

**EFFECT OF BOARD CHARACTERISTICS ON FINANCIAL PERFORMANCE
OF FINANCIAL INSTITUTIONS LISTED AT NAIROBI SECURITIES
EXCHANGE, KENYA**

BY

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DECLARATION

As pertains to this research project, it is my own original work and has not been presented for a degree at any other university for examination.

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This research project has been submitted for presentation with my approval as the University Supervisor.

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DEDICATION

This work is dedicated to my parents' dedication to education, sacrifices, and unwavering support.

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LIST OF ABBREVIATIONS

BOD:	Board of Directors
CA:	Current Assets
CBK:	Central Bank of Kenya
CEO:	Chief Executive Officer
CL:	Current Liabilities
CMA:	Capital Market Authority
IRA:	Insurance Regulatory Authority
KCB:	Kenya Commercial Bank
LTD:	Limited
MM:	Modigliani and Miller
NSE:	Nairobi Securities Exchange
ROA:	Return on Asset
ROE:	Return on Equity
SPSS:	Statistical Package for Social Science

ABSTRACT

The association between board characteristics and financial performance is, however, a hotly debated topic, with different researches arriving at different conclusions. This study therefore looked at financial performance of listed Kenyan financial institutions and how board characteristics affect them... The return on assets (ROA) of companies was employed as a metric for performance financially, while size of the boards, diversity in directorship, and directorship composition were utilized as pointers of board characteristics. The size of the firm was employed as a factor that would control the interaction. Between 2015 and 2019, the study looked at 21 companies that were listed on the NSE. With the utilization of Statistical Package for Social Sciences, the data was evaluated via descriptive as well as inferential models. The findings revealed that board qualities and business size had a beneficial impact on financial institutions listed on the Nairobi Securities Exchange's return on assets. Between 2015 and 2019, board qualities and company size shown a positive relation with publicly traded company financial performance, according to the correlation. According to the findings, board characteristics have a positive link with financial success of Kenya's publicly traded financial institutions. According to the study, financial institutions should increase their board size, ensure that they have at least 10 directors on their boards, boardrooms boost the members of board who are not executive members' number, and increase the number of women on their boards for the purpose of improving their financial performance. A similar research over a longer length of time, such as ten years, is recommended by the researcher. A review of all listed companies, excluding banking institutions and non-listed financial companies, is also recommended.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Given the characteristic and significance of the activities performed by the board of directors of organizations, it is important to recognize the characteristics that make them successful. The directors' board is one of a company's most essential decision-making groups. The board is in charge of completing the main tactical and financial choices, which may include changes to the capital and investment composition (Van der & Ingley, 2013). Traits of a Board or attributes can influence vital choices, including asset designation and hence influence the performance financially. Investment decisions made at the board level have an influence on the performance of the establishment, its financing patterns, and the state's economic status (Jangili & Kumar, 2010).

The basis of this research is on three corporate governance theories; stakeholders' theory, agency theory and stewardship theory. Stakeholder theory as advanced by Freeman (1999) suggest that directors appear to supplying essential resources to the company, for instance connections to stakeholders (suppliers, policy makers, financial institutions), as well as counsel and advice. As per Jensen and Meckling's agency theory (1976), boards serve as a primary control mechanism for ensuring that managers' and owners' interests are aligned. Donaldson and Davis created the stewardship hypothesis (1991) which describes how stewards should maximize shareholder wealth by improving corporate performance since this increases their utility.

Banks and insurance businesses are among the major financial institutions listed on the Nairobi Stock Exchange. These organizations are governed by bodies that ensure corporate integrity, majorly for the reason that there increased demand for transparency and actualization of commendable governance practices. In a study conducted by Adams and Ferreira (2009) revealed that BOD is responsible in implementing both long-short term decisions that have an overall influence on establishment's performance. The problem of board characteristics and performance of an entity affects all industries (Kihumba, 2010). Mwaura (2017) discovered a significant positive relation between board characteristics and performance. Jepkemboi (2017) conclude that ethnic diversity in the company board members results into increase in ROA in insurance companies.

1.1.1 Board Characteristics

The board's organizational aspects, such as the nature and size of committees, committee membership, and the way data is shared from one board member to the next, as well as board leadership, are referred to as board characteristics (Htay, 2012). The characteristics of the board refer to the various unique attributes that a certain board of directors identifies with (Noor, Kamardin & Ahmi, 2016). Different boards have different combinations of features that suit them. Several attributes relating to boards include: size, board diversity, composition of board, CEO duality, the boards average age, independence of the board and recurrence of board meetings (Murphy & McIntyre, 2007).

The number of resolutions adopted by the Management board is a measure of the board's output in terms of performance-influencing decisions. Board meeting measures the average number of times the directors meet each year. A board that meets regularly during the financial year is more concerned about the company's issues, and such companies perform better. The Board size and its implications on a company's financial performance is already explored with some researchers finding it relevant while others found no relevance. Yermack (1996) is a researcher who found that the board size exceeding eight members was unlikely to be effective. On the other hand, only when the chairman is independent, according to Rathish and Sujoy (2015), positive influence exists, particularly when it comes to larger enterprises.

The term "change of CEO duality" refers to a shift from having the CEO serve as both managing officer and director's chairman to having two separate individuals serve as CEOs and chairmen of directors. The business argument on gender diversity claims that when there is board diversity, there is an increase in the effectiveness of board actions which result in improved performance and productivity of the bank (Hassan, 2011). This study used size board operationalized as the numbers of directors; meetings was measured as total board meetings held annually. Board composition was dignified as independent directors as a percentage of board members while number of committees was used as measure of Corporate Governance (Makokha, 2014).

1.1.2 Financial Performance

The degree of the soundness in which companies put in usage their key resources in its field of operation to produce enough income to cover operating costs and create a financial gain for its owners is termed as financial performance (Zabri et al, 2016). It refers to indications of a company's financial well-being that allow for inter-industry or cross-industry comparisons. Adopting proxies like ROE, ROA, solvency, and liquidity can help you understand an establishment's financial performance and sales turnover (Rasheed & Nisar, 2018).

Information of the financial performance of firms can be retrieved from annual financial reports that all listed firms in Kenya are compelled to publish. These reports are meant to furnish stakeholders with accurate and reliable information that presents a synopsis of the firm's financial performance (Bhagat & Black, 2001). These records are audited and signed by the leadership of the firm along with a number of other documents relating to the firms' disclosures. Annual reports comprise the statement of cash flow, the income statement and the balance sheet. Statements of cash flows exhibits how variations in the balance sheets accounts and income statements influence cash and cash equivalents. Many analysts view the cash flow statement as the most significant financial statement as it bears reconciliation between the net income and cash flow (Robin, Salim & Bloch, 2018).

Performance can be categorized as either monetary or non-monetary (Hermalin & Weisbach, 2003). Returns on Asset depicts how efficient a firm is in employing its assets to create profits. It is a variable that can easily be employed to differentiate business financial performance in the same industry or that of firms in different industries. It is expressed as a ration of net income after tax divided to cumulative assets employed during the financial year. A higher ROA is favorable as that elucidates the firm is earning more money than the value of employed assets. Returns on Equity is expressed as net income after tax as a proportion of average common shareholder value. In this paper, the return on investment (ROI) was utilized as a metric for gauging financial performance.

1.1.3 Board Characteristics and Financial Performance

The impact of board symbols on a company's financial success is added weight hypothetically by various experts. Firms with well governed structure yield high performance compared to those that have poor corporate governance practices (Ali et al., 2017). Agency theory states that board ownership formation, a type of focus, is considered to lessen the difficulties contained in agency as shareholders engage in regulating management, by ascertaining that they don't engage in risky endeavors, but rather focus on increasing shareholder wealth. (Jensen & Meckling, 1976).

Fama & French (2002) defined profit as the ability to ensure the use of its resources to maximize revenue beyond costs. Yermack (1996) stresses this narrative empirically using companies' sample based in the U.S and noticed that leaner boards are associated with better company performance and increased company value. Poor performance of firms contributed to more frequent merger and acquisitions in the U.S. monetary sector. Kihumba (2010) pointed out that large boards have a positive impact on the firm's performance in any organization, particularly firm that need more counsel, for example, those that work in different classifications. The dualism of the CEO adversely influences solid performance contrasted with firms with a free CEO and a different board Chairman (Kyereboah, 2007).

Board structure, the constituent of the board, female directors, board remuneration, audits, and frequency of board meetings are among the essential variables that have been identified as influencing financial performance. Chief executive officers (CEOs) are solely accountable for a company's financial performance through completing responsibilities in management's authority. Skilled and competent chief executives can lead companies to improved incomes, whereas inefficiency in CEOs can lead to a company's loss (Liu, Qu & Haman, 2018).

1.1.4 Listed financial Institutions at Nairobi Securities Exchange

Banks, Sacco's, and insurance companies are among Kenya's major financial institutions. These institutions are governed by separate authorities that protect the institutions' integrity. Kenya had 23 listed financial institutions as of December 31, 2017. They include firms from various segments including; Investment services, Real estate, Banking and

insurance sector. Banks and investment companies are regulated by CBK and the Insurance Regulatory Authority regulates insurance firms (CBK, 2019).

The Central Bank of Kenya, whose mandate is derived from the Banking Act, supervises banks. In reference to CBK's website, exists 42 licensed banks in Kenya. They offer both corporate and retail services, and the head offices in Nairobi. The number of these banks that are listed in security exchange is eleven (appendix 1). The Insurance Regulatory Authority of Kenya (IRA) was established in 1986, with the express purpose of regulating, protecting customers, and supervising the industry in Kenya. The authority has licensed 56 insurance and reinsurance companies (IRA 2017).

So as to keep Kenya's monetary and fiscal system stable, characteristics of the directors as a gauge of corporate governance in these financial institutions is critical. The issue of board characteristics and entity performance impacts all industries, including firms publicly traded. The banking and insurance industries have faced challenges in recent years, resulting in the failure of a large number of firms. The banking sector has also been impacted over the years, with some institutions, like Chase Bank and Imperial Bank, recently experiencing financial difficulties. The responsibility for the collapse of some of them has been attributed to the general directors who were accused of engaging in malpractices and ignoring governance structures. This study seeks to begin to engage in the process of addressing the above issues raised (NSE, 2018).

1.2 Research Problem

According to the agency's hypothesis, director's characters improve board oversight since directors from various backgrounds bring a unique perspective to the business (Jensen & Meckling, 1976). The resource dependency theorist, on the other hand, proposes that the boards' job is not just to settle agency issues, but also to provide critical tactical resources to the entity. The stakeholder hypothesis states that board members representing firm's stakeholder groups provide unique insight into the diverse demands of external stakeholders (Freeman, 1999).

However, indeed, even with boards and board structures set up, an increment in boardroom disagreements in organizations which are failing has been a common occurrence in both advanced and third world nations. In Kenya, monetary establishments have additionally encountered a myriad of challenges, and somewhere in the range of 2015 and 2018 some of them ceased to be solvent. In Kenya, numerous banks, including Chase Bank and Dubai Bank, were involved in scandals relating to their finances in 2016. An issue raised in these scenarios was the lack of effective corporate governance systems for protection against losses relating to their financial standing. As a result of these sad events, additional research is needed to prevent similar future catastrophes.

Composition of a company's board features and performance financially is, however, a hotly debated topic, with different researches arriving at different conclusions. The factors of independence, size of board, and diversity of board have an adverse impact on the financial success of an organization (Martin & Herrero, 2018). Ciavarella (2017) explored the association between directors' diversity and business performance in EU and discovered no significant link. Borlea et al (2017) brought into light the deficiency of a significant statistical connection between the characteristics of the members of the board and Romanian business performance. Palaniappan (2017) discovered size of the board, executive duality, Independence of directors and director's activities were inversely associated to performance of the firm. Assenga et al (2018) discovered that of CEO/chairperson functional and gender diversity has an influence that is incremental on financial performance.

Local, Mandala (2018) discovered that the general structure of the board had a significant independent impact on the functioning of the financial institution, the function of the board had a strong independent effect on performance and the board meetings of directors making strong performance 11-15. Abdi (2018) observed a positive and insignificant link between autonomy in relation to the boards and ROA with an inverse and irrelevant connection in board sizes and ROA, further board diversity, board composition and ROA indicated a negative relationship. Mwaura (2017) brought to light that a significant direct connection between the characteristics and profit levels in commercial banks. Jepkemboi (2017) conclude that ethnic diversity in the company board members results into increase in ROA in insurance companies.

However, a several researchers have failed to find a positive relationship between BOD features and ROA. With these conflicting findings by previous researchers on this broad topic, this establishes if indeed characteristics of board impacts a company's financial performance, specifically for those quoted at the (NSE). It aimed to ask the following question: How does board characteristics affect financially performance in institutions listed on the Kenyan financial sector?

1.3 Research Objectives

To determine the effect of board characteristics on financial performance of listed financial institutions at NSE in Kenya

1.4 Value of the Study

This paper usefulness for policymakers in banks sector and insurance sector is displayed by establishing best management practices for use both internationally and locally and by understanding the combined mixture of business decisions to maximize profits. This study also provides information on financial sector failures in addition to regulatory failures and helps them see the importance of corporate governance in improving efficiency. This article assists present and potential investors in listed commercial and service organizations in making informed investment decisions. The study also aids management of Kenyan publicly traded companies in selecting the best choice of best practices decisions that will improve the firm's performance and maximize shareholder wealth.

Managers in financial companies will be assisted to make better decisions in the future. This could help people make informed decisions about the situation. It may help in picking board members for a greater effect on financial success.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The literature on the influence of qualities of the board on ROA is examined in this chapter. It includes a review of the theoretical literature as well as the factors that influence financial performance.

2.2 Theoretical Review

Governance ideas that underpin this research are explained in this section. The theories that anchor this research are; stakeholder theory, stewardship theory, and agency theory.

2.2.1 Stakeholders Theory

It's postulated by Freeman (1999). Theory establishes a framework for analyzing the interaction between stakeholders and management and how such relationships contribute to achieving the goals of the organization. It considers the interests of a group of stakeholders. It places a higher weight on the network's relationship than the relationship between the shareholders and managers. Manager has to put into consideration all stakeholders who would be influenced by their decision-making (Sendjaya et al., 2016). This method highlights the interests of various parties, where none has precedence over every other but they're all equally valuable, and managers must take into account every one of these concerns.

Several authors have criticized this teaching. For example, from a stakeholder perspective, external interests should be defined externally, that is, without consulting the board of directors or company executives. It is not yet clear how this can be done, or how the variety of such groups can be legally identified (Windsor, 2017). Phillips et al (2019) have also critiqued it, claiming that stakeholder theory does not specify how participants should be represented or how the power to protect their interests should be extended.

This hypothesis is relevant to this research because it highlights the role of governance procedures and company performance, because both have a bearing on the concerned parties. This theory is relevant because it gives close attention to both the interests of the owners as well as other stakeholders. Corporate governance systems should ensure that the

owners' goals, such as maximizing their wealth, are accomplished while simultaneously considering the interests of other stakeholders (Freeman, 1999).

2.2.2 Agency Theory

The hypothesis was created in 1976. It aims to resolve agency issues that develop as a result of these two parties' competing interests. This conflict, according to Xie and Fukumoto (2013), causes the firm's performance to be sub-optimal. The owners' goal is to maximize their wealth, however the agents' motives could be selfish, like as undertaking extremely high chances for a short-term gain with little concerns, or paying big unreasonable wages.

A firm can introduce incentive schemes for its managers where they can be rewarded financially for maximizing shareholders' interests. The independent statutory auditors can also help in reducing the agency costs by checking if the financial and non-financial disclosures give an honest and accurate representation of the financial health of the firm. Another viable mechanism to reduce agency costs is by having an efficient and independent board of directors. According to this idea, the purpose of effective governance procedures purpose is to actualize the agent's expectations and needs with the principles through directing and maintaining the acts of top management (Fernando, 2012).

Various authors have criticized this theory. As per Kultys (2016), board effectiveness is determined by the actual behavior of the directors, while board structure, diversity, and independence are just conditions. External board members are not sufficiently independent of executives to act as shareholders' agents in selecting or controlling management, according to Yusof (2016), and there are too many factors influencing stock prices to serve as a framework for effective investment in management. The coherence of agency theory in this research means that the board of directors refers to an internal control tool that governs agency issues across all corporate structures.

2.2.3 Stewardship Theory

This theory of management was developed by Donaldson. And Davis (1991) states that, directors who are good corporate executives need to act in a healthy way and work with all stakeholders to achieve the same goal of achieving the company as a whole. The assumption is that executives are the protectors of the executives and are using the

shareholders' fund for the performance of the company, as in doing so, the operator's performance objectives are being applied. The management hypothesis therefore suggests that trustworthy and supportive communication between principals and managers is closely linked to corporate performance (Hassan & Lukong, 2012).

Unlike agency conjecture, the hypothesis of stewardship focuses on the functions of top executives as stewards, including their accomplishments as part of the organization. The study is relevant to stewardship theory because it recommends that the CEO should be given some authority built on honesty, which minimizes the cost of monitoring the executive's actions. However, the biggest limitation to the adoption of the stewardship style of management is that it lies in the risk propensity of the shareholders. Only the shareholders who are risk taking are the ones that will favour a stewardship governance mechanism (Fernando, 2012).

2.3 Determinants of Financial Performance

A firm's financial performance is influenced by several indicators. Amongst these factors include board characteristics, size of the firm, age of the firm, and liquidity of the firm (Lebans & Euske, 2006).

2.3.1 Board Characteristics

BOD characteristics vary from one firm to another. Studies around this subject are not conclusive in nature. For instance, Laing, Weir and McKnight (2002) and Wang (2014) found no proof that BOD features influence the performance of a firm. Other scholars however, took an opposing view and connected certain BOD characteristics with firm performance (Lotfi & Malgharni, 2013). However, the BOD's responsibility is vital to the performance of a firm since BODs have the crucial role of strategically leading the entity (Abdullah, 2004).

Lipton and Lorch (1992) posited that the optimum number of board members should be between 7 and 8. They concluded that large boards could lead to time-consuming decisions. Their research was confirmed by Jensen (2001) who found that organizations consisting of large boards tend to be less efficient. Lipton (1992), however, recommends the size of the board size to be twelve members which could lead to meaningful discussions while

approving the appointment of board committees. Bathula (2008) conducted a study focusing on approximately 158 companies quoted in the stock exchange of New Zealand with a conclusion of a progressive linkage between the board size and the firm performance.

2.3.2 Firm Size

The company's size determines its magnitude of engagement and is measured by its total investment or its total investment. The size of a company can therefore be determined by how large a company is characterized by its cumulative assets, sales, or its capitalization of the market. The company should increase in size so that it can take advantage of the various tools offered. Firms that are small lack the advantage of access to the economy of the amount needed to build a variety of costly tools. In some cases, they may be large enough to use the necessary skills and knowledge available in the company (Robin, Salim & Bloch, 2018).

Firm sizes vary as some are large whilst others are small. Firm sizes contribute to the financial performance. For instance, large firm are able to produce in huge quantities because of the economy of scale they have over small firms. The mass production provides large firms with competitive advantage which enables them attain high profits (Abdi, 2018). In addition to economies of scale, large firms are more penetrated, which has ensured their attainment of higher market shares than the smaller firms. The higher market share is also a source of competitive advantage to larger firms. Large companies have an edge when it comes to raising external funding from the money markets that could be linked to businesses' size, which attests to their ability to finance the loaned cash. Large firms also have a lower reliance on internally raised cash, allowing them to profit more than small companies (Alghusin, 2015).

2.3.3 Firm Liquidity

Liquidity denotes the ability to pay off debt outstanding, in the next, full year with money or assets that can be converted to cash. It indicates how quickly an asset may be converted to cash and also displays a company's ability to use working capital when kept at regular levels. Additionally, high levels of liquidity help the company in dealing with unexpected

contingencies and also help in meeting the firm's debt obligations during periods of low returns. Earning sufficient funds makes the bank have the capacity to settle short-term obligations such as regular withdrawals from clients, loan applications and operating costs. This capability will protect the bank from the ups and downs of business losses, bad credit, reputation risks and even shortages. (Myers, 1977).

Liquidity reserve are easily established from earnings accessible under the pecking order theory, as corporations prefer to use monies raised from within compared to outside funds. If a company's assets are fluid enough as to support the company's various expansions, it'll never be compelled to offer additional funding. The current ratio or quick ratio is utilized to measure a company's liquidity. It reveals a company's ability to satisfy urgent obligations using present assets. A high current ratio shows that an organization can settle its obligations with current assets (Tamari, 1966).

2.3.4 Firm Age

Age refers to the length of time that something or someone has existed. The age of a corporation is sometimes described as the period it has been existing. Older entities are more recognized, with expertise allowing for better coping in ambiguous circumstances. Although old ages can help organizations become more effective, it can also cause know-how, capacities, and expertise to become outdated, which can lead to organizational collapse (Muturi & Omondi, 2013).

According to the resource-based approach, an organization's abilities and resources appear to be reliant on its age, with young organizations having insufficient resources and abilities compared to older firms. Due to tendencies to become more rigid in their managerial endeavors and administrative processes, well-respected organizations may face a competitive disadvantage in contrast to less renowned companies. Inflexibility can restrict companies' ability to make quick changes in the existing products and services, in addition to identifying and developing new corporate prospects (Carr et al., 2010).

2.4 Empirical Studies

Globally, Martin and Herrero (2018) conducted a study on the board of directors: constitution and results in the ROA of the organization during the interval of 2010-2015

and a sample of all 82 businesses in the Spanish SE, the second findings related to annual reports on financial status used. Board size, diversity and autonomy have been considered factors and the results reveal a negative relationship to financial performance. The investigation simply looked at board composition and failed to take into account any other characteristics of a board.

Borlea et al (2017) researched on directors' characteristics together with firm ROA in emergent economies having learnt from Romanian companies. The research utilized a sample of 55 non-financial listed organizations in Romania while the data collected of a secondary nature was taken from the companies' financial filings. The outcomes revealed that statistically significant linkage between none of the board characteristics and performance of the firms. The study is based on non-financial businesses instead of financial businesses.

In the Indian manufacturing business, Palaniappan (2017) investigated the factors of company financial success in relation to board features of corporate governance. Between 2011 and 2015, the target group was 275 entities listed at the Indian bourse in eighteen categories. Board size, independence, Board function and CEO both were tested factors and the results showed a negative link to board features and the company's performance. The study's context was manufacturing organizations and not monetary institutions.

By Assenga, Aly and Hussainey (2018), impact of board traits on the financial results of Tanzanian organizations were investigated. The characteristics of the board observed were females in directorship, board skill, and foreign directorship. It covered a period of 2006-2013 for a target population of 80 firms. Secondary data from published reports was collected and primary data via semi-structure questionnaire to twelve key stakeholders. The results of the research proposed the division of CEO / chair roles, and diversity of gender has an incremental effect on the performance financially, additionally the results did not support board size, external directors, foreign directors and the PhD degree link in financial performance. The research was conducted in Tanzanian companies, which could not be generalized in the Kenyan context.

In Kenya, Mandala (2018) researched the structure of the board, senior position, strong features and performance of the financial institution in Kenya. Sampled financial

institutions consisted of 98 organizations; data collection took place from 2006 - 2015. The study used descriptive design of the correlation and the survey of the different categories. The results showed that the overall structure of the board had a significant independent impact on the performance of the financial institution, the work of the board had a strong independent influence on profitability and the board meetings of directors making strong performance 11-15. There exist a gap which is contextual since it zeroed in on a combination of the sector of monetary organizations however this paper will focus on listed financial institutions.

Abdi (2018) explored on effects of board characteristics in relation to ROA of microfinance in Kenya. Targeted research populace consisted of thirteen microfinance institutions. Second sources of financial records provided information during the period 2013- 2017. The results of the study showed a promising and unobtrusive link to the board's independence and budget performance and the adverse and insignificant link between the board rate and financial related, continuous transactions board gender, board nationality and spending have shown negative relationships. The article focuses on microfinance rather than finance companies.

As part of her research, Mwaura (2017) researched as regards the association between board traits and profit margins of Kenyan commercial banks. There were 43 banking institutions that were governed by CBK. Secondary environmental data has been removed from published financial institutions from 2012-2016. Characterized features of board size, board technology, board independence and gender diversity. The results of the study showed an incremental link between the identified factors and financial performance. The study only focused on commercial banks and not all financial institutions such as insurance firms.

Jepkemboi (2017) undertook a study on the relationship between board diversity and the profitability ratios of Kenya's insurers. As part of the study, a descriptive research was used. 20 insurers were selected from a target group of 48 over a duration of 5 years. The conclusions have highlighted that there is a strong direct and significant increase in the organization of women in leadership and the return on assets. The increase in the effects of racial segregation on the rise in returns and the increase in foreign directors leads to an

increase in asset returns, there is a strong, strong and direct correlation between board structure in ROA and board size having negative effects on performance. The study only looked at insurers instead of financial institutions such as banks.

2.5 Conceptual Framework

The connection between the two concepts is depicted in the conceptualization. Figure 2.1 depicts the study's conceptual model, which includes gender diversity, board age, board educational achievement, and board country as independent factors, investments (dependent variable), with company size, firm age, together with liquidity as controls.

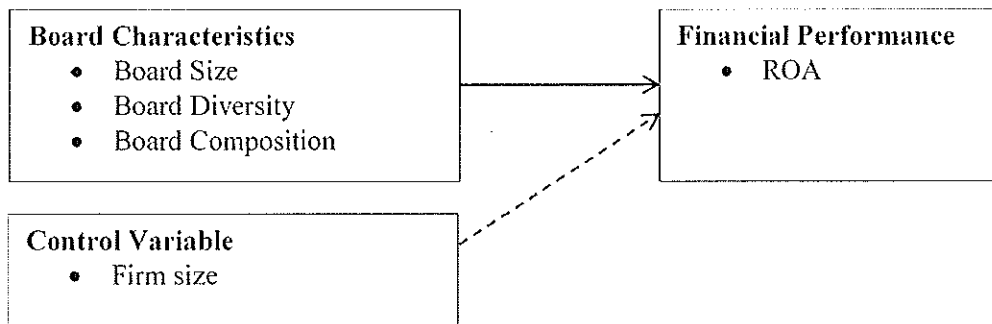


Figure 2.1: Conceptual Model

2.6 Summary of Literature Review

Around the world, major business scandals and financial crises have occurred, resulting in significant losses and economic turmoil. As a result, strong board features are essential to handle these losses. Under the heading of empirical literature review, this study looked at a variety of worldwide and local investigations. In relation to board characteristics practices on ROA, global studies have likewise revealed a mixed bag of findings. Palaniappan (2017) revealed that director's number and CEO duality is connected inversely with organization's performance. While Assenga et al (2018) discovered that CEO/chairperson functions and director' characteristics impacted in a positive way financial performance.

Locally, there is contextual concept since many scholars excluded other financial sectors listed at NSE. This research aims to close the gap. The Kenyan studies likewise look into the link between board traits and financial success, but none of them focus on publicly

traded financial institutions. This creates weakness in reviewed researches, which this article aims toward filling by answering; how does board characteristics affect financial performance of publicly traded financial institutions?

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The study design, the research population, and the procedure for collecting research data, as well as the testing of assumptions using diagnostic tests and the procedures for evaluating the acquired research data, are all covered in this chapter.

3.2 Research Design

It is the general strategy for integrating the numerous processes of a research in a clear and comprehensive method, ensuring that scholarly goal is effectively communicated (Sekaran & Bougie, 2011). A descriptive design was put into use in this paper. Such design is appropriate when the overall goal is to see if at some point in time, there is a substantial relationship between variables. Primary goal of this kind of research is to give valuable information on the characteristics of a population or phenomenon (Upagade & Shende, 2012).

3.3 Target Population and Sample Design

A population denotes that the entire set of data on which the study was done was examined (Sekaran & Bougie, 2011). Between January 1, 2015, and December 31, 2019, the research population was composed of the quoted NSE 21 financial institutions from various sectors, as detailed in Appendix 1. A census technique is one in which the cumulative total of the components of the populace are included in the study. The census technique has the advantage of increasing the degree of precision and reliability. Because the study's population is tiny, the census method was used (Mugenda, 2003). Banking, insurance, investment services, and real estate are some of them.

3.4 Data Collection

Researcher relied entirely on information derived from secondary sources. Statistics were gathered from yearly reports of publicly traded institutions, which were collected from the Kenyan Capital Markets Authority and the companies' websites. The data was gathered in a five-year period from 2015 to 2019. For each period, particular data such as net revenue

and total assets were collected. Other corporate reports supporting the annual reports provided data on the predictors.

3.5 Diagnostic Tests

The researchers used a normality for independent variables, as well as an autocorrelation test and a multicollinearity.

3.5.1 Linearity Test

The linearity assumption states that the outcome/dependent variable and the independent variables have a linear relationship. This means that a standard deviation can only predict the link between dependent and independent variables with accuracy if the relationship is linear. This test was used to assess whether or not the connection is linear. This is critical because linear relationships between dependent and independent variables can only be reliably estimated using conventional multiple regression (Williams, Grajales, & Kurkiewicz, 2013). The data was tested for linearity using the Ramsey reset test. The relationship between the independent variables is said to be linearly dependent if the p-value for the divergence from linearity is greater than 0.05.

3.5.2 Test for Normality

Normality is carried out since it's impossible to make accurate and truthful inferences when it's assumed that the populace from which the sample is drawn is false. The residuals of the observed variables should be regularly scattered, with the mean and median being equal (Garson, 2012). Shapiro-Wilk test of normality was employed to determine whether the distribution is normal.

3.5.3 Test for Multicollinearity

When independent variables in a study have a high degree of correlation, this is known as multi - collinearity. The model is judged to have severe multi - collinearity if a predictor variable has a collinearity of higher than 0.8 (Khan, 2012). Presence of multicollinearity in a time series can prevent the analysis from coming up with reliable estimates of individual coefficients of independent variables. Based on Cooper and Schindler (2006), Overstated estimators result from high correlation which can be deceptive for policy and forecasting

reasons. Variance Inflation Factor (VIF) was used in this study. A score higher than 10 indicates multicollinearity problems (Khan, 2012).

3.5.4 Test for Heteroscedasticity

The heteroscedasticity test is used to see if the error term dispersion has remained constant over time. A study with the same dispersion is said to be homoscedastic. The test was carried out to see how much variance there was in the residuals of the regression model that would be utilized in the research. One of the key assumptions of OLS is that the error term should change with time. The Breusch Pagan Test was used to conduct the test.

3.5.5 Autocorrelation Test

Independence of residual assumes that serial independence exists among the residuals (no autocorrelation) (Hoffman, 2010). When the residuals are not independent of one another, autocorrelation arises. Autocorrelation happens when explanatory variables are removed, the mathematical form of the model is miss-specified, statistical observations are interpolated, and the real error is miss-specified; the disturbance term may be auto correlated since it contains measurement errors. Wool ridge test statistics were used to test autocorrelation.

3.6 Data Analysis

The descriptive approaches will be utilized to assess quantitative data that had been gathered. To characterize the essential characteristics of data descriptive analysis is used. The panel regression was utilized to determine connection among variables. The firm's performance (dependent variable) was represented by ROA, whereas the study's independent factors were board composition, size, and diversity. SPSS 26 software was used to generate the statistics.

3.6.1 Analytical Models

The numerical equation is shown in this investigation to be;

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

Y_{it} represents financial performance measured using ROA

X_{1it} is the board size as calculated by number of directors in firm

X_2 is the composition of board as calculated by ratio of independent and dependent directors in firm

X_3 is the diversity of the board calculated by the percentage of women members to all the board members in firm

X_4 is the firm size which has been measured by logarithm of assets in firm i at time t

β_0 is the constant term when all independent variables are held constant

β_1 - β_4 is the coefficients of independent variables

ε_{it} is the composite error term

3.6.2 Operationalization of the Variables.

Table 3.1: Operationalization of the Variables

Variables	Description	Supporting Literature	Measurement
Financial Performance	It is the indicators of a company's financial health that allow for cross-industry comparisons or industry comparisons	Zabri, Ahmed & Wah (2016) Rasheed & Nisah (2018) Robin, Salim & Bloch (2018)	Return on Assets (ROA)
Board Size	This refers to the number of directors who sit on the board	Lipton (1992); Yermack (1996); Herrero (2018)	Total number of board members
Board Composition	It refers to the proportion of non-executive directors on the board	Borlea (2017); Abdi (2018)	Proportion of non-executive directors divided by total number of directors on the board
Board Gender Diversity	Proportion of woman directors by total number of directors on the board	Lofti & Malgharni (2013); Wang (2014); Assenga, Aly & Hussainey (2018)	measured using the ratio of women directors to total directors
Firm size	Firm total assets	Carr et al, (2010)	Natural log of total assets

3.6.3 Test of Significance

To assess the model's statistical fit, the F-test was utilized, while the T-testing was put to the test in the specific importance of various variables. They were utilized to check for the

substantial variance in descriptive statistics measurements and hypotheses development.
To confirm the data, we produced a 95% confidence interval.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND INTERPRETATIONS

4.1 Introduction

The interpretations, which were driven through research objectives and the results reported in the tables below, are presented in this chapter. The chapter included data analysis and discussion of results.

4.2 Descriptive Statistics

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Y= ROA	105	-30.2582	9.55	0.959747	4.884875	-3.661	0.236	19.377	0.467
X1 = Board Size	105	5	16	9.76	2.255	-0.077	0.236	0.201	0.467
X2 = Board Composition	104	0.25	12	2.970971	2.137846	1.688	0.237	3.57	0.469
X3 = Diversity	105	0	55.5556	22.58494	10.36627	0.32	0.236	0.166	0.467
X4 = Firm Size	105	5.2825	8.9536	7.796275	0.856761	-1.255	0.236	1.24	0.467
Valid N (list wise)	104								

Table 4.1: Descriptive statistics

Outcomes reveal that financial performance (Y) had a minimum and maximum of -30.258% and 9.550% respectively. Financial performance also showed an average of 0.9597 and SD of 4.8849. The results further indicate that the average board size (X1) was 9.76 with the smallest board having 5 members and the largest one having 16 directors. The board size displayed a standard deviation of 2.2554%. The average board members are 10 but didn't vary much across the firms. The discoveries reveal that the mean value of composition of board (X2) is 68.7139% with 20 and 100 being the least and highest values respectively. Board composition varied at 14.6376%. This shows that more than 68% of the directors in listed firms in Kenya are non-executive directors but varied across the firms.

Board diversity (X3) averaged at 0.2258 with 0 and 0.5556 being the minimum and maximum values. This is an indication that women ratio in boards is 0.2 which means female directors are fewer in most boards of listed firms in Kenya. The standard deviation was 0.1037 which shows that the board diversity did not vary much across the firms. On the other hand, the mean firm size in terms of assets (X4) during (2015-2019) was 7.796 with a variance standing at 0.8568. Firm size also showed the least log was at 5.2825 with 8.9536 as highest.

4.3 Diagnostic Tests

4.3.1 Linearity Test

Regression analysis assumes that variables have a linear relationship. To test this, scatter graphs were plotted to note any linearity in the plots. A line of best fit was also fitted to assist. The P-P plot follows the diagonal line to indicate linearity.

As shown the below figure, the independent variables were found to be linearly related with the dependent variable (ROA).

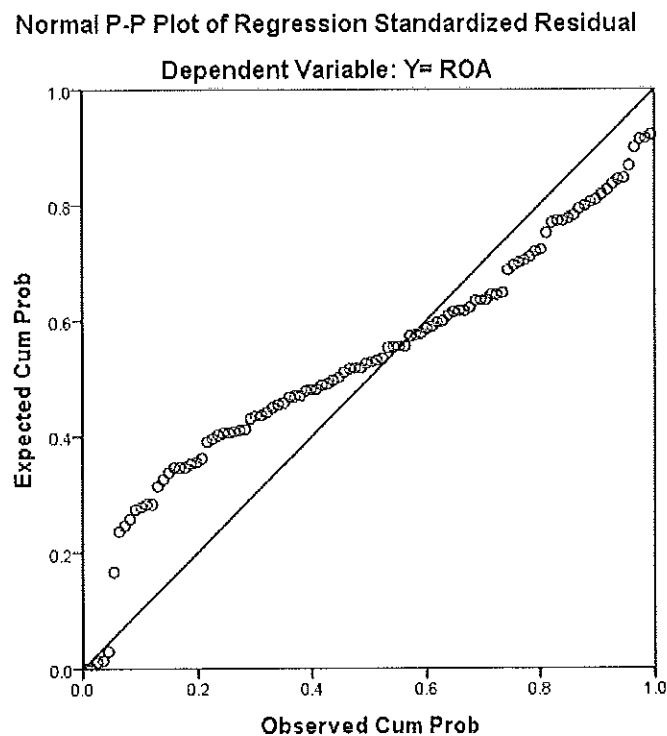


Figure 4.1: Linearity Test

4.3.2 Normality Test

Shapiro-Wilk Test reveal that only Board diversity and Board size are greater than 0.05 and therefore normal. The others were not normally distributed and therefore the study used their standardized values to normalize them

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Y= ROA	0.25	104	0	0.651	104	0
X1 = Board Size	0.146	104	0	0.964	104	0.071
X2 = Board Compositi on	0.148	104	0	0.854	104	0
X3 = Diversity	0.108	104	0.005	0.983	104	0.212
X4 = Firm Size	0.134	104	0	0.882	104	0

a. Lilliefors Significance Correction

Table 4.2: Normality Test

Normality

4.3.3 Test for Multicollinearity

Table 4.2: Multicollinearity Test

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-9.552	4.261		-2.241	0.027	
	X1 = Board Size	0.49	0.225	0.226	2.179	0.032	0.83
	X2 = Board Composition	0.253	0.245	0.11	1.034	0.304	0.786
	X3 = Diversity	0.062	0.05	0.131	1.241	0.218	0.801
	X4 = Firm Size	0.459	0.615	0.08	0.746	0.457	0.77

a. Dependent Variable: Y= ROA

VIF was used to test for multi-collinearity in the variables. The results show VIF of 1.2 which is less than 10 indicating no multi-collinearity observed.

4.3.4 Test for Heteroscedasticity

The test for heteroscedasticity was done by plotting a graph of standardized predicted and residual values. Scatter points around zero were observed. As can be deduced in figure 4.2, the plots are distributed around the line. This shows that the data does not suffer from heteroscedasticity.

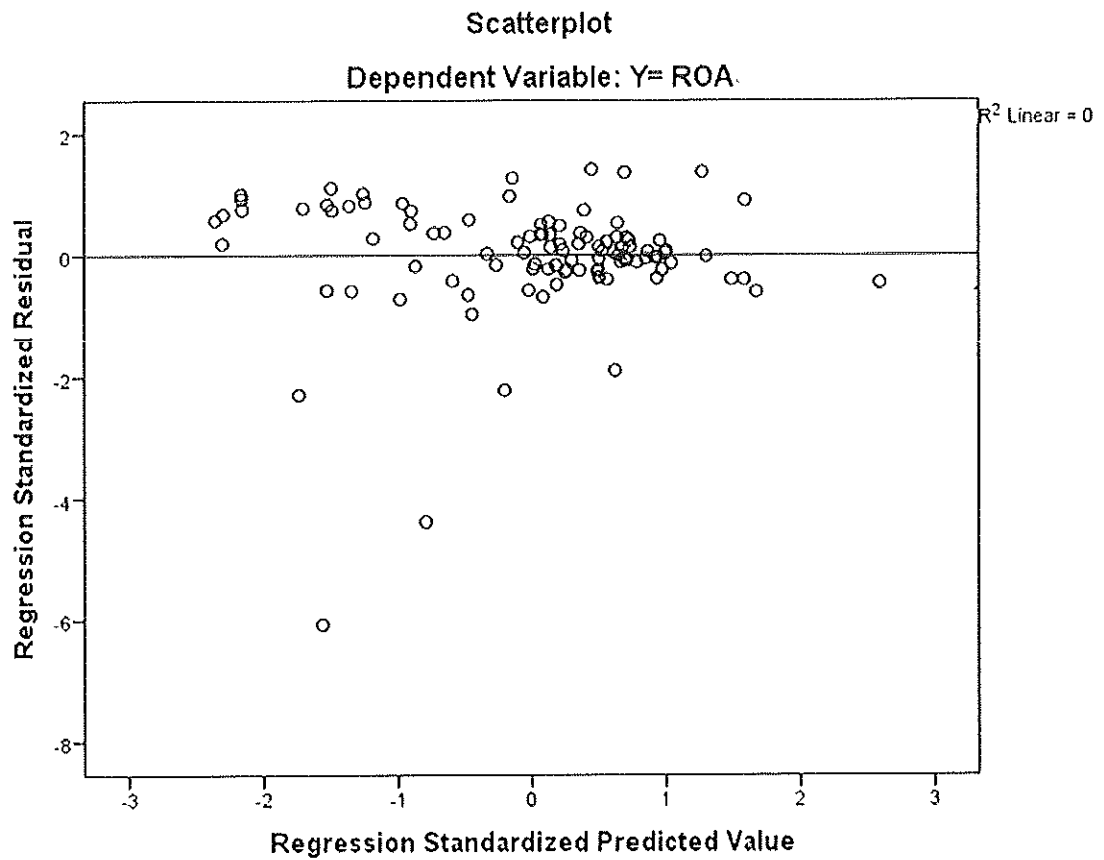


Figure 4.2: Heteroscedasticity

4.3.5 Test for Autocorrelation

Durbin Watson test is utilized to test for autocorrelation. The results were below 2 indicating there were no autocorrelations. The score was 0.628 indicating a slight positive autocorrelation but since it was below the threshold hence no adjustment was made. The table below shows the Durbin Watson test.

4.4 Correlation Analysis

Model	Std. Error of the Estimate	Durbin-Watson
1	4.712194	0.628

Table 4.5: Autocorrelation

Autocorrelation

Pearson correlation coefficient was adopted to determine the correlation among the model variables. If variables were related, they could influence each other.

	Y= ROA	X1 = Board Size	X2 = Board Composition	X3 = Diversity	X4 = Firm Size
Y= ROA	1				
X1 = Board Size	.289**	1			
X2 = Board Composition	0.133	.219*	1		
X3 = Diversity	0.126	0.062	-.334**	1	
X4 = Firm Size	.219*	.384**	.208*	.217*	1

Table 4.6: Correlation Analysis

According to the findings, ROA had a positive correlation with all variables, with board size the coefficient was 0.289, with board composition it was 0.133 and with diversity the coefficient was 0.126 while ROA and firm size had a coefficient of 0.219. Also observed was the negative correlation between diversity and board composition with a negative coefficient of -0.334 hence indicating that an increment in one factor lead to a decline in

the other factor. As all independent variables had a positive correlation with ROA hence an increment in the independent variables lead to an increment in ROA.

4.5 Regression Analysis

Regression was undertaken to determine the equation that links the independent variables to the dependent variables. ANOVA test was also done to identify the significance of the model.

To determine the degree of influence the independent variables had on dependent variables, R square was determined.

Table 4.3: Model summary results table

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.338 ^a	0.114	0.078	4.712194

a. Predictors: (Constant), X4 = Firm Size, X2 = Board Composition, X1 = Board Size, X3 = Diversity

b. Dependent Variable: Y= ROA

As shown in the above table, the model is only able to explain 11.4% of the changes in financial performance as R square is 0.114. This indicates there exists other variables that constitute the 88.6% change in ROA.

Table 4.8: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	283.367	4	70.842	3.19	.016 ^b
	Residual	2198.27	99	22.205		
	Total	2481.64	103			

a. Dependent Variable: Y= ROA

b. Predictors: (Constant), X4 = Firm Size, X2 – Board Composition, X1 = Board Size, X3 = Diversity

Significance was tested by use of ANOVA. The test had a p-value of 0.016 which was significant. This indicates the predictor variables can reliably be utilized to predict ROA. The results are as indicated in Table 4.8 above.

Table 4.9: Regression test results table

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-9.552	4.261		-2.241	0.027
	X1 = Board Size	0.49	0.225	0.226	2.179	0.032
	X2 = Board Composition	0.253	0.245	0.11	1.034	0.304
	X3 = Diversity	0.062	0.05	0.131	1.241	0.218
	X4 = Firm Size	0.459	0.615	0.08	0.746	0.457

a. Dependent Variable: Y= ROA

Regression results indicate what remains the constant in the equation linking the dependent and independent factors is -9552. The regression findings also show that all independent

variables had positive coefficients with Board Size at 0.490, Board Composition at 0.253, Diversity at 0.062 and Firm size at 0.459. With only Board size with a moderately high coefficient, the rest of the variables had small coefficient concluding that they have a small impact on ROA but not small to be ignored. Looking at their p-values, Board size only had a low p value hence significant while the rest of the variables had high p-values and hence their effect is insignificant. Board Size had a coefficient of 0.490 hence indicating that for every unit increment in Board Size, there is a similar increment in ROA by 0.490 units while a unit increment in Board Composition results into a 0.253 increase in ROA.

As regards to their significance, both board composition, diversity and firm size are insignificant at 95% confidence level. Their p-values are 0.304, 0.218 and 0.457 for board composition, diversity and firm size respectively as shown in Table 4.9. These significance levels show that the three factors have insignificant relationships with ROA and are not very critical in influencing the levels of ROA in firms.

From the following tables, the regression equation derived is as follows;

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

Was fitted into

$$Y_{it} = -9.552 + 0.490X_{1it} + 0.253X_{2it} + 0.062X_{3it} + 0.459X_{4it}$$

4.6 Discussion of Research Findings

As per the discoveries, a positive relationship exists between size of company's board and financial performance. This suggests that the size of a company's board of directors influences its financial performance positively and an increment in size results into an increment in ROA. The findings concur with those of Kiragu (2018) who discovered that board size influenced financial performance directly.

The study discovered a direct and statistically significant link between composition of a company's board and its financial performance as evaluated by ROA. This research implies that increasing non-executive directorship on a company improves its financial metrics. The findings concur with those of Iqbal (2016) and Osiako (2017) who found that board

composition directly affects firm financial performance. The findings, however, differ with the findings of Martin and Herrero (2018) who established a negative relationship.

The study discovered a substantial and statistical significance link between board diversity and ROA. This suggests that when the number of women on boards of directors grows, the financial performance of publicly traded companies improves in terms of ROA. The results support the findings of Assenga, Aly, and Hussainey (2018), who found a positive association. The results contradict those of Abdi (2018), who discovered a negative association.

The findings also found that size of the firm had a positive effect and relationship with the financial performance (ROA). This means that firms which are large enjoy higher performance compared to small firms. The findings concur with those of Alghusin (2015) who discovered a positive effect on financial performance.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Summarization of the results, suggestion of a conclusions, and recommendations is done in this part of the paper. Furthermore, the chapter contains proposals that policymakers might use to boost business value. Finally, this chapter makes recommendations for future empirically instigated research.

5.2 Summary of the Findings

The purpose of the researcher geared towards seeing if there was any link between financial performance and board characteristics in publicly traded financial organizations. The population for the study included 21 financial companies quoted at the NSE between 2015 and 2019. From 2015 to 2019, historical information was reviewed. The study gathered complete data from 21 businesses that had been in operation during the period of study.

The findings revealed average financial performance (Y) was 0.9597%. The board size average (X1) across the sampled organizations was approximately 10 (9.762) with the smallest board having 5 members and the largest one having 16 directors. Board composition (X2) mean was 2.97. The findings displayed board diversity (X3) as averaging at 0.2258% with 0 and 0.5556 being the minimum and maximum values. On the other hand, the mean firm size in terms of assets (X4) was 7.796.

The study established that board characteristics and firm size expounded 11.4% of the total variance in the financial performance of listed firms between 2015 and 2019. This meant that board characteristics as well as the company's size, were drivers of financial success of financial institutions listed between 2015 and 2019. The study discovered that between 2015 and 2019, board characteristics and business size had a slight beneficial effect on return on assets of financial institutions listed on the NSE, according to the regression analysis. The findings indicated that board characteristics and business size had a substantial positive link with financial performance in the correlation results.

5.3 Conclusions

From the regression results an R^2 value of 0.114 was computed that lead to the conclusion that 11.4% of the variation in financial performance for financial institutions was as a consequence of the independent and controlling variables.

The findings showed a mean of 10 directors for size of board. Therefore, the constituent number of directors in financial institutions in Kenya averages at 10 directors. The findings established there exist a positive relationship between board size and financial performance. This research, therefore, concludes that a positive relationship exists between board size and financial performance of financial institutions listed in Kenya.

According to the findings, the board of director's composition has a substantial incremental connection with financial performance. As a result, the financial performance of listed financial institutions has a positive link with board composition, according to this research. Regression showed that board composition had an effect on ROA. This leads to the conclusion that board composition in listed financial institutions, has an effect on their financial performance.

On board diversity, the findings showed that board diversity had a positive regression coefficient. This leads to the conclusion that board diversity has an impact on the financial performance of financial institutions listed at the NSE. The discoveries indicate that the diversity of the board had a significantly positive relationship with ROA. As a result, this study finds that conclusively, board diversity at financial institutions listed on the NSE directly influence performance metrics relating to the financial aspect.

5.4 Recommendations

According to outcomes, the board of directors' size has directly positive impact on financial performance. Hence, researcher recommends that financial institutions increase their board size for the purpose of enhancing their financial performance. Financial institutions listed at the NSE should ensure that they have at least 10 directors in the board which would positively affect their performance.

The findings showed that board composition positively affected financial performance. This study recommends that financial institutions enlarge the number of directors who are

not executive in their boards as directors who are not executive would bring more expertise and study shows this improves ROA. The non-executive directors check on the way the executive directors execute their duties which enhances the overall board efficiency and hence their performance.

The findings revealed that board diversity had a positive impact on financial performance of listed financial institutions. Therefore, it is recommended that listed financial institutions in Kenya increase the number of women in their boards. This would enhance their financial performance as the women are assumed to enhance board efficiency and performance. Hence company boards are encouraged to come up with policies that will improve board diversity.

Firm size showed a direct influence on financial performance. Hence, for listed financial institutions in Kenya to improve on their financial performance, increment of their assets is essentially required. With the above recommendations, managers in financial companies will be assisted to make better decisions in the future. This will help people make informed decisions and will assist in picking board members for a greater effect on financial success.

5.5 Limitations of the Study

A five-year span between 2015 and 2019 was covered. This indicates that the results may vary depending on whether the analysis is conducted over an extended time period, such as ten years. As a result, the analysis was restricted to the research period.

The study was further constrained by the data's authenticity. Despite the fact that the data was obtained from NSE, the researcher found it impossible to verify the accuracy of the information presented. Secondary sources of information were utilized, which cannot be claimed to be fully representative because it was derived from annual audited financial statements, which are limited in terms of information disclosed to the public, and a mixture of secondary sources and primary data could probably reveal otherwise.

The sampled population of the research was on 21 financial firms quoted at NSE. The number may not be representative of all firms hence limiting the outcomes to that specific sector. The board characteristic aspects under study were 3 namely; board size, board

diversity and board composition hence an increase in the number of variables would shift the findings.

5.6 Suggestions for Further Research

The researchers carried out an investigation over a five-year period (2015 to 2019). The study suggests that a comparable study be done over a period based on more years. This would allow the reader to examine and contrast the data on the impact of board qualities on ROA.

The research was based on three board characteristics factors. According to the findings, other board factors that affect the ROA should be considered. The paper suggests that a study be conducted on all publicly traded companies other than financial institutions. This would improve the findings' generalizability.

The study was conducted on the Nairobi Stock Exchange in Kenya, and it suggests that a similar study be conducted on non-listed financial enterprises, as most of those markets are emerging countries. The reader will be able to compare different markets based on the financial sector as a result of this.

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APPENDICES

Appendix 1: List of Financial Firms Listed at Nairobi Securities Exchange

1. Barclays Bank Ltd
2. Britam Holdings Ltd
3. Centum Investment Co Ltd
4. CIC Insurance
5. Diamond Trust Bank
6. Equity Group Holdings
7. HF Group Ltd
8. Home Afrika Ltd
9. I&M Holdings Ltd
10. Jubilee Holdings Ltd
11. KCB Group Ltd
12. Kenya Re-Insurance
13. Liberty Kenya Holdings Ltd
14. National Bank of Kenya Ltd
15. NIC Group PLC
16. Olympia Capital Holdings Ltd
17. Sanlam Kenya PLC
18. Stanbic Holdings Plc.
19. Standard Chartered Bank
20. The Co-operative Bank
21. Trans-Century Ltd

Appendix II: Data Collection Sheet

Year	Number of Directors	Non-executive directors	Number of Women in the Board	Total assets	Profit after Tax
				Shs. '000	Shs. '000
2015					
2016					
2017					
2018					
2019					

Appendix III: Data

Company	Year	Number of Directors	Non-executive directors	Number of Women in the Board	Total assets	Profit after Tax
					Shs. '000	Shs. '000
Barclays Bank Ltd	2015	9	5	3	240,877,000	8,401,000
Barclays Bank Ltd	2016	9	5	3	259,718,000	7,111,000
Barclays Bank Ltd	2017	9	5	4	271,572,000	6,679,000
Barclays Bank Ltd	2018	10	5	4	325,313,000	7,144,000
Barclays Bank Ltd	2019	10	6	4	374,904,000	7,161,000
Britam Holdings Ltd	2015	8	6	1	77,632,352	-1,009,458
Britam Holdings Ltd	2016	9	5	2	83,642,609	2,480,204
Britam Holdings Ltd	2017	9	6	2	99,024,857	527,474
Britam Holdings Ltd	2018	9	6	3	103,656,332	-2,210,285
Britam Holdings Ltd	2019	12	8	4	125,243,565	3,542,625
Centum Investment Co Ltd	2015	9	7	2	72,231,387	4,866,921
Centum Investment Co Ltd	2016	9	8	2	83,642,609	2,480,204
Centum Investment Co Ltd	2017	11	9	2	99,024,857	527,474
Centum Investment Co Ltd	2018	10	7	3	96,288,084	1,041,253
Centum Investment Co Ltd	2019	10	8	4	101,763,653	742,866
CIC Insurance	2015	12	9	3	24,920,235	1,136,604
CIC Insurance	2016	12	8	3	26,826,686	188,185
CIC Insurance	2017	12	9	3	30,505,376	478,473
CIC Insurance	2018	14	11	2	33,046,419	480,943

CIC Insurance	2019	15	13	2	35,303,070	321,519
Diamond Trust Bank	2015	11	7	2	386,230,186	6,785,603
Diamond Trust Bank	2016	11	8	3	377,719,314	6,686,612
Diamond Trust Bank	2017	11	8	3	363,303,400	6,449,811
Diamond Trust Bank	2018	11	7	2	328,044,501	7,173,939
Diamond Trust Bank	2019	11	7	3	271,608,597	5,912,082
Equity Group Holdings	2015	10	6	3	428,062,000	10,467,000
Equity Group Holdings	2016	10	6	2	473,713,000	11,470,000
Equity Group Holdings	2017	10	7	3	524,465,000	8,123,000
Equity Group Holdings	2018	10	7	2	573,384,000	10,547,000
Equity Group Holdings	2019	9	6	2	673,682,000	12,263,000
HF Group Ltd	2015	7	5	2	71,659,434	1,196,969
HF Group Ltd	2016	7	5	1	71,930,140	225,655
HF Group Ltd	2017	9	7	3	67,541,116	183,689
HF Group Ltd	2018	9	7	3	60,588,226	41,502
HF Group Ltd	2019	9	6	3	56,454,917	-34,314
Home Afrika Ltd	2015	7	4	1	3060900	-390,091.34
Home Afrika Ltd	2016	7	5	1	3,930,011	-168,458
Home Afrika Ltd	2017	7	5	2	4,477,828	-181,435
Home Afrika Ltd	2018	9	7	2	4,502,462	-130,115
Home Afrika Ltd	2019	10	7	2	4,347,808	-188,589
I&M Holdings Ltd	2015	9	6	1	191,657	7,145
I&M Holdings Ltd	2016	9	7	1	210,542	7,759
I&M Holdings Ltd	2017	9	7	1	240,111	7,264
I&M Holdings Ltd	2018	10	6	2	288,522	8,504
I&M Holdings Ltd	2019	10	5	2	315,291	10,769
Jubilee Holdings Ltd	2015	11	9	1	82,378,010	3,121,093

Jubilee Holdings Ltd	2016	10	9	1	90,567,743	39,674
Jubilee Holdings Ltd	2017	9	9	2	104,967,530	911,319
Jubilee Holdings Ltd	2018	10	7	2	114,189,212	1,219,559
Jubilee Holdings Ltd	2019	10	6	2	130,076,938	6,894,773
KCB Group Ltd	2015	12	9	2	558,094,000	19,623,000
KCB Group Ltd	2016	11	9	1	595,240,000	19,723,000
KCB Group Ltd	2017	10	8	2	646,668,000	19,704,000
KCB Group Ltd	2018	11	9	2	714,313,000	23,995,000
KCB Group Ltd	2019	11	8	1	898,572,000	25,165,000
Kenya Re-Insurance	2015	13	8	5	35,954,134	3,433,619
Kenya Re-Insurance	2016	12	9	3	38,494,000	3,287,284
Kenya Re-Insurance	2017	11	8	3	42,733,000	3,577,340
Kenya Re-Insurance	2018	11	9	2	44,363,000	2,278,282
Kenya Re-Insurance	2019	11	10	3	50,361,000	3,966,379
Liberty Kenya Holdings Ltd	2015	5	4	0	34,533,690	736,050
Liberty Kenya Holdings Ltd	2016	5	4	0	35,097,953	627,834
Liberty Kenya Holdings Ltd	2017	6	5	0	37,338,972	674,573
Liberty Kenya Holdings Ltd	2018	7	6	1	36,579,039	549,526
Liberty Kenya Holdings Ltd	2019	7	4	2	38,221,854	740,393
National Bank of Kenya Ltd	2015	8	7	1	121,367,000	-11,942,001
National Bank of Kenya Ltd	2016	11	9	2	112,086,000	56,000
National Bank of Kenya Ltd	2017	9	8	1	109,873,000	549,500
National Bank of Kenya Ltd	2018	9	8	1	114,850,000	-1,153,477
National Bank of Kenya Ltd	2019	11	9	2	115,292,392	162,190
NCBA Group PLC	2015	12	10	2	165,779,268	4,485,125

NCBA Group PLC	2016	6	4	1	169,458,985	4,330,396
NCBA Group PLC	2017	6	3	1	206,172,462	4,144,418
NCBA Group PLC	2018	15	11	3	245,106,892	4,228,370
NCBA Group PLC	2019	16	12	1	494,717,416	7,754,112
Olympia Capital Holdings ltd	2015	5	2	1	1,531,409	-29,551
Olympia Capital Holdings ltd	2016	6	2	1	1,527,522	14,834
Olympia Capital Holdings ltd	2017	6	2	2	1,638,796	38,848
Olympia Capital Holdings ltd	2018	5	1	1	1,658,883	-3,488
Olympia Capital Holdings ltd	2019	5	2	1	1,626,599	5,743
Sanlam Kenya PLC	2015	8	5	3	27,109,000	-62,000
Sanlam Kenya PLC	2016	10	6	3	28,443,000	90,000
Sanlam Kenya PLC	2017	11	5	3	29,811,000	31,000
Sanlam Kenya PLC	2018	12	5	4	29,102,000	-2,017,000
Sanlam Kenya PLC	2019	12	6	3	29,027,000	113,000
Stanbic Holdings Plc.	2015	11	9	3	208,452,000	4,906,000
Stanbic Holdings Plc.	2016	10	8	3	214,683,000	4,419,000
Stanbic Holdings Plc.	2017	10	7	4	248,739,000	4,309,000
Stanbic Holdings Plc.	2018	9	7	4	290,570,000	6,277,000
Stanbic Holdings Plc.	2019	9	6	5	303,625,000	6,381,000
Standard Chartered Bank	2015	9	5	3	233,966,000	6,342,000
Standard Chartered Bank	2016	10	5	3	250,482,000	9,049,000
Standard Chartered Bank	2017	12	6	4	285,724,000	6,914,000

Standard Chartered Bank	2018	11	5	4	285,404,000	8,099,000
Standard Chartered Bank	2019	10	6	4	302,138,000	8,237,000
The Co-operative Bank	2015	11	9	2	342,500,000	11,706,000
The Co-operative Bank	2016	12	10	2	351,828,577	13,051,564
The Co-operative Bank	2017	13	11	1	386,857,657	11,635,530
The Co-operative Bank	2018	13	11	2	413,670,710	12,732,486
The Co-operative Bank	2019	13	12	3	457,092,986	14,311,248
Trans-Century Ltd	2015	11	5	1	21,817,981	-434,889
Trans-Century Ltd	2016	13	7	1	18,911,552	-335,160
Trans-Century Ltd	2017	7	5	1	18,740,964	-755,553
Trans-Century Ltd	2018	8	5	2	16,668,181	-3,502,623
Trans-Century Ltd	2019	7	4	1	13,006,484	-3,935,529