555   .4151417    -4.75   0.000    -2.798713   -1.146396
          EP |   .0290978   .0334375     0.87   0.387    -.0374449    .0956405
          LD |  -.1605763    .085016    -1.89   0.063    -.3297636     .008611
       _cons |   .5313005   .1045104     5.08   0.000     .3233182    .7392828
-------------+----------------------------------------------------------------
     sigma_u |   .0597055
     sigma_e |  .08845208
         rho |   .3130124   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0: F(5, 80) = 5.92                       Prob > F = 0.0001
```

Source: Author 2023

The results presented in the above model was adopted in the study as it passed the Hausman test as shown below:

4.7.1 Capital Adequacy

Capital Adequacy has a weak positive correlation on the return on asset (ROA). change in capital adequacy by one unit increases the ROA by 0.076 times holding all other factors constant over time and across firms. The firm should thus ensure there is adequate capital to run the day to day operations which are in most cases uncertain given the volatile nature of the insurance business. The results are consistent with the findings by Mutumira (2019) who found that the more capital an insurance firm has the most financially stable it is. Odongo (2021) also found similar results in a research conducted in the Kenyan insurance sector.

4.7.2 Management Effectiveness

Management effectiveness is statistically significant with a high negative correlation. It indicates that the return on asset reduces by 1.97 times when management effectiveness is increased by 1 unit holding other factors constant. This is because the management effectiveness induces operational costs which the firm must incur, thereby lowering the returns in short run. A study by Ikapel et al.'s (2019), in the determination of the relationship between ficsal management and financial performance in the banking sector showed contrary results which could be due to the heterogenous nature of the businesses between the insurance and banking sector.

4.7.3 Earning Potential

The earning potential in the insurance firm has a weak positive relationship with the return on asset where, an increase in the earning potential by one unit increases the return on asset by 0.029 times holding all other factors constant. The findings coincides with those by Saleh et al.'s (2020) who found that ROA is among those variables that are influenced positively by the quality of the earnings. Another study by Duarte et al. (2022) also showed that the quality of earnings correlate with the firm’s financial standing.

4.7.4 Liquidity

Liquidity is the ability of the firm to settle current obligations as and when the obligations fall due. This calls for the firm keeping high amounts of liquid assets which deny the firm an opportunity to allocate the assets in profitable ventures thus lowers the returns on assets. The findings shows that liquidity is negatively related to the return on assets where an increase in the liquidity level by one unit lowers the return on asset by 0.1605 times holding all other factors constant. These results differed from the findings by Onyekwelu et al. (2018), Kariuki et al. (2021) and Mohammed et al. (2022) whose findings from studies conducted in the banking sector showed a positive correlation between liquidity and banks financial performance.

CHAPTER FIVE

FINDINGS, RECOMMENDATIONS AND CONCLUSION

5.1 Introduction

This chapter shows the findings on the effects of financial soundness factors on the performance of insurance firms in Kenya. It includes the recommendations, conclusions, limitations as well as areas where future researchers and academicians can situate their studies.

5.2 Research Findings

5.2.1 Capital Adequacy on the performance of insurance firms in Kenya

Capital adequacy has a mean of 0.181 and a standard deviation of 14.2 %. From the regressed fixed effect model, Capital Adequacy has a weak positive correlation on the return on asset (ROA). Change in capital adequacy by one unit increases the ROA by 0.076 times holding all other factors constant over time and across firms. This is evident from prior studies but the effect is statistically insignificant.

5.2.2 Managerial effectiveness on the performance of insurance firms in Kenya

Management effectiveness has the lowest mean and standard deviation of 0.489 and 2.5% respectively. Management effectiveness is statistically significant with a high negative correlation. It indicates that the return on asset reduces by 1.97 times when management effectiveness is increased by 1 unit holding other factors constant. The findings even though inconsistent with previous studies could be explained since past studies focused with the banking sector which by design operates differently with the area of study.

5.2.3 Earning Potential on the performance of insurance firms in Kenya

The earning potential was 0.4173 on average and a deviation of 34%. The earning potential in the insurance firm has a weak positive relationship with the return on asset where, an increase in the earning potential by one unit increases the return on asset by 0.029 times holding all other factors constant. The earning potential should be cultivated as it boosts the financial performance of the insurance firms.

5.2.4 Liquidity on the performance of insurance firms in Kenya

Liquidity on the other side recorded the highest mean of 1.164 and standard deviation of 11.3%. The findings shows that liquidity is negatively related to the return on assets where an increase in the liquidity level by one unit lowers the return on asset by 0.1605 times holding all other factors constant. This is however statistically insignificant which means that the negative effect of liquidity on return on asset is relatively low.

5.3 Conclusion

5.3.1 Capital Adequacy on the performance of insurance firms in Kenya

The firm should thus ensure there is adequate capital to run the day-to-day operations which are in most cases uncertain given the volatile nature of the insurance business. The results are consistent with the findings by Mutumira (2019) who found that the more capital an insurance firm has the most financially stable it is. Odongo (2021) also found similar results in a research conducted in the Kenyan insurance sector.

5.3.2 Managerial effectiveness on the performance of insurance firms in Kenya

Management effectiveness was found to be counterproductive probably because the management effectiveness induces operational costs which the firm must incur, thereby lowering the returns in short run. A study by Ikapel et al.'s (2019), in the determination of the relationship between fiscal management and financial performance in the banking sector showed contrary results which could be due to the heterogenous nature of the businesses between the insurance and banking sector.

5.3.3 Earning Potential on the performance of insurance firms in Kenya

The earning quality and capability of the firm is crucial towards the realization of more returns by the insurance firm. The findings coincide with those by Saleh et al.'s (2020) who found that ROA is among those variables that are influenced positively by the quality of the earnings. Another study by Duarte et al. (2022) also showed that the quality of earnings correlate with the firm's financial standing. The firm should therefore build its capacity to earn sustainable returns by scanning the environment in order to unravel unforeseen circumstances (Risk).

5.3.4 Liquidity on the performance of insurance firms in Kenya

Liquidity is the ability of the firm to settle current obligations as and when the obligations fall due. This calls for the firm keeping high amounts of liquid assets which deny the firm an opportunity to allocate the assets in profitable ventures thus lowers the returns on assets. These results differed from the findings by Onyekwelu et al. (2018) , Kariuki et al. (2021) and Mohammed et al. (2022) whose findings from studies conducted in the banking sector showed a positive correlation between liquidity and banks financial performance.

5.4 Recommendations

The insurance regulatory authority (IRA) should undertake thorough research by involving all the stakeholders in the insurance sector and major on the optimal capital that every insurance firm should maintain and failure to which they suspend the firms operating license. This will go a long way in ensuring that the insurance firms are sustainably profitable and thus be able to cover their clients' perils.

Secondly the management of each and every insurance firm has a role to ensure that the managerial tactics and strategies employed are not counterproductive but rather aligned to the business objective of profit maximization. This will avoid the negative effect of management effectiveness where the management enact effectiveness procedures at the expense of profit thus lowering the performance (ROA)

The firm should engage proficient and qualified actuaries who are able to project future occurrence of losses and thus enable the firm to keep only the liquid assets that are needed within a specified period of time rather that maintaining excess liquidity or inadequate liquidity all of which have severe financial implications on the firm's performance.

Lastly, the government should collaborate with the insurance sector and strike a consensus on the tax liability by supporting the sector and eliminate the punitive taxes such as taxes on claims which discourages the clients and thus lower the earning potential of the firm. This is because earning potential was found to have a positive relationship on the Return on assets.

5.5 Limitations of the Study

Several studies pertaining to the effect of financial soundness indicators have been conducted in the banking sector and thus presented a major challenge concerning availability of information, this limitation of scanty information was overcome by thorough data mining beyond the local journals in order to support the structure of the study.

With regards to the data and data collection a lot of time was needed to fetch the source of the required data as it was not availed by NSE and therefore the researcher had to supplement with the financial statement of each of the firm over the period under study which was time consuming.

5.6 Suggestions for further research

The current study focused on the effect of financial soundness indicators on the performance of listed insurance firms in Kenya. Future researchers should expand the target population to include other stakeholders in the insurance sector such as brokers and even unlisted insurance firms. This will provide results that could thereafter be generalized.

It’s also good to note that financial soundness indicators have been majorly focused on the banking sector and insurance sector, however there could be need to determine the effect of the same on the financial performance of Sacco's and micro finance institutions in Kenya.

Of necessity to consider in future research, academicians should be concerned about the good will of the management especially in ensuring the financial soundness indicators especially where there is conflict of interest e.g., when the management intend to maintain high liquidity levels so that they can pay genuine claims in the shortest possible time.

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APPENDICES

Appendix I: Data collection Template

	Return on assets	Ratio of core capital to risk weighted assets	NPLs to total mortgage advances	Revenues to total assets	Operating income to total assets	Liquid assets to total assets	Return on assets
2016							
2017							
2018							
2019							
2020							
2021							
2022							

Appendix II: Budget

1TEMS	**(KSH)**
Stationery	10000
Typing and printing	15000
Binding of documents and photocopy	10000
Data Analysis	25000
Miscellaneous	10,000
Total	**70,000**

Appendix III: Work Plan

Week /Activity	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Research proposal writing and approval								
Data Collection								
Data Analysis								
Report writing								

Appendix IV: List Insurance Companies

	Listed Insurance Companies as of December 2022
1	Sanlam Kenya PLC
2	Britam Holdings Ltd
3	CIC Insurance Group
4	Jubilee Insurance
5	Kenya Reinsurance corporation Ltd
6	Liberty Kenya Holdings Ltd

Source: CMA (2022)

Table 2.1: Summary of Literature Review and Research Gaps

Author (year)	Title	Objective (S)	Methodology	Results	Conclusion	Research gaps
Onyekwelu, Chukwuani & Onyeka (2018)	The Impact of Liquidity on Nigeria's Deposit Money Banks' Financial Performance	To evaluate the impact of liquidity on financial performance of Nigerian banks.	Random sampling of secondary sample of 5 banks random sampling Secondary data ten years period, multiple regression analysis	The liquidity of a bank has a positive and considerable impact on its profitability statistics, especially their Return on Capital Employed.	There is a direct correlation between a bank's success and its ability to effectively manage its liquidity.	The investigation was conducted within the context of banks and revealed a geographical divide.
Mutumira (2019)	Effect of capital adequacy on Kenyan insurance firms' financial performance	to evaluate the impact of adequate capital on the financial performance of Kenyan insurance businesses.	survey research design Secondary data Purposeful sampling technique Panel data	A statistically significant relationship exists between capital sufficiency and the financial success of Kenyan insurance businesses.	A statistically significant relationship exists between capital sufficiency and the financial success of Kenyan insurance businesses.	The study only focused on the financial performance hence did not show how capital adequacy affects other aspects of performance
Talibong and Simiyu (2019)	Financial soundness indicators and financial performance of deposit taking micro finance banks in Kenya	the effect of asset quality on the profitability of Kenya's deposit-taking microfinance institutions	• census approach • Secondary data • Panel data from 2012 to 2017	The financial success of microfinance institutions that accept deposits is inversely and significantly related to the quality of their assets.	Microfinance institutions that accept deposits are impacted by asset quality.	Deposit-accepting microfinance banks, rather than insurance firms, were the primary research focus of this study.
Ikapel, Namusonge and Sakwa (2019)	Efficiency and effectiveness of financial management of commercial banks traded on the Nairobi Stock Exchange	commercial banks in Kenya and the impact efficient financial management have on their bottom lines.	• study targeted commercial banks listed on the Nairobi Securities Exchange • period 2006 to 2017 • descriptive research design • OLS model	Commercial banks' bottom lines are positively correlated with the quality of their financial management.	Efficiency in financial management has a direct impact on the bottom lines of Kenya's commercial banks.	The research was limited to the environment of commercial banks and its primary emphasis was on profitability.

Cho and Lee (2019)	Managerial efficiency, corporate social performance, and corporate financial performance	To assess how management efficiency influences the outcomes of corporate financial performance.	• KLD database for the years 2003 through 2011 • Regression analysis.	managerial efficiency is positively associated with a subsequent change in corporate social performance	Product-related CSR has a clear correlation to CFP, and efficient managers are more inclined to participate in it.	The research didn't include every facet of performance since it was focused on corporate financial performance.
Utami, Nuzula and Damayanti (2019)	The Effect of Earnings Quality on Financial Performance in Indonesia: is the State-Owned Bank better than Private Bank.	to analyze the effect of earnings quality on financial performance of banks in Indonesia by comparing the SOEs and private banks	• Eight conventional banks • data from 2006-2018 • Partial Least Square Multigroup Moderation Technique	Earnings quality has a significant effect on financial performance of banks in Indonesia.	earnings quality has a significant effect on financial performance of banks	The focus of the study was banks and also exhibited a geographical gap since it was conducted in Indonesia
Seyedi and Abdoli (2019)	Modeling and rating financial soundness indicators of commercial banks using confirmatory factor analysis and TOPSIS method	To investigate the factors affecting financial soundness in banking industry.	• descriptive-correlation • R-test software • confirmatory factor analysis • TOPSIS method	Liquidity affects the financial soundness of banks and also has the most impact.	Liquidity has a huge effect on the financial soundness of banks	The study depicted methodological gap and also a context gap since it focused on banks
Ali and Siddiqui (2020)	Exploring the nexus between financial flexibility, managerial efficiency, ownership, and performance: an interactive model for growth, mature, and stagnant companies in Pakistan	to examine whether the managerial efficiency of Pakistani firms affects firm performance	• a sample of 30 firms listed on Pakistan stock exchange • gathered data from the annual reports • period 2009 to 2018 • fixed effect regression model • balanced panel data	managerial efficiency (ME) is the key factor in affecting firm performance in all the stages of the lifecycle affecting firm performance negatively	Managerial performance has an effect on firm performance	The study presented a geographical gap
Saleh, Abu Afifa and	Does earnings quality affect companies'	to investigate the	• panel data analysis	Return on Assets (ROA), Return on	Earnings quality has an effect on	The study was conducted in Jordan hence

Alsufy (2020)	performance? New evidence from the Jordanian market	importance of earnings quality as a determinant of companies' performance	• a sample of all Jordanian industrial public shareholding companies listed on Amman Stock Exchange (ASE) • 2010-2018 data	Equity (ROE), and Earnings Per Share (EPS) as proxies of company's performance are affected by the earnings quality.	company's performance	presenting a geographical gap
Odongo (2021)	Effect of Capital Adequacy on Financial Performance of General Insurance Companies in Kenya	to establish the effect of capital adequacy on the financial performance of general insurance companies in Kenya	• longitudinal research design • data for the period 2017 to 2019 from Insurance Regulatory Authority (IRA) database • panel data regression analysis	Capital adequacy has a positive influence on the financial performance of general insurance companies.	Capital adequacy positively affects financial performance	There is a conceptual gap as the study focused on only financial performance
Mbaeri, Uwalake and Gimba (2021)	Capital adequacy ratio and financial performance of listed commercial banks in Nigeria.	to examine the effect of capital adequacy ratio on the performance of listed commercial banks in Nigeria	• Data from 2014-2019 • collected from the sampled commercial banks annual financial reports • panel regression	Capital adequacy ratio had significant and positive effect on return on capital employed of listed commercial banks in Nigeria.	Capital adequacy has a positive effect on performance of banks	The study presented a contextual gap since it was conducted among gaps and also a geographical gap since it was conducted in Nigeria
Eladly (2021)	The Financial Performance on Asset Quality of Insurance Industry in Egypt (Panel Data Analysis).	to analyze the impact of the financial performance on asset quality of insurance industry in Egypt	• Data from 1999-2019	There is a significant negative linear relationship between return on investment and asset quality while there is no significant linear relationship between return on equity and asset quality.	Asset quality has a partial effect on performance of insurance companies	There was a geographical gap since the study was conducted in Egypt and also a conceptual gap as it focused on only financial performance

Kariuki, Muturi and Njeru (2021)	Influence of Liquidity on Financial Performance of Insurance Companies in Kenya	to determine the influence of liquidity on the financial performance of insurance companies in Kenya	• correlational research design • fifty-three insurance companies in Kenya	liquidity had an enormous positive effect on financial performance of insurance companies	liquidity had an enormous positive effect on financial performance of insurance companies	The study presented a conceptual gap since it only studies the financial aspect of insurance companies
Nnubia, Okafor and Okegbe (2022)	Financial Soundness Indicators and Performance of Listed Deposits Money Banks in Nigeria	To examine the relationship between capital adequacy and performance of deposits money banks in Nigeria	• Eight (8) deposits money banks • Secondary data used • from 2009 to 2018 • Pearson correlation matrix • ordinary least square method	Capital adequacy ratio was positive indicating that capital adequacy positively influences bank's performance	Capital adequacy has a positive effect on performance of banks	There was a geographical gap since it was conducted in Nigeria A contextual gap was also presented since the study focused on banks and not insurance companies
Sit (2022)	The Effect of The Financial Soundness Index on The Financial Performance of Banks: An Application in Turkey.	To investigate the effect of asset quality on financial performance in the banking sector in Turkey	• 11 banks operating in the BIST Bank Index • Annual data for the 2005-2019 • Kónya causality test method	there is a two-way relationship between asset quality and Market Value, and a one-way causality relationship from Profitability ratios to asset quality	Profitability affects the asset quality of banks and not vice versa	The study presented a contextual gap as well as a geographical gaps since it was conducted among banks in Turkey
Roselyne, Mackton and Kiganda (2022)	Asset quality and financial performance of tier IV commercial banks in Kenya	To assess the influence of asset quality on the financial performance of tier IV commercial banks in Kenya	• longitudinal research design • 13 tier IV commercial banks in Kenya • Panel data • Pearson's product-moment correlation • regression analysis	asset quality has a significant influence on financial performance of banks in Kenya	asset quality has a significant influence on financial performance of banks	The study showed a contextual gap as it was conducted among commercial banks and not insurance companies
Nyakieni, Kimitei and Siele (2022)	Effect of Management Efficiency on Financial	To Investigate the effect of management	• Explanatory research design. • 2009-2018 secondary	a significant short run and long run equilibrium	Management efficiency has a long run effect on	The study focused on banks and not

	Performance of Commercial Banks in Kenya.	efficiency on financial performance of commercial banks in Kenya	consolidated panel data • 40 commercial banks • Time series of cointegration and Vector Error Correction model (VECM)	relation between coefficient of management efficiency and financial performance of commercial banks in Kenya	financial performance of banks	insurance companies Also, the study focused on financial performance only
Kirimi, Kariuki and Ocharo (2022)	Financial soundness and performance: evidence from commercial banks in Kenya.	analyzed the effect of earnings ability on financial performance of commercial banks in Kenya	• dynamic panel model • data from commercial banks • period 2009 to 2020	Earning quality had a statistically significant effect on net interest margin but a statistically insignificant effect on ROA and ROE.	Earnings quality has partly affected performance of banks	The study focused on financial performance only and also was conducted among banks hence presented both conceptual and contextual gaps
Duarte, Lisboa and Carreira (2022)	Does earnings quality impact firms' performance? The case of Portuguese SMEs from the mold sector.	the impact of earnings quality on firms' financial performance	• panel data of 237 small- and medium-sized Portuguese companies • using 2010–2018 yearly data • a fixed-effects or a random-effects specification.	Earnings can affect positively firms' financial performance.	Earnings ability has a positive effect on financial performance of SMEs	The study focused on SMEs and also focused on financial performance only
Mohammed, Ali and Mhmood (2022)	Measuring Financial Strength Using the Profitability Index and its Impact on Achieving Financial Soundness: An Analytical Study of Several Iraqi Private Commercial Banks.	To measure the profitability and financial soundness and evaluating their relationship and impact	• Targeted Ashur International Bank, National Bank of Iraq, Commercial Bank of Iraq, Gulf Commercial Bank.	Investing in liquidity and achieving a balance between liquidity and profitability.	Liquidity has a positive effect on profitability of commercial banks	The study presented a geographical gap and also a contextual gaps since it was conducted among banks in Iraqi