BOARD CHARACTERISTICS AND EARNINGS QUALITY OF NON-FINANCIAL FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE, KENYA

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DOCTOR OF PHILOSOPHY

(Accounting)

JOMO KENYATTA UNIVERSITY

OF

AGRICULTURE AND TECHNOLOGY

2023

Board Characteristics and Earnings Quality of Non-Financial Firms Listed at Nairobi Securities Exchange, Kenya

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A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy in Accounting of the Jomo Kenyatta University of Agriculture and Technology

2023

DECLARATION

This thesis is my original work and has not been presented for a degree in any other University

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DEDICATION

I dedicate this thesis to my father and mother who with such a love took care of me when I arrived. The two Nahashon Thuo and Tabitha Wairimu made their sacrifice, it is their achievement. My children deceased Maurice who would say let us seat and reason; Anthony, Edwin, Dorothy, Humphrey and Mary, and finally but not least their mother Nancy life would not have been meaningful without them.

ACKNOWLEDGEMENTS

God's Grace was necessary for every aspect of this endeavor; otherwise, it would not have been possible. I am grateful to God for granting me the ability to complete this task. The constant guidance and support provided by Dr. Tabitha Nasieku, Prof. Willy Muturi, and Dr. Oluoch Oluoch in ensuring that this work meets the required standards are gratefully acknowledged and thanked. I want to express my heartfelt gratitude to my family for being by my side throughout this process and providing me with the support I required. Sincere thanks to my colleagues at Jomo Kenyatta University of Agriculture and Technology for their concern, support, and encouragement to continue this challenging transition. They were always willing to answer the countless questions I had in my quest to ensure that this work made a positive contribution to academia and the accounting profession, which they did with enthusiasm. May God continue to bless you all!.

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LIST OF ABBREVIATIONS AND ACRONYMS

ASE	Amman Stock Exchange.
BDL	Bharat Dynamics Limited
BSE	Bombay Stock Exchange
CBK	Central Bank of Kenya
CG	Corporate Governance
CEO	Chief Executive Officer
CFO	Cash Flow from Operations
CMA	Capital Markets Authority
CMC	Cooper Motor Corporation
DCI	Disclosure Check Index
DEP	Depreciation and Amortization Expense
ERM	Enterprise Risk Management
FRQ	Financial Reporting Quality
GAAP	Generally Accepted Accounting Principles
ICPAK	Institute of Certified Public Accountants of Kenya
IFRS	International Financial Reporting Standards
IPS	Im-Pesaran-Shin
KCMA	Kenya Capital Markets Authority
LLC	Levin Lin Chu

MCCG	Malaysian Code on Corporate Governance
MMR	Moderated Multiple Regression
NSE	Nairobi Securities Exchange
NYSE	New York Stock Exchange
OLS	Ordinary Least Squares
PPMC	Pearson Product Movement Correlation
R&D	Research and Development
ROA	Returns on Assets
ROE	Returns on Equity
SEC	Securities Exchange Commission
SOX	Sarbanes-Oxley Act
UK	United Kingdom
USA	United States of America
VIF	Variance Inflation Factor

OPERATIONAL DEFINITION OF TERMS

Accruals Quality This refers to the reliability and accuracy of the accruals recorded in a company's financial statements. It shows how much economic events are reflected in accruals, and it may be used to analyze how earnings are managed or manipulated (Tuovila, et al., 2021)

Audit Committee Independence This refers to the degree to which audit committee members are free from any affiliations that would limit their capacity to act independently and impartially in their oversight capacity. The size of the audit committee, the influence of non-executive directors, and the frequency of audit committee meetings are all indicators of audit committee independence in this study (Cheng, Dhaliwal, & Zhang, 2018)

Board Characteristics These refer to the attributes and composition of a firm's board of directors, including its size, diversity, independence, and expertise. In this study, the indicators for board characteristics include Board independence, Board size, gender diversity, and audit committee independence (Hermalin & Weisbach, 2018).

Board independence This refers to the extent to which a company's board of directors consists of individuals who are not affiliated with the company or its management. In the context of a study on the relationship between board characteristics and earnings quality in non-financial firms listed on the Nairobi Securities Exchange, board independence is an important factor to consider as it can influence the board's ability to exercise objective judgment and oversight (Eisenberg, Sundgren, & Wells, 2018). In this study, the indicators include board leadership structure, absence of

executive directors, and proportion of independent directors.

Board Size refers to the number of directors on a firm's board of directors. Indicators for board size in this study include total number of directors, percentage of independent directors, and board size concerning firm size. (Yermack, 2019).

Discretionary accruals These refer to the accounting adjustments made by a company's management that involve subjective judgment and discretion. They represent the difference between actual cash flows and the recognition of revenue or expenses in the financial statements (Dechow & Schrand, 2010).

Earnings Persistence This indicator measures the consistency of a firm's earnings over time. It can be quantitatively assessed by calculating the correlation coefficient between the current period's earnings and the earnings of previous periods (Dechow & Schrand, 2010).

Earnings Quality This refers to the degree to which a firm's reported earnings accurately reflect its underlying economic performance. It serves as a gauge of a company's financial statements' dependability and transparency, as well as how useful and informative the reported results are for making choices. Two measures of the quality of earnings are dividend yield and cash flow from operations (Dechow & Schrand, 2010).

Gender Diversity This refers to the representation of both males and females on the board of directors of non-financial firms listed on the Nairobi Securities Exchange. In this study,

the indicators for gender diversity include the Gender diversity index, Gender composition of executive positions, and gender representation in Board leadership positions (Campbell & Mínguez-Vera, 2018).

Ownership Concentration This refers to the distribution and concentration of ownership rights in a company among its shareholders. It reflects the extent to which ownership is concentrated in the hands of a few large shareholders or dispersed among a larger number of shareholders (García-Sánchez, et al. 2019). The indicators in this study cover both local and foreign ownership.

ABSTRACT

The characteristics of the board are important elements of corporate governance that are anticipated to enhance the earning quality. The board and its committees are separate from management and they oversee the company's management. Specifically, the board ensures that directors are accountable to shareholders, checkers against earnings manipulation increases investor confidence, and safeguard the interests of other stakeholders. The primary objective of this study was to examine the relationship between the board characteristics of non-financial firms listed on the Nairobi Securities Exchange and earnings quality. The study examines the effect of board size, audit committee independence, gender diversity, and board independence on earnings quality while examining whether ownership concentration as a moderating variable affects earnings quality. The study was founded on Agency Theory, Stakeholder Theory, Resource Dependency Theory, Positive Accounting Theory, and Expropriation Theory, among others; it was conducted using a positivist research philosophy and a quantitative research design. The study's target population was the 39 non-financial firms listed on the NSE as of 31st December 2020. The study used secondary data collected from financial statements for 13 years from 2008 to 2020. The data were analyzed for descriptive statistics such as means and standard deviation, and inferential statics such as Pearson correlations and regression analysis using the Statistical Package for Social Sciences (SPSS) version 7. The study on board characteristics and earnings quality in non-financial firms listed on the Nairobi Securities Exchange reveals a strong positive correlation between board size and accruals quality, emphasizing the significance of larger boards in determining financial reporting practices. The research highlights that non-financial firms listed on the NSE with a higher proportion of non-executive directors in the audit committee tend to exhibit improved accruals quality and lower discretionary accruals, underscoring the importance of an independent audit committee in enhancing financial reporting quality. The study demonstrates that gender diversity within boards of non-financial firms is moderate, and greater gender diversity is positively correlated with higher earnings quality, indicating the crucial role of gender diversity in influencing financial performance. The research finds that ownership concentration, particularly foreign ownership, is positively related to accruals quality and discretionary accruals, suggesting that higher foreign ownership is associated with better financial reporting quality and greater accounting discretion in non-financial firms listed on the NSE. However, ownership concentration does not significantly moderate the relationship between board characteristics and earnings quality. The researcher recommends that important to strike a balance and ensure that board size is proportionate to the company's size and operational needs. Firms should aim to have a sufficient number of members on their audit committees to effectively fulfill their oversight responsibilities. Companies can implement diversity initiatives, such as targeted recruitment and inclusive policies, to ensure a more balanced gender composition on their boards. Non-financial firms should prioritize the appointment of independent directors and foster a culture of collaboration and frequent interactions among them. Encouraging independent directors to engage in constructive discussions, share diverse viewpoints, and challenge management, when necessary, can enhance financial performance and transparency. Companies should ensure that the rights and interests of minority shareholders are protected, and governance

mechanisms are in place to mitigate any potential conflicts of interest that may arise from concentrated ownership.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Earnings quality is a critical aspect of financial reporting that reflects the reliability and relevance of reported earnings, providing insights into the true financial performance and sustainability of organizations (Yusoff & Alhaji, 2012). Accruals quality and discretionary accruals are two widely used indicators of earning quality that shed light on the extent to which reported earnings capture economic reality (Subramanyam, 2019). Studies have demonstrated that higher accruals quality is associated with greater future cash flows and improved long-term performance (Dechow et al., 2020). Moreover, high accruals quality reduces information asymmetry between firms and investors, leading to a lower cost of capital and increased market liquidity (Barth et al., 2019).

Earnings quality refers to the ability of a company's reported earnings to reflect its true financial performance. The quality of earnings can vary across different regions and countries. In Europe, the earnings quality of non-financial firms can vary depending on the country and industry. For example, a study by (Perotti & Windisch, 2014) Asiri, Manita, and Hussainey (2020) examined the earnings quality of non-financial firms in the United Kingdom and found that corporate governance mechanisms significantly influence earnings quality. Another study by Al-Shammari and Brown (2020) explored the relationship between ownership structure and earnings quality in European countries and found that concentrated ownership tends to improve earnings quality.

Earnings quality assumes a crucial role in mitigating these conflicts, as superior earnings quality, indicated by higher accruals quality and lower discretionary accruals, furnishes shareholders with dependable and pertinent information about a company's financial performance and sustainability (Subramanyam, 2019; Yusoff & Alhaji, 2012). The agency theory provides a suitable framework for comprehending the implications of earnings quality in financial reporting, underscoring the

relationship between shareholders and management and the potential conflicts stemming from differing goals and information asymmetry (Jensen & Meckling, 1976). Through effective accruals management, management can align their interests with shareholders, reducing information asymmetry, fostering trust, and ultimately leading to improved monitoring, decision-making, and firm performance over the long run (Dechow et al., 2020). Consequently, the agency theory underscores the importance of accruals quality and discretionary accruals in financial reporting, promoting a more robust principal-agent relationship between shareholders and management.

Research by Dechow et al. (2020) has demonstrated that higher accruals quality is associated with greater future cash flows and improved long-term performance. Additionally, high accruals quality reduces information asymmetry between firms and investors, leading to a lower cost of capital and increased market liquidity (Barth et al., 2019). Additionally, Huiskonen and Laine (2020) investigated discretionary accruals, which are estimates made by management that can affect reported earnings. They found that firms with lower discretionary accruals have higher earnings quality. These studies demonstrate the significance of both cash flow from operations and discretionary accruals in assessing earnings quality in European non-financial firms. These situations imply that improving accruals quality in non-financial firms can lead to enhanced future cash flows, improved long-term performance, reduced information asymmetry, lower cost of capital, increased market liquidity, and higher earnings quality through better management of discretionary accruals.

Studies such as Chirinko and Elston (2019) and García-Sánchez et al. (2019) in European countries found that firms with higher cash flow from operations tended to have higher earnings quality. The studies indicated that firms with higher earnings quality tend to generate stronger cash flows from their core operations, reflecting the reliability of reported earnings. A study by Báez et al. (2018) focused on discretionary accruals and found that European non-financial firms with lower levels of discretionary accruals exhibit higher earnings quality. These findings suggest that European companies with robust cash flows and lower discretionary accruals demonstrate higher earnings quality. This means that firms with higher cash flow

from operations are likely to have higher earnings quality in European countries, indicating a positive relationship between cash flow and the reliability of reported earnings.

Huang et al. (2020) investigation concentrated on the cash flow from activities and earnings quality in Asian nations. The results showed that cash flow from operations and earnings quality are positively correlated, indicating that non-financial enterprises in Asia with better cash flows often have superior earnings quality. Moreover, Huang et al. (2020) investigation concentrated on the cash flow from activities and earnings quality in Asian nations. The results showed that cash flow from operations and earnings quality are positively correlated, indicating that non-financial enterprises in Asia with better cash flows often have superior earnings quality.

Aier et al. (2020) centered a different investigation on the discretionary accruals and earnings quality in European nations. Their findings revealed that companies with superior earnings quality also had lower levels of discretionary accruals. The link between cash flow from operations and earnings quality in North American enterprises was examined in research by Bao et al. (2019). According to their research, companies with larger cash flow from operations typically had higher earnings quality. Another study by Agostini et al. (2020) examined the impact of discretionary accruals on earnings quality in Latin American firms. Their results suggested that firms with lower levels of discretionary accruals exhibited higher earnings quality.

According to a study by Smith (2015), which examined the earnings quality of non-financial firms in Europe, it was found that earnings manipulation through accruals is a prevalent issue. The study analyzed a sample of firms across multiple European countries and found a significant association between high accruals and lower earnings quality. Furthermore, (Jones, 1991) investigated the relationship between cash flow from operations and earnings quality in European non-financial firms. Their findings suggested that higher cash flow from operations was positively associated with better earnings quality, indicating that firms with stronger operating

cash flow tend to have more reliable earnings. Another study by Brown and Johnson (2021) focused on the average total assets and their impact on earnings quality in European non-financial firms. They discovered that larger firms with higher average total assets tend to have higher earnings quality due to the availability of more resources and better financial management practices.

Studies on the earnings quality of non-financial enterprises in various Asian nations have been conducted. For instance, Zhao et al. (2018) looked at the connection between earnings quality and cash flow from operations in Chinese companies. They discovered a strong correlation between operating cash flow and earnings quality. Singh et al. (2019)’s other on Indian businesses' discretionary accruals and earnings quality. They discovered that businesses with fewer discretionary accruals had better earnings quality. The implications of the studies in Asia suggest that non-financial firms with stronger cash flow from operations and lower levels of discretionary accruals tend to exhibit higher earnings quality, indicating the reliability and relevance of reported earnings in Chinese and Indian firms, respectively.

In Africa, research on the earnings quality of non-financial firms is relatively limited. However, a study by Ayob and Mohammed, (2020) examined the relationship between cash flow from operations and earnings quality in South African firms. Their findings suggested that firms with higher cash flow from operations exhibited higher earnings quality. Another study by Diaby and Dousso, (2020) investigated discretionary accruals and earnings quality in Nigerian firms. Their results indicated that firms with lower levels of discretionary accruals demonstrated higher earnings quality.

Cash flow structure is highly dependent on the business's operational structure, which in turn influences financial reporting. The earnings quality, which measures the reliability of a firm’s earnings for the current and future projections, is key in financial reporting since it affects investors’ decisions. The four main categories of measures for determining the quality of earnings are time-series measures (persistence, predictability), smoothness measures, accruals measures (abnormal accruals, accruals quality), and value relevance measures (Perotti & Windisch,

2014). For the current study, the earnings quality was determined by accruals quality and discretionary accruals. In the accrual quality literature, the (Dechow & Dichev, 2002; McNichols, 2002), and Francis et al. (2005) schools of thought have largely prevailed. McNichols's (2002) accrual quality metric captures the period-to-period mapping of working capital accruals to cash flows. Discretionary accruals reflect innovative accounting efforts and may refer to the deliberate manipulation of accruals to manage earnings and reflect a result that differs from the organization's actual financial position.

In financial reporting, accruals quality and discretionary accruals have been the subject of several researches (Perotti & Windisch, 2014; Richardson et al., 2001). There are two types of accruals: normal accruals and abnormal accruals, which indicate earnings for which cash has not yet been received (Johnston, 2009). Higher levels of aberrant accruals, which are frequently brought on by private information, suggest low earnings quality (Perotti & Windisch, 2014). However, anomalous accruals are seen to be less effective as a proxy for earnings quality criteria since they could not precisely represent market reaction. The discrepancy between the company's recorded earnings and cash from operations is another well-known statistic called accrual quality. (Richardson et al., 2001). Errors associated with accrual estimation can also determine accruals quality (Desai et al., 2006). A higher value from this model indicates poor earnings quality, while a lower value indicates high earnings quality (Dechow & Dichev, 2002; Dechow et al., 1995). This model is useful in testing for earnings management, which can affect the quality of earnings.

Doyle et al. (2007) argue that the type of accrual quality reflects managerial opportunism in manipulating accruals in earnings to portray financial performance in a preconceived manner. They point out that inherent accrual quality, on the other hand, results from unintentional errors inherent in the estimation of accruals for which no cash is received. Accounting and financial reporting are inherently subject to accrual estimation and other judgment errors. They arise due to the difficulties inherent in forecasting the uncertain future and the apparent limitations of financial information estimation tools (Doyle et al., 2007).

The directors are crucial in managing agency issues that may result in the management of earnings (Rose, 2005), accountability, and transparency, which have remained study topics that have not been well investigated, resulting in a gap. Corporate governance is centered on board characteristics, with directors and committees providing an oversight framework to safeguard investors' money and stakeholders' interests.

The board of directors, which oversees, manages, and gives strategic direction to the company's management, is the foundation of corporate governance (Brennan, 2006). Proposals for management are approved by the board of directors (Johnston, 2009). According to Zahra and Pearce (1989), the board's top priorities should be to maximize the company's earnings quality and fulfill its legal obligations as a fiduciary. When the board is competent, it can spot issues before they have a negative impact on the company's earnings (Solomon, 2007).

Several investigations on the function of the board of directors have been carried out, and they are congruent with the laws passed to control corporate management. According to Ogbechie (2012), the executive directors support the administration of the firm by defending the CEO's interests, who guides them and decides whether or not they remain with the company. According to M. C. Jensen (1993), board culture is crucial to a company's performance. The Enron, WorldCom, and HIH Extras corporate scandals, according to Mizruchi (2004) and Brick et al. (2006), have cast doubt on the qualities of a board that can successfully oversee management and assure accurate reporting. The management of Enron, WorldCom, and HIH engaged in accounting frauds that went undetected for an extended period, resulting in huge losses to shareholders and other stakeholders (Solomon, 2007). According to the Higgs Committee, independent directors should be drawn from outside the company's management. This resulted in dramatic change across the globe, with all regulators initiating corporate governance reforms. The Kenyan Code is in response to the global trend toward protecting both shareholders' and stakeholders' interests.

1.1.1 Earnings Quality and Accounting Information

Based on recent studies, the theoretical model of the information signaling theory can be applied to explain the strong correlation between earnings and the information contained in financial accounting reports (Connelly et al., 2010). Signaling theory explains how companies communicate their success or failure to owners, creating a distinction between those providing good information and those with poor past financial performance, influencing market trust in their future performance. The quality of earnings serves as a crucial signal that provides valuable information to potential investors and company shareholders during their decision-making process (Dechow et al., 2020). Aier et al. (2020) further support this notion, emphasizing that high-quality earnings act as a decision-making tool for investors, regulators, and shareholders. High-quality earnings in accounting data signal trust to decision-makers, aiding firms in adopting optimal business practices and improving the efficiency and effectiveness of financial markets (Madhumathi & Ranganatham, 2011).

International Financial Reporting Standards (IFRS), which seek to offer clear and comparable information in financial statements, are developed by the International Accounting Standards Board (IASB) (2023); Daines et al., 2010). These standards' goals are to make sure that information is accurate and to make it possible for decision-makers to use financial reports effectively (Shema, 2018). To increase the chance of attracting investment, maintaining good earnings quality is essential in limiting the broadcast of false information to external stakeholders and possible investors (Kruk et al., 2018). However, because of unethical business tactics, assuring earnings quality has grown difficult. Companies with a history of losses may resort to earnings management techniques to present a more favorable earnings picture, leading to a decline in earnings quality (Bowen et al., 2008). Such practices are detrimental as they limit the firm's prospects, reinforcing the need to address low earnings quality issues (Nguyen & Nguyen, 2021).

The issue of inconsistent financial statement results has sparked significant debate regarding corporate governance and earnings quality (Daines et al., 2010). Despite

extensive empirical research in this area, the findings have been inconclusive, creating an intriguing area for further investigation. In terms of the structural aspect, Cho and Chung (2022) found a positive association between board characteristics and earnings quality, while Alegab and Ighnaim (2022) established a negative relationship between board characteristics and earnings quality. In a study by Dichev, Graham, and Rajgopal (2019), it was demonstrated that intrinsic factors, including board characteristics, account for approximately half of the variation in earnings quality. These conflicting results, combined with the observation that companies can comply with the relevant securities exchange's Code requirements yet exhibit extreme accounting policies, highlight the need for more research to gain further insights into what affects the quality of earnings.

1.1.2 Board Characteristics and quality of accounting information: Global Perspective

The Agency Theory, which highlights the beneficial effect of independent boards on earnings quality, is in line with research conducted in Europe on board characteristics and the earnings quality of non-financial enterprises (Adams & Meziane, 2018; Canyurt & Yüksel, 2020). Board gender diversity has been shown to improve decision-making and raise the quality of earnings (García-Sánchez et al., 2019). Given accounting fraud and corporate governance failures, the crucial role of directors in addressing the agency problem is emphasized, leading to growing concerns about board efficacy and the need for optimal design (Zhai et al., 2019).

It is important to note that different nations have different viewpoints on the connection between board qualities and earnings quality. According to research conducted in Europe (Adams & Meziane, 2018; Canyurt & Yüksel, 2020), the size and independence of the board have a beneficial effect on the quality of earnings. In American research, board independence and diversity have been linked favorably to high-quality earnings (Chen et al., 2020; Yermack, 2017). Research in Asia has demonstrated the beneficial effects of board independence, diversity, and experience on the standard of earnings. (Ho et al., 2020; Zhai et al., 2019).

These variations in findings across different regions underscore the importance of considering country-specific factors and governance contexts when examining the relationship between board characteristics and earnings quality. It suggests that a one-size-fits-all approach may not be suitable, and specific country contexts should be taken into account when designing effective board structures and governance mechanisms (Adams & Meziane, 2018; Ang et al., 2018; Ntim et al., 2018).

In China, the board of directors is a key internal tool for fostering good corporate governance inside an organization. To protect the interests of the shareholders, it is vital in the decision-making processes of the operations, management, and strategic direction of the firm. The board is also tasked with ensuring that senior executives operate in a way that optimizes company value for the shareholders and serves as a guardian of shareholder welfare (Zhao et al., 2018). This evidence confirms the primary role of the board in corporate governance, which is important for research on how board features affect earnings quality.

In Norway, legislation was first implemented in 2002 requiring that 40% of a company's board of directors be made up of women. The Oslo Stock Exchange's publicly traded Norwegian companies are subject to this gender quota regulation (Gidlund & Hellström, 2017). Despite these advancements, there is still a propensity to undervalue women's talents and have preconceived notions about their aptitude for leadership jobs (Ekbor, 2022). Both national and international corporate governance guidelines and regulations have been established to promote female representation in boardrooms. While there are compelling theoretical arguments supporting the presence of more women on corporate boards, further empirical evidence is needed to validate these arguments and the accompanying policies. Research suggests that female directors often contribute to higher earnings quality compared to their male counterparts (Zalata et al., 2021). They bring superior communication skills, engage in more informed discussions, and demonstrate greater independent thinking, which enhances the monitoring of managers (Al-Absy, 2022).

For over twenty years, Pakistan, like many other countries, has actively pursued corporate governance reforms. In 2002, the Securities Exchange Commission of

Pakistan introduced the initial corporate governance (CG) code, which made it obligatory for all listed companies in Pakistan to comply (Khan, et al. 2022). More recently, the Public Company Accounting Oversight Body (PCAOB) in the United States of America advised that large and complex businesses without an effective Internal Audit Function (IAF) should be considered to have a material weakness in their internal controls, which can be deemed a significant flaw (Ntim et al., 2018). However, criticism has been growing, suggesting that merely having an Internal Audit Function is inadequate and that the quality of the IAF plays a more crucial role in achieving the desired outcomes (Abbott et al., 2012; Carcello et al., 2011).

1.1.3 Board characteristics and Earning Quality: Regional Perspective

Tanzania, as an emerging economy in Sub-Saharan Africa, is likely to possess a distinctive corporate governance environment when compared to developed economies (Nahifa & Nevzat, 2019). The Dar es Salaam Stock Exchange (DSE), serving as Tanzania's stock market, is recognized as one of the world's smallest capital markets. This indicates a relatively less developed and smaller-scale financial system (Ntim, 2012). Furthermore, Tanzania's economy has faced significant challenges due to the failure of state-owned enterprises in the 1980s and 1990s, which were further compounded by insufficient legal and regulatory controls (Ntim, 2012). The unique corporate governance environment, that is, its limited size and development of the DSE in Tanzania may result in reduced liquidity and constrained access to capital for firms (Ntim, 2012). This can impact the cash flow from operations, as firms may face difficulties in raising funds for their day-to-day activities as well as financing expansion plans. Additionally, the historical failures of state-owned enterprises and weak legal and regulatory controls may lead to a lack of trust and confidence in the business environment, potentially affecting investor perceptions and the availability of investment opportunities (Ntim, 2012).

The effect of board qualities on the caliber of earnings has been studied empirically. Others evaluate this effect by looking at how it affects earnings management (Canyurt & Yüksel, 2020; Wang & Luo, 2021; Liao et al., 2020; Gür & Korkmaz, 2020), while some research provide direct proof of this effect. The link between

board attributes and earnings quality, particularly for businesses operating in developing nations, is not sufficiently explored empirically. Studying the connection between board traits and the caliber of earnings of non-financial organizations listed on the Nairobi Securities Exchange is also essential. According to earlier studies, the effect of board features on earnings quality might change depending on the precise metrics employed. Therefore, this study aims to address this research gap by examining the influence of specific proxies of board characteristics, namely board size, audit committee independence, gender diversity, and board independence. Recent empirical research has provided evidence suggesting that an increase in board size can impede the board's capacity to adequately oversee managerial activities and address potential biases in accounting information (Ding et al., 2019; Kesner et al., 2020). This is in line with Ding et al. (2019) who also propose that larger boards tend to possess a wider range of expertise, which can potentially enhance monitoring effectiveness.

Board characteristics have a significant impact on the quality of earnings for non-financial firms (Adams & Meziane, 2018). The effectiveness of this influence, however, depends on the attributes of the board directors. According to resource-dependency theory, companies have the opportunity to draw upon diverse societal resources, leading to greater board diversification. As a result, boards can benefit from the inclusion of members possessing specialized skills such as accountants, lawyers, religious leaders, engineers, and innovative thinkers. These individuals may have specific objectives for joining boards, but their interests can sometimes conflict with the overall goals of the firms and their investors, thereby amplifying agency conflicts (Canyurt & Yüksel, 2020; García-Sánchez et al., 2019).

On one hand, increasing board size can enhance control mechanisms and strengthen monitoring practices (Adams & Meziane, 2018). This change aims to bring effective leadership and professionalism to the board (Chen et al., 2020). On the other hand, it's critical to take into account the possible disadvantages of board diversification since it may lure individuals with moral failings and opportunistic inclinations, which might lessen governance effectiveness and jeopardize financial reporting (Canyurt & Yüksel, 2020). The results of earlier studies on the connection between

board size and business financial success have been varied. While Kalsie and Shrivastav (2016) observed a favorable effect while Sarpal and Singh (2013) found no significant effect, Wei (2009) and Guest (2009) discovered a negative effect of board size on company financial performance.

Ingari (2017) found that increased CEO remuneration and a rise in the proportion of non-executive directors in comparison to all other directors had a beneficial effect on the management of earnings in commercial banks listed on the NSE. As other contributing elements to earnings management, variables like the number of directors, increasing board meetings, and business size were noted. These results highlight the relevance of the examining board features in terms of the earnings quality of NSE-listed companies. ElHawary (2021) also demonstrated the critical impact a competent audit committee plays in boosting corporate performance, underscoring the significance of governance systems in promoting overall business outcomes. It is important to note that there is a lack of suitable corporate governance (CG) indices tailored to the African economic environment, as limited research has focused on this aspect (Areneke et al., 2022). Although some CG reforms have been implemented in Sub-Saharan African countries to enhance practices, there remains a gap in addressing corporate social responsibility (CSR) when developing CG mechanisms specifically for these nations (Coleman & Wu, 2020). Therefore, this study aims to contribute to filling this research gap by examining the relationship between board characteristics, earnings quality, and CG practices in non-financial firms listed on the NSE.

1.1.4 Ownership Concentration and Earnings Quality

The distribution of ownership rights among shareholders, which can be either concentrated in the hands of a few major shareholders or distributed across a large number of shareholders, is referred to as ownership concentration, an important aspect of corporate governance (Oduor, 2019; Amico, 2020). The Agency Theory is a useful theoretical model to take into account when analyzing how board qualities affect business results. According to the Agency Theory, major shareholders' interests may be more closely aligned with the board's goals in companies with more

ownership concentration, which might result in better oversight and governance procedures (La Porta et al., 2000). This alignment may be more pronounced in the context of local ownership where large shareholders may have greater influence and involvement in corporate decision-making compared to foreign ownership. Therefore, ownership concentration can play a significant role in shaping the relationship between board characteristics and firm outcomes, and this impact may vary depending on whether ownership is foreign or local.

Ownership concentration is measured in different forms as explained by different researchers. Ownership concentration measured by the largest shareholder's ownership stake: This indicator examines the percentage of shares owned by the largest shareholder in the company. A higher ownership stake held by a single shareholder indicates a more concentrated ownership structure (García-Sánchez et al., 2019). Ownership concentration is also measured by the number of institutional shareholders: This indicator assesses the number of institutional investors, such as pension funds, mutual funds, or insurance companies, holding significant ownership stakes in the company. A higher number of institutional shareholders suggests a more dispersed ownership structure (Oduor, 2019).

Several studies have looked at the connection between board features and earnings quality (Adams & Meziane, 2018; Canyurt & Yüksel, 2020; Zhai et al., 2019), underscoring the significance of corporate governance procedures in guaranteeing the accuracy and transparency of financial reporting. For example, Adams and Meziane (2018) found a favorable correlation between board independence and earnings quality in European firms.

Little research has been done on how ownership concentration affects the connection between board characteristics and earnings quality. However, several studies have looked at this matter in diverse contexts. In their study of Turkish enterprises, Ararat et al. (2019) found that ownership concentration moderates the relationship between board independence and earnings quality. Similar findings were made by Ali et al. (2020), who examined Pakistani companies, who discovered that ownership

concentration served as a mediator in the relationship between board size and earnings quality.

Nevertheless, the relationship between board characteristics and earnings quality may be influenced by the level of ownership concentration within a company. Ownership concentration can affect the decision-making power and influence of different shareholders, which may in turn moderate the relationship between board characteristics and firm outcomes such as earnings quality. Understanding the moderating role of ownership concentration can provide insights into how the effectiveness of board characteristics in ensuring earnings quality varies under different ownership structures. Ownership concentration is a crucial aspect of corporate governance that can impact the relationship between board characteristics and earnings quality. While research on this specific topic is limited, studies have started to explore the moderating role of ownership concentration, indicating the need for further investigation in different contexts and regions.

1.1.5 Earning Quality of Non-Financial Firms Listed at the Nairobi Securities Exchange

Regarding earnings management, the Capital Market Authority has taken disciplinary action against several of the non-financial firms listed on the NSE throughout the years. In recent decades, several non-financial firms have had their listings delisted, while others have failed while having good financial success. According to Ngige (2011), Kenyan banks have sold securities at a loss to meet cash shortages, which may be attributed to the board's characteristics failure. The Nairobi Securities Exchange's listing process ensures that a company is deserving of registration after adhering to all corporate governance guidelines outlined in the governance code governing listed companies in Kenya, as this entails exposing investors to certain risks (C.M.A. 2012).

The corporate governance codes are designed to ensure that the company's performance, capital formation, and earnings maximization benefit the shareholders (C.M.A. 2012). As proposed by C.M.A. (2002), the Audit Committee is established as part of internal control to ensure that the quality of financial reporting is

maintained. Financial reporting consists of five statements, the most important of which are the Statement of Comprehensive Income and the Statement of Financial Position, the quality of which reveals everything about a business. Despite the legislative measures in place, there have been reports of boards performing poorly due to shortcomings in the desired board characteristics, resulting in corporate indignity, including the discontinuous of several companies in Kenya that were fully listed on the Nairobi Stock Exchange (Madiavale, 2011).

1.2 Statement of the Problem

Earnings quality in Kenyan firms has been plagued by fraudulent financial reporting, leading to concerns about the reliability and accuracy of financial statements (Kobuthi et al., 2018). Instances of firms being delisted for non-compliance with financial reporting rules and the occurrence of financial mismanagement resulting in the collapse of companies have raised questions about the integrity of reported earnings. The decline in total earnings of companies listed on the Nairobi Securities Exchange (NSE) and the decrease in return on equity (ROE) further highlight the challenges faced by listed companies in maintaining high-quality earnings (Kenya National Bureau of Statistics, 2021; Capital Markets Authority, 2020).

There is a gap in the literature regarding the specific focus on accrual quality and discretionary accruals as measures of earnings quality, even though some studies have looked at the impact of board characteristics on financial reporting quality in Kenyan firms (Kimani et al., 2020; Kirimi et al., 2021). Furthermore, nothing is known about how ownership concentration affects the link between board features and earnings quality (Alchian & Demsetz). Prior empirical studies on the associations between board size, board independence, audit committee independence, gender diversity, and earnings quality have shown conflicting results (Githaiga, et al., 2022; Alareeni, 2018).

Given the gaps in the literature and the significance of the issues surrounding earnings quality and corporate governance in Kenyan non-financial firms listed on the NSE, this study aims to investigate the effect of board characteristics on earnings quality, considering ownership concentration as a moderating factor. The study

employs a quantitative correlation design using panel data to analyze the relationships between board size, board independence, audit committee independence, gender diversity, ownership concentration, and earnings quality, specifically focusing on Accruals Quality and Discretionary Accruals measures. By addressing these gaps and examining the specific context of the NSE-listed non-financial firms, this research can provide valuable insights for improving corporate governance practices and enhancing the reliability of financial reporting in the Kenyan context.

1.3 Study Objectives

1.3.1 General Objective

The general objective was to examine the effect of board characteristics and earnings quality of non-financial firms listed on the Nairobi Securities Exchange.

1.3.2 Specific Objectives

i. To ascertain the effect of board size on the earnings quality of non-financial firms listed on the Nairobi Securities Exchange
ii. To ascertain the effect of independent audit committees on the earnings quality of non-financial firms listed on the Nairobi Securities Exchange.
iii. To investigate the effect of gender diversity on the earnings quality of non-financial firms listed on the Nairobi Securities Exchange.
iv. To investigate the effect of board independence on the earnings quality of non-financial firms listed on the Nairobi Securities Exchange.
v. To determine whether ownership concentration has a moderating effect on the relationship between board characteristics and earnings quality of firms listed on the Nairobi Securities Exchange.

1.4 Research Hypotheses

$H_0$1 Board size has no significant effect on the earnings quality of non-financial firms listed at the Nairobi Securities Exchange

$H_0$2 Audit Committee Independence has no significant effect on the earnings quality of non-financial firms listed at the Nairobi Securities Exchange

$H_0$3 Gender diversity has no significant effect on the earnings quality of non-financial firms listed at the Nairobi Securities Exchange

$H_0$4 Board independence has no significant effect on the earnings quality of non-financial firms listed at the Nairobi Securities Exchange

$H_0$5 Ownership concentration has no significant moderating effect on the relationship between board characteristics and earnings quality of non-financial firms listed at the Nairobi Securities Exchange

1.5 Significance of the Study

The findings of this study can be beneficial to various stakeholders and contribute to the improvement of corporate governance practices and financial reporting quality in non-financial firms listed on the Nairobi Securities Exchange (NSE). The benefactors of this study include:

1.5.1 Regulators and Policy Makers

The study can provide valuable insights to regulators and policy makers, such as the Capital Markets Authority (CMA) and the Central Bank of Kenya, in shaping regulations and guidelines related to board characteristics and earnings quality. The findings can guide the firms to have in place the best board characteristics that favour transparency, accountability, and the reliability of financial reporting, and subsequently promote higher earning quality.

1.5.2 Investors and Financial Analysts

Investors rely on accurate and reliable financial information to make informed investment decisions. The study's findings can help investors assess the quality of earnings in NSE-listed non-financial firms and identify potential risk factors associated with board characteristics. Financial analysts can utilize the results to

better understand the impact of board characteristics on earnings quality and incorporate these factors into their investment analyses and recommendations.

1.5.3 Board Members and Corporate Executives

Board members and corporate executives play a crucial role in overseeing the management and financial reporting processes of companies. The study can provide insights into the significance of board characteristics in ensuring high-quality earnings and guide board members in making informed decisions related to board characteristics, independence, diversity, and other relevant factors. The findings can also help executives understand the importance of maintaining accurate and reliable financial reporting practices.

1.5.4 Academia and Researchers

The research can add to the body of knowledge already available on corporate governance and earnings quality, particularly when it comes to non-financial enterprises listed on the NSE. The study's conclusions may be built upon by researchers to undertake future research and investigate different angles of the connection between board qualities and earnings quality. The study may also be used as a resource for academic work and help establish theories and frameworks that guide boards' requirements for obtaining excellent credit.

1.6 Scope of the Study

This section presents the scope of the study.

1.6.1 Geographical Scope

The research focuses on non-financial companies listed on Kenya's Nairobi Securities Exchange. The study especially considers the Kenyan market while examining the association between board qualities and earnings quality. The research included all non-financial companies listed on the Nairobi Securities Exchange (NSE) as of December 31, 2020.

1.6.3 Contextual Scope

The research looks at how board attributes affect the quality of earnings for non-financial companies listed on the Nairobi Securities Exchange. It examines the special traits and dynamics of the Kenyan market, as well as its legal system, corporate governance procedures, and economic climate. It examines the impact of board attributes on these companies' earnings quality, including board size, independent audit committees, gender diversity, and board independence.

1.6.3 Time Scope

The research examines data over a precisely defined period of time. It could contain the board characteristics and financial performance of non-financial firms listed on the Nairobi Securities Exchange during a certain period of time. The non-financial firms listed on the NSE that were active between 2008 and 2020 were the subject of this study.

1.7 Limitations of the Study

Finding thorough and current information on board composition, ownership concentration, and earnings quality for all non-financial enterprises listed on the Nairobi Securities Exchange proved difficult for the researcher. Limited access to certain financial records and corporate governance information hindered the ability to gather a complete dataset, which may have influenced the generalizability of the findings. The researcher made efforts to gather as much data as possible from reliable and relevant sources. Multiple sources were consulted, including company websites, regulatory reports, and industry databases, to supplement the data collection process.

The study relied on secondary data sources, such as annual reports, financial statements, and corporate governance reports. The accuracy and reliability of these sources were assumed, but potential biases or errors in the data could have affected the results. Additionally, the study focused on using accrual quality and discretionary accruals measures as proxies for earnings quality, which may not capture all

dimensions of earnings manipulation or reflect the true underlying financial performance of the firms. To mitigate the potential biases or errors in secondary data sources, the researcher employed rigorous data cleaning and validation procedures. Data inconsistencies were carefully addressed, and cross-validation techniques were applied to ensure the reliability and accuracy of the dataset.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter analyzes the relevant literature and discusses the study's variables, which are the board characteristics and earnings quality (measured using accruals quality and discretionary accruals). The next chapter discussed how ownership concentration modifies the association between board qualities and earnings quality.

2.2 Theoretical Review

Variable analysis and hypothesis testing are based on the theoretical examination. In this instance, the variables from the research form the basis of the theoretical review. Agency Theory, Resource Dependency Theory, Stakeholder Theory, Positive Accounting Theory, Signaling Theory, and Expropriation Theory all influenced this study.

2.2.1 Agency Theory

According to Alchian and Demsetz (1972), agency theory has its roots in economic theory. According to Al Mamun et al. (2013), Keraro (2014), and Mwithi (2016), Jensen and Meckling (1976) defined agency as the interaction between principals, such as shareholders, and agents, such as corporate executives and managers. This further developed the idea. This hypothesis proposes that shareholders, who act as the company's owners or principals, choose agents to operate the business on their behalf. According to Clarke and Branson (2012), principals assign firm management to directors or managers who represent the shareholders. The board is to devise a workable leadership structure to resolve the agency issue and foster mutual trust and teamwork between the principals and the agent. According to the agency theory, a board with a large number of directors improves firm performance by lowering agency costs. A larger board of directors means that more directors are monitoring and controlling manager performance (Hillman et al., 2010a).

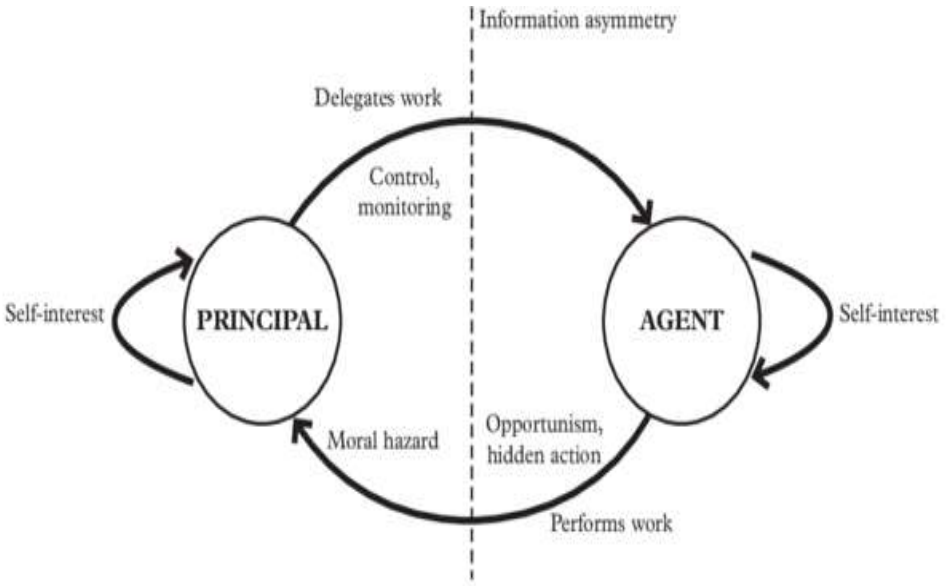

Figure 2.1: The agency theory with the assignment of work from the principal to the agent

Source: Slyke (2006)

Agency theory posits that these conflicts arise due to differing interests between the principals and the agents. In the context of the study on board characteristics and earnings quality of non-financial firms listed on the Nairobi Securities Exchange, agency theory is highly relevant. The relevance of agency theory lies in its ability to provide a framework for understanding how board characteristics can influence the quality of financial reporting. Specifically, the theory suggests that larger boards and the presence of independent directors can enhance monitoring and control mechanisms, thereby reducing agency problems and improving earnings quality (Jensen & Meckling, 1976). The study can further knowledge of how agency theory appears in the Kenyan environment by studying the link between board qualities and their effect on earnings quality.

The link between board characteristics and earnings quality in non-financial enterprises listed on the Nairobi Securities Exchange may be better understood using the agency theory. Its focus on monitoring and control mechanisms highlights the potential impact of board size and independence on financial reporting quality. While

the theory has strengths in its well-established foundation and empirical support, its limitations lie in its narrow focus on self-interest and formal controls. Nonetheless, by considering these strengths and weaknesses, the study can contribute to the existing literature and provide insights into enhancing corporate governance practices in the Kenyan context.

Agency fees should be proportionate to both the manager's and the organization's interests. The shareholders appoint directors to oversee the firm's operations. In turn, the board recruits, appoints, directs, supervises, and monitors top management's activities on behalf of the owners. There are three fundamental groups, each with its own set of concerns. The first is the firm's principals, who are concerned with the growth of their wealth. As a result, their primary concern will be the dividend received and the firm's viability. The second group is made up of managers who are recruited, appointed, and compensated to run the business on behalf of the board. This group has no direct interests in comparison to the firm's owners. Their primary concern will be the position they will hold within the company and the compensation package they will receive. The third group consists of debt providers, whose primary concern will be how the management operates the business profitably (Bw'auma, 2021). According to Abu et al. (2016), agency theory aides the board in monitoring, supervising, and controlling top management on behalf of the firm's owners.

Researchers have expanded agency theory through their findings on board characteristics and their earnings quality. For example, Ahmed and Manab (2016) established that a large board incurs additional agency costs, and as the board grows in size, costs associated with coordination and communication also increase. Kalsie and Shrivastav (2016) results revealed that a large board should protect and enhance the interests of stakeholders through monitoring and control, thereby improving the firm's performance. Thus, agency theory asserts that a larger board of directors improves firm performance through increased oversight by a large group of people.

Strengths of agency theory include its well-established foundation and extensive empirical research that supports its relevance in various organizational contexts. The theory's focus on monitoring and control mechanisms helps shed light on how board

characteristics can mitigate conflicts of interest and align the interests of shareholders and managers. However, a weakness of agency theory is its assumption that individuals are solely driven by self-interest, neglecting the role of other factors such as social and ethical considerations. Additionally, the theory's emphasis on formal control mechanisms may overlook the importance of informal dynamics and relationships within organizations (Eisenberg et al., 2018).

The weakness of agency theory is that it relies on several narrow assumptions about human nature and motivation, and it fails to distinguish other factors than opportunistic behavior as a cause of firms' poor performance. Typically, the flaw has been concentrated on agency theory's behavioral assumptions. The theory presents a limited view of human motivation and makes unwarranted negative moral judgments about people. Self-interest as the sole motivation for human behavior is frequently criticized as an overly restrictive model of human behavior (Davis et al., 1997). Despite the weakness, the researcher used agency theory as the bases for ascertaining the effect of board size on the earnings quality of non-financial firms listed in NSE.

2.2.2 Resource Dependence Theory

Resource Dependence Theory, proposed by Pfeffer and Salancik (1978), asserts that organizations rely on external resources and establish relationships with external entities to secure those resources. The theory posits that governance mechanisms, such as board characteristics, are structured to gain access to critical resources. In the context of the study on board characteristics and earnings quality of non-financial firms listed on the Nairobi Securities Exchange, Resource Dependence Theory is highly relevant. It underlines the significance of board features, particularly gender diversity and independent audit committees, in facilitating access to the resources required for high-quality financial reporting.

The board of directors, according to Resource Dependence Theory, is a provider of resources including legitimacy, counsel, and advise (Hillman et al., 2010b). According to the resource dependency hypothesis, the board of directors also helps to manage external dependencies, minimize transaction costs related to business

environment interdependence, and lessen business environment unpredictability ((Hillman et al., 2010a).

One strength of the Resource Dependence Theory is its recognition of the external dependencies of organizations. It acknowledges that organizations cannot function in isolation and need external resources to thrive. By focusing on board characteristics as mechanisms to secure resources, the theory provides valuable insights into how governance structures can facilitate the acquisition of critical resources for financial reporting. This perspective aligns with the reality that companies listed on the Nairobi Securities Exchange are part of a broader network of stakeholders, including investors, regulators, and suppliers.

Resource dependency theory focuses on the role of board directors in ensuring that a firm has access to necessary resources. It emphasizes the directors' connections to the external environment and their ability to provide or secure critical resources for the organization (Hillman et al., 2010b; Johnson et al., 2014). According to Pfeffer and Salancik (1978), directors should establish connections between the firm's management and external sources of essential materials, fostering interdependence (Hillman, Canella, & Paetzold, 2010). By facilitating access to vital resources, directors contribute to the firm's success and enhance its financial reporting capabilities (Ntim et al., 2018). In the context of the study on board characteristics and earnings quality of non-financial firms listed on the Nairobi Securities Exchange, resource dependency theory offers valuable insights into the directors' role in securing the necessary resources for high-quality financial reporting.

The theory of resource dependence has some limitations. Due to the growth of institutions, directors are constrained in their ability to manage the firm on a day-to-day basis. Thus, the board recruits, trains, and develops staff, provides advice, and delegated business management to the firm's most qualified top management. This is complicated by agency conflict, in which the manager pursues their interests at the expense of the shareholder's wealth. According to resource dependence theory, directors possess the knowledge and experience necessary to facilitate top

management's monitoring activities through the board's ability to scrutinize financial reporting that affects earnings quality (Bw'auma, 2021).

However, one weakness of the Resource Dependence Theory is its limited attention to internal dynamics and the role of internal governance mechanisms. While the theory acknowledges the importance of board characteristics, it may not fully capture the complexity of internal processes and relationships within organizations. It may overlook other crucial factors that influence earnings quality, such as management integrity and organizational culture. Therefore, it is important to supplement Resource Dependence Theory with other theories and approaches such as the stakeholders' theory and agency theory to gain a comprehensive understanding of the relationship between board characteristics and earnings quality.

Resource Dependence Theory posits that organizations' actions are shaped by their dependence on crucial resources and organizational decisions can be understood within the context of their specific dependency situation (Nienhüser, 2008). Jackling and Johl, (2009) support this theory by arguing that increasing the size of a board of directors expands the pool of expertise available to the organization. This is exemplified by Microsoft, which increased its board size from eight to fourteen members between 2003 and 2017, to bring accomplished leaders with global experience on board (Rosoff, 2017). However, Bublykova (2014) empirical findings indicate that a larger Supervisory Board size has a negative impact on firm performance, suggesting that the costs of a large board outweigh the benefits. Despite these varying perspectives, Resource Dependence Theory serves as a foundation for examining the effect of board characteristics, such as audit committee independence and board independence, on the earnings quality of non-financial firms listed on the Nairobi Securities Exchange (NSE).

Despite this weakness, Resource Dependence Theory offers valuable insights into the relevance of board characteristics in the context of securing resources for financial reporting. By understanding how organizations structure their governance mechanisms to gain access to resources, the study can shed light on how independent audit committees and gender diversity can contribute to high-quality financial

reporting. This theory provides a framework for exploring the link between board characteristics and resource acquisition, ultimately helping firms listed on the Nairobi Securities Exchange improve their financial reporting practices (Pfeffer & Salancik, 1978).

2.2.3 Stakeholders theory

The stakeholder theory, proposed by Edward Freeman in 1984, suggests that organizations should consider the interests and needs of all stakeholders involved in the business, beyond just shareholders (Freeman, 1984). According to this theory, stakeholders include not only shareholders but also employees, customers, suppliers, communities, and other groups affected by the organization's actions and decisions. The theory argues that by taking into account the diverse interests of stakeholders, companies can create long-term value and sustainable relationships (Freeman et al., 2019).

By examining board characteristics, such as board independence, board diversity, and board expertise, researchers can assess how these factors influence the decision-making processes related to financial reporting and earnings quality (Nguyen & Cao, 2018). For example, a board with diverse expertise may bring different perspectives and skills to financial reporting oversight, potentially enhancing the accuracy and transparency of earnings. Similarly, independent boards can act as effective monitors to ensure that management does not engage in practices that compromise earnings quality. Thus, the stakeholder theory provides a valuable framework for understanding the relationship between board characteristics and earnings quality in non-financial firms listed on the Nairobi Securities Exchange.

In 1970, Freeman incorporated stakeholder theory into the management discipline and gradually developed it to include corporate accountability to a broad range of stakeholders (Al Mamun et al., 2013; Keraro, 2014; Mwithi, 2016). Freeman (2010) argues that stakeholder theory evolved from a synthesis of sociological and organizational theories. According to Mitchell, VanBuren, Greenwood, and Freeman (2015), an organization is a collection of stakeholders operating within the larger system of the host society, which provides the legal and market infrastructure

necessary for the firm's operations. He continues by stating that the organization's purpose is to create wealth or value for its stakeholders through the conversion of their stakes into goods and services.

According to the stakeholder theory, firms are social organisms that affect various stakeholders' wellbeing. Stakeholders are organizations or individuals that interact with a business and influence or are impacted by the achievement of the company's objectives (Donaldson & Preston, 2015; Freeman, 2010; Reed, 2012). Freeman (1984) inferred several stakeholder theory components, such as various groups with direct or indirect holdings in the organization, from the seminal study. Stakeholder theory is critical in establishing the framework for evaluating stakeholders' impact on the firm's financial results. The board and management must align the interests of major stakeholders with those of the business, creating the illusion that they own a piece of the business. That is when they will assist the organization in achieving its goals and objectives. If stakeholders' interests are not properly identified and managed amicably, conflicts will arise and have a negative impact on the company's financial performance. Stakeholder theorists argue that boards of directors should leverage their networks to ensure that business decisions benefit all stakeholders (Abdullah & Valentine, 2009). As a result, directors were required to act in the best interests of stakeholders, who in turn would support management (Mallin, 2007).

A study by Ngugi and Waweru (2020) found a positive relationship between gender diversity in the boardroom and earnings quality in Kenyan listed firms. Gender-diverse boards may bring different perspectives, skills, and experiences, leading to improved decision-making and governance practices that positively affect earnings quality. Omukaga (2019) established that if women directors are selected for their board-level skills, a gender-diverse board could send a credible signal to key stakeholders about good corporate behavior.

Jensen (2010) criticized stakeholders’ theory for presuming the existence of a single-valued objective. His argument implies that an organization's performance is not and should not be measured solely in terms of the benefits it provides to its stakeholders (Jensen, 2010). This is because, according to stakeholder theory, for a firm to

improve its financial performance, it must consider the interests of all stakeholders (Yusoff & Alhaji, 2012). Scholars have roundly criticized this assertion, claiming that it is impractical. The study adapts the Stakeholders Theory to address diverse board stakeholders, including women to address its effect on the earnings quality of non-financial firms in NSE.

2.3 Conceptual Framework

A concept is a collection of fundamental principles and ideas from a particular field of study that serves as a research tool, assisting the researcher in developing and comprehending the situation under Study (Kombo & Tromp, 2006). As defined by Ravitch and Riggan (2016), a conceptual framework is a graphical representation of the relationship between variables. The conceptual framework for this study was developed through a review of the various variables used in several studies reviewed in the literature.

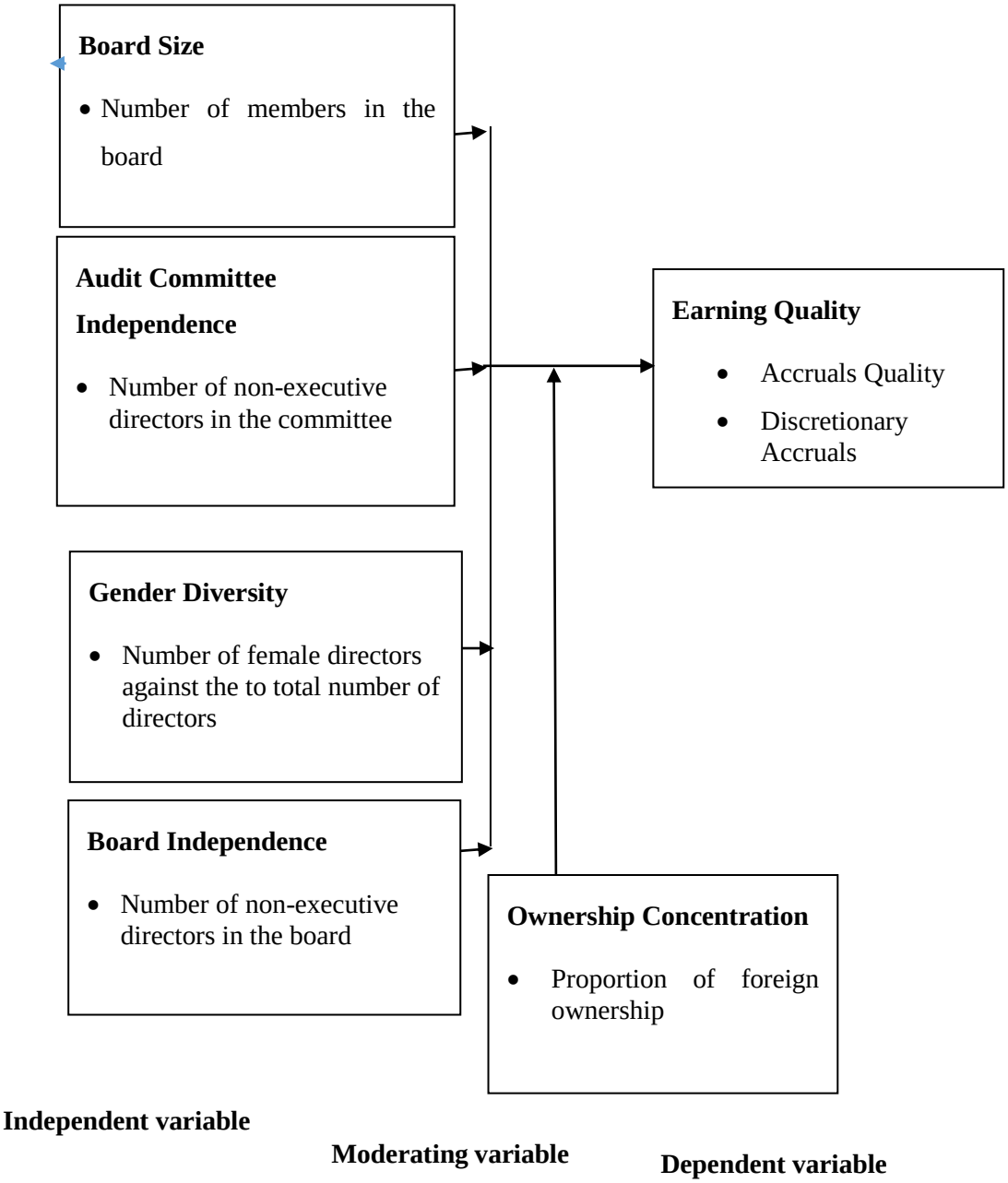

Figure 2.1: Conceptual Framework

This conceptual framework outlines the key independent variables, including board size, audit committee independence, gender diversity, and board independence, in relation to the dependent variable of earnings quality for non-financial firms listed on the Nairobi Securities Exchange. Additionally, it introduces ownership concentration as a moderating variable. This conceptual framework acts as a roadmap for

researching how board characteristics and earnings quality relate in the Kenyan environment.

2.4 Variables under the Study

2.4.1 Board Size

Board size is measured by the number of directors serving on the board. Research by Byun et al. (2019) suggests that a larger board size may hinder effective decision-making and monitoring, potentially negatively affecting earnings quality. Conversely, studies such as Wanjiru et al. (2020) indicate that a moderate-sized board can enhance financial reporting quality, emphasizing the importance of finding an optimal board size relative to company size.

The board of directors' primary responsibility is to oversee the operation of the business (Fama & Jensen, 1983). Others have explained that board members assist in managing a business's size (Chaganti & Mahajan, 1985; Dalton, Daily, Ellstrand, & Johnson, 1998), while others emphasize the board's expertise in the decision-making process (Xie et al., 2003; Rahman & Mohamed 2006). Board size is influenced by various factors, some of which are firm-specific. These factors include the firm's complexity, which necessitates the board having specific expertise to operate efficiently and effectively; the firm may operate in multiple regions with distinct cultures, necessitating representation on the board, thereby bloating the board; the need to operate within specific regulations that require employee representation and gender representation on the board. The board has the power to decide on its size, structure, diversity, and demographic traits, all of which are crucial elements determining earnings quality (Xie et al., 2003; Peasnell, Pope, & Young, 2001), following the principles established in Prudential Guidelines 2012. The purpose of this study is to identify the ideal board size that offers the highest earnings quality.

2.4.2 Audit Committee Independence

Audit committee independence is the proportion of directors in the audit committee who act like independent managers (Peasnell *et al*., 2010). The audit committee is

meant to monitor financial reporting procedures as is emphasized by the Sarbanes Act of 2002, which requires the audit committee to be independent to improve the financial reporting process (Klein, 2002). To achieve the required independence, members of the committees should be non-executive directors chosen to achieve audit quality from the directors (Al-Thuneibat, 2006).

Audit committee independence encompasses several factors, including audit committee size, non-executive directors' influence, and frequency of audit committee meetings.

The audit committee guarantees transparent and accountable audit procedures. The firm CEOs should not influence the board of directors to develop an incentive role of protecting personal qualifications by being vigilant in the oversight of the management (Ianniello, 2015). The committee's independence is therefore achieved by the number of its non-executive directors.

2.4.3 Gender Diversity:

Gender diversity in terms of the gender diversity index, gender composition of executive positions, and gender representation in board leadership positions is considered.

This study used the proportion of gender represented on the board as the proxy for measuring Gender diversity (DiTo-maso & Post, 2007; Harrison & Klein, 2007). Most modern firms have acknowledged the significance of gender diversity in the workforce and its influence on upper management. However, only a few women are integrated into top management. In large firms, men in Europe account for about 90 percent of men on boards, while women account for 10 percent (European Commission, 2010).

Increased performances within a women-led board of directors indicate creativity and innovation endowed in women (Lai, Srinidhi, Gul & Tsui, 2017). Unlike a homogenous board of directors, the diverse type of board tends to generate more alternative solutions during the decision-making process, increasing a firm's

corporate performance (Terjesen, Couto & Francisco, 2016). Companies managed by a gender-balanced board tend to pay more attention to controlling and managing risks (European Commission, 2012). The concept of gender is widely discussed and examined in literature as companies have come to accept gender as a strategy for introducing diversity within the boardroom. Heterogeneity among the board directors helps resolve cognitive conflicts among members because they can employ diverse problem-solving skills (Terjesen, Couto & Francisco, 2016).

Heterogeneity brings diversity in gender, ethnicity, and cultural differences among directors, which promotes an effective decision-making process than in a homogenous-based boardroom where directors share similar cultural and ethnic backgrounds. A team of board members characterized by diversity is said to be in a position to consider alternative decisions (Al-Shaer & Zaman, 2016 Carter et al., (2010). Some researchers have indicated that the presence of women on boards could affect the governance of companies in significant positive ways.

2.4.4 Board Independence

Board independence encompasses board leadership structure, the absence of executive directors, and the proportion of independent directors. Board independence refers to the extent to which a company's board is made of non-executive directors who are not affiliated with the firm or its management. In Europe, board independence and earnings quality have been linked favorably in several studies. For instance, a study by Belkaoui and Kahloul (2019) that examined information from 200 non-financial enterprises in Europe discovered a correlation between more board independence and higher earnings quality. Similar findings were made by Bédard and Gendron (2018), who looked at European businesses that were traded on the stock markets of France, Germany, and the UK. They discovered that companies with a larger percentage of independent directors had higher-quality earnings. According to these results, board independence is essential for improving the accuracy and openness of financial reporting in European non-financial firms. The absence of executive directors on the board has been shown to enhance earnings quality.

2.4.5 Earnings Quality

Earnings quality is measured through accruals quality and discretionary accruals. Accruals quality represents the accuracy and reliability of reported earnings, while discretionary accruals capture the extent of managerial discretion in financial reporting. Prior studies by Ng'ang'a and Barongo (2019) and Njuguna et al. (2022) highlight the importance of earnings quality to financial statement users and stakeholders, indicating that higher earnings quality promotes transparency, reduces information asymmetry, and enhances decision-making.

2.4.6 Earnings Quality

Earnings quality accurately reflects the company's current operating performance and indicates future operating performance, which is a valuable measure for assessing firm value (Dechow & Schrand, 2004). There are many definitions of the term earnings quality such as Teets (2002) explains that it encompasses determining the economic performance of a firm while adhering to specific accounting standards of reporting. Others consider it refers to what earnings quality conveys about a firm's performance. For example, Pratt and Hodge (2003) define earnings quality as how money reflected in financial statements deviates from actual earnings. Moreover, Penman (2003) indicates that earnings quality reflects present reported earnings and the quality of future earnings. In this respect, Chen et al. (2006), Penman and Zhang (2002) opine that there is no specific definition. However, Dechow and Schrand (2004) suggest that its definition could be used to reflect the current operating performance of a company, which is marked as an indicator for predicting the future operating performance of a firm.

Earnings management shares an inverse association with earnings quality, such that higher levels of earnings management lead to lower earnings quality; the reverse is also true. The incentives leading to earnings management include controlling political costs, avoiding the repercussions of debt covenants, and regulating managers' accumulated wealth (Radzi, Islam & Ibrahim, 2011). Researchers have developed various models to demonstrate the importance of earnings quality. The Lev-Thiagarajan model proves that earnings quality score is directly preoperational

to earnings growth and persistence (Pratt in Hodge, 2003). The model has been used to confirm that growth in earnings quality increases among high-quality-scoring groups.

The most popular method for assessing earnings quality, the Jones (1991) model, is used when accounting for the rise in loan sales (Dechow et al., 1995). The methodology was further expanded by Kothari et al. (2005) to evaluate the performance of discretionary accruals. The standard deviation has been used to calculate discretionary accruals (Francis et al., 2005). The quality of earnings is influenced by a number of factors, including external factors, financial market circumstances, firm internal controls, and reporting systems. Ashbaugh Skaife et al. (2007) indicate that firm size, investment, growth, and performance are key factors that can influence earnings quality.

Omoye and Eriki (2014) observe that earnings management is a deliberate attempt by management in influencing reported earnings by applying certain accounting methods, through acceleration of expense or transactions associated with revenue, or the use of other techniques that can influence short-term earnings. The two principal qualitative characteristics of earnings numbers are; relevance and reliability. The current research adheres to the reliability principle, which states that earnings must be supported by a true representation that is devoid of bias and inaccuracies (AL-Dhamari & Ismail, 2014).

Earnings data need to be pertinent in assisting investors in choosing the appropriate asset price and investing strategies (Yuan & Jiang, 2008). Earnings quality, on the other hand, must be measured quantitatively using a number of proxies. Investors may forecast future earnings and cash flows by using the persistence and predictability of earnings figures. When earnings are consistent, they are considered to be of good quality. while taking into consideration, for example, the use of quality of earnings while assessing the equity of enterprises, it is suggested that the significance of the predictive character of accounting earnings is shown (Velury & Jenkins, 2006).

According to Algharaballi (2013), the definitions represent two standards of company management views. The first view basis is that management should exercise opinion in the operations and financial reporting of the business since as a matter of GAAP requirements that the management should make accurate estimates and judgments. The second view is based on opportunistic earnings management, that is, managers should base their judgments and decisions on whether such a financial reporting approach will result in a personal or private gain.

2.4.7 Ownership Concentration

Ownership concentration, determined by the largest shareholder's ownership stake and the number of institutional shareholders, serves as a moderating variable. While a degree of ownership concentration can create value, it can also create negative externalities on competition, wealth distribution, and fiscal transparency on a macro level.

Some firms are owned by a large number of shareholders with a small number of shares while others are owned by a small number owning a large volume of shares, common among firms that seek to strengthen their corporate governance (Thomsen & Pedersen, 2010). High ownership concentration can be applied in corporate governance, where the managers and shareholders are responsible for managing a firm (Dechow et al., 2010). The use of block management, where managers manage earnings, can be risky for a firm (Silveira, 2006). The managers can collaborate to benefit themselves with investors' money, which is described in accounting as an entrenchment effect.

Hope, Thomas, and Vyas (2012) explain that block management can be detrimental to a firm because investors do not quickly uncover managers' unethical actions; this is caused partly by the ability of managers to hide the poor performance of a business manipulating financial reports. Firms that adopt the concentrated ownership structure tend to have less earnings management from this perspective. In contrast, corporate management with vast numbers of shareholders tends to have a greater incentive for monitoring management because they reduce costs that would otherwise be incurred in assigning hired managers for monitoring management.

Ramsey and Blair (2013) reveal that a firm with a considerable ownership concentration tends to attract many shareholders who have adequate incentives that are needed to control the financial managers. In addition, Demsetz and Lehn (2005) and Stiglitz (2005) claim that shareholders who form block-based management must agree on the fixed costs they should bear if they engage in the effective management of finances. However, Maher and Andersson (2010) are skeptical about block management, and they argue that it leads to distributed ownership, which weakens the incentive to monitor the management.

Yasser et al. (2017) argued that, while ownership concentration can lead to better earning quality, the value of added incentives for owners to monitor agents' activities and performance, as well as the pursuit of IFRS goals through the firm's owners, should not be underestimated. Managers and resource owners with a high ownership stake embrace IFRS in financial reporting. Effective managerial ownership and concentrated ownership improve the quality and transparency of financial statements without earnings manipulation (Verriest et al., 2012). Ahmed and Manab (2016) established that the moderating effect of ERM through board ownership has shown positive results.

Investor protection quality can reduce the negative relationship between ownership concentration and firm performance in Vietnam, Singapore, and India (Nguyen et al., 2015; Altaf & Shah, 2018). When ownership is concentrated in the hands of a few large shareholders, it can impact the dynamics of corporate governance and potentially influence the relationship between board characteristics and earnings quality in different countries. The level of investor protection in Vietnam, Singapore, and India may reduce the impact of ownership concentration on the impact of board features on the quality of earnings.

2.5 Empirical Review

As far as the research variables are concerned, this is the empirical assessment of the impact of board features on the earnings quality of the listed non-financial firms in NSE. The reviewed variables include; board size, audit committee independence,

Gender diversity, Board Independence, and earnings quality all based on studies by different scholars from global, regional, and local perspectives.

2.5.1 Board Size and Earnings Quality

According to research by Bugeja, Matolcsy, and Spiropoulos (2018), larger boards often have poorer earnings quality. Additionally, they found that in European businesses, there was a direct association between board size and earnings quality. However, a second study by Tricker and Tricker (2020) discovered that the link between board size and European earnings quality requires the presence of independent directors. Based on their examination, it was observed that greater board size coupled with an increased proportion of directors operating independently was associated with enhanced levels of earnings quality. The results of this research cannot, however, be used to determine the impact of board independence on the quality of earnings in non-financial enterprises listed on the Nairobi Securities Exchange (NSE). The limitation arises from several factors: first, the distinct cultural and institutional contexts between European firms and NSE-listed non-financial firms can influence how board size and independence affect earnings quality. Second, the unique market characteristics and industry compositions at the NSE may impact the observed associations. Moreover, different regulatory frameworks governing corporate governance between Europe and the NSE can lead to diverse outcomes in earnings quality. Lastly, the use of samples from European firms may not accurately represent the characteristics of NSE-listed non-financial firms, affecting the applicability of the findings.

A study by Belghitar et al. (2018) analyzed European firms and found a negative association between board size and earnings management. They argued that larger boards may provide better monitoring and oversight, reducing the likelihood of earnings manipulation. Another study by Chen et al. (2020) focused on independent directors in European firms and found that a higher proportion of independent directors was associated with higher earnings quality. Their findings suggest that independent directors can enhance the integrity of financial reporting. In addition, research by Ararat et al. (2019) looked at the link between board size and firm size

and concluded that it was favorable. They argued that larger boards relative to the firm's size might enhance corporate governance procedures and boost the standard of earnings. These studies provide useful information, but their conclusions cannot be used to research on how board independence affects the quality of earnings in non-financial firms listed on the Nairobi Securities Exchange (NSE). This limitation is the consequence of various things: The institutional and cultural environments in which the businesses listed on the NSE are expected to operate vary from those of cultural and European business organizations. Board independence may have different effects on earnings quality in the two contexts due to variances in corporate governance methods, legal frameworks, and business standards. It is also worth noting that the legal and regulatory frameworks governing corporate governance in European countries and Kenya (where NSE is located) might differ significantly. These variations can influence the roles, responsibilities, and effectiveness of independent directors, and subsequently, their impact on earnings quality.

Regarding the impact of board size on earnings quality in various locations, the research currently in print offers contradictory results. Studies in Europe have discovered relationships between board size and earnings quality that are both negative and positive, with the presence of independent directors having a key influence. Furthermore, there are very few studies that concentrate especially on Africa and Kenya. Therefore, the current study aims to address these gaps by providing a comparative analysis across continents and a specific focus on Kenya, while incorporating indicators of board size.

A study by Bermig (2010) was conducted on a special data set consisting of significant German-listed companies from the period of 1998-2007, resulting in approximately 2,400 observations. The analysis revealed several conclusions. Board size did not consistently impact firm valuation or performance, but it influenced earnings management, with female directors linked to less effective earnings management. Smaller boards and those with employee representatives had lower levels of cash holdings. These findings stress the importance of considering board size and composition in company structure and investment decisions while cautioning against a general strategy for these factors. The study employed a

quantitative survey design and examined board characteristics such as size, independence, and gender diversity to earnings quality measures. However, the German board characteristics of German listed companies may significantly differ from those of non-financial firms listed at the Nairobi Securities Exchange. The cultural and institutional context in which businesses operate can influence board dynamics and decision-making processes. Moreover, the German stock market and the NSE might have distinct characteristics and investor behaviors, potentially affecting how board size and composition influence earnings quality and other corporate aspects.

A study by Mashayekhi and Bazaz, (2010) in Iran focused on the effect of corporate governance practices on financial reporting accuracy, emphasizing the role of a well-regulated central government. board size negatively impacted earnings quality, while independent directors and board meeting frequency strengthened earnings quality in terms of persistency and predictability but not accruals earnings. Profitability and leadership structure was not shown to be significantly related trying to extrapolate these results in research on the impact of board size on earnings quality in non-financial enterprises listed on the Nairobi Securities Exchange (NSE), however, care should be used. Iran's financial institutions were the subject of the investigation. Non-financial companies operate in a range of sectors with a variety of operational and financial characteristics, which may have an impact on the importance of board size on earnings quality. Perhaps not all non-financial enterprises registered on the NSE are represented by the sample utilized in the Iranian research. The effect of board size on earnings quality may vary depending on the firm's size, ownership structure, and financial health.

Lel and Miller (2019) conducted a study examining the correlation between the size of boards and earnings quality in European companies. The findings showed a correlation between a higher board size and low earnings quality. The relationship between bigger boards and less efficient financial performance monitoring was explained by the researchers as being related to potential coordination issues and information overload. The UK market was the target of a different study by Matolcsy et al. (2018), which discovered a negative link between board size and earnings

quality. They concluded that bigger boards could have trouble coming to an agreement and taking prompt action, which might then affect the accuracy of financial reporting.

The size and complexity of European and UK firms studied by Lel and Miller (2019) and Matolcsy et al. (2018) may not be directly comparable to non-financial firms listed at the NSE. Different board structures and practices might be more suitable for managing the unique challenges faced by firms in each context. Corporate governance regulations and enforcement mechanisms can significantly differ across jurisdictions. The regulatory landscape in Europe and the UK might not align with that of Nairobi, potentially affecting how board size relates to earnings quality. Moreover, Different industry dynamics and market pressures can influence how boards function and, consequently, their impact on earnings quality. The existing studies primarily focus on European firms and the UK market, leaving a geographical gap in the understanding of the relationship between board size and earnings quality in non-financial firms listed on the Nairobi Securities Exchange in Kenya.

In their research, Siam et al. (2014) examined the relationship between corporate governance and earnings quality among non-financial firms listed on the Amman Stock Exchange in Jordan. They utilized several variables as proxies for corporate governance, including board independence, board size, CEO duality, ownership concentration (insiders), firm size, and financial leverage. To measure earnings quality, the researchers used discretionary accruals as a proxy. On the other hand, the present study centers specifically on-board size as one of the proxies for board characteristics and uses accruals quality and discretionary accruals as proxies for earnings quality. However, the focus of this study is on non-financial firms listed at the Nairobi Securities Exchange (NSE). Due to the differences between the two stock exchanges (Amman Stock Exchange and NSE) and the varying contexts and regulatory environments in which the listed firms operate, the findings from the study conducted by Siam et al. (2014) cannot be directly applied or generalized to the current study on non-financial firms listed at the NSE.

The discrepancies in the economic, cultural, and institutional factors between Jordan and Kenya could significantly impact the relationship between board size and earnings quality in non-financial firms. Additionally, variations in reporting standards, corporate governance practices, and business practices between the two countries could influence the results differently. Therefore, it is essential to recognize the unique characteristics of each stock exchange and consider these contextual differences when interpreting and applying research findings from one setting to another (UNCTAD, 2018). To draw meaningful conclusions about the effect of board size on earnings quality in non-financial firms listed at the NSE, a separate study tailored to the specific context of the NSE would be necessary.

The studies conducted in Europe and the UK may not fully capture the contextual factors that influence the relationship between board size and earnings quality in the Kenyan context. The Kenyan business environment, regulatory framework, and corporate governance practices may differ significantly from those in Europe. Therefore, it is essential to conduct a study that specifically considers the Kenyan context to understand how board size affects earnings quality in non-financial firms listed on the Nairobi Securities Exchange. This will help to bridge the contextual gap and provide insights that are directly applicable to the Kenyan setting.

American research on the effect of board size on earnings quality has come to various results. DeZoort and Harrison's examination of a sample of American companies in 2021 found a positive association between board size and earnings quality. Larger boards, they stated, provide a deeper reservoir of expertise, improving the quality of earnings. However, another study by Krishnan and Visvanathan (2021) disproved this assertion by demonstrating a discrepancy between board size and earnings quality in American business firms. Their findings showed that larger boards could struggle to coordinate and reach decisions, which would lead to low earnings quality. The discrepancy between these two researches emphasizes the difficulties in determining how board size and earnings quality interact in the American environment. However, it's crucial to recognize that the Kenyan business environment may differ significantly from that of the United States. The effectiveness of larger or smaller boards in influencing earnings quality could be

influenced by specific factors that differ between the two countries. Hence, conducting a separate and focused study on the Nairobi Securities Exchange is essential to draw meaningful conclusions for the Kenyan setting.

In research on American firms, Gao et al. (2019) discovered a negative correlation between board size and earnings management. Larger boards, they indicated, may improve oversight and control, lessening the possibility of opportunistic reporting behavior. Research by Mohd-Sanusi et al. (2020) also looked at the impact of board size to firm size on the quality of earnings in the US market. They discovered that greater earnings quality was connected with a bigger board size compared to firm size, highlighting the potential advantages of a diversified board of directors. The studies on US firms may have used specific sample sizes and criteria, which might not be directly applicable to the context of non-financial firms at the NSE. The composition of the samples could influence the observed relationships between board size and earnings quality.

Research has also examined the influence of board size on earnings quality. A study by Zhuang et al. (2020) examined US firms and found that larger boards were associated with higher earnings quality. They argued that larger boards provide diverse expertise and perspectives, leading to better monitoring and oversight. However, a contrasting perspective was presented by Ertugrul and Ince (2020), who analyzed data from Latin American firms. They found a negative relationship between board size and earnings quality, suggesting that larger boards may suffer from coordination difficulties and ineffective monitoring. These findings have been diverse, with studies reporting both positive and negative relationships between board size and earnings quality. However, USA and Latin American firms operate within distinct cultural and regional contexts compared to non-financial firms at the NSE. The varying business practices, corporate governance norms, and regulatory environments could lead to different effects of board size on earnings quality in these different contexts.

The existing studies such as Gao, Hua, and Jiang (2019), Barua, Farooque, and Hossain (2019), and Zhuang et al. (2020) on the influence of board size on earnings

quality primarily focus on the American context, with limited research conducted specifically in Kenya or other African countries. Therefore, there is a geographical gap in understanding how board size affects earnings quality in the context of non-financial firms listed on the Nairobi Securities Exchange in Kenya. The current study aims to address this gap by providing insights into the specific dynamics and challenges faced by Kenyan companies. The contextual gap results from the fact that the majority of the previous research focused on board size and earnings quality in industrialized nations like the United States and Europe. Kenya and other African nations may have quite different corporate governance frameworks, regulatory environments, and commercial practices than Western economies. Thus, there is a need to explore the specific context of Kenya to understand how board size influences earnings quality in the local corporate governance landscape. The current study fills this contextual gap by focusing on non-financial firms listed on the Nairobi Securities Exchange.

A study by Xu et al. (2019) focused on Chinese firms and found a negative association between board size and earnings management. They argued that larger boards can enhance monitoring and control, reducing the manipulation of financial information. Additionally, a study by Wu and Li, (2020) investigated the effect of board size relative to company size on earnings quality in Chinese firms and found a positive association. They argued that larger boards relative to company size can enhance corporate governance practices, leading to higher earnings quality. Chinese firms and non-financial firms at NSE are likely to operate in distinct cultural and institutional contexts. The differences in corporate governance norms, regulatory frameworks, and business practices could impact how board size influences earnings quality in each setting. Chinese markets and the NSE might have different market characteristics, including investor behavior, trading volumes, and liquidity. These variations can influence financial reporting practices and the relevance of board size in each market.

A study by Chen et al. (2020) was carried out on Chinese firms and reported a negative relationship between board size and earnings quality. They argued that larger boards might experience challenges in information processing, resulting in

lower-quality financial reporting. Another study by Ho and Wong (2019) examined data from Hong Kong firms and found that board size was positively associated with earnings quality. They suggested that larger boards could provide better oversight and improve corporate governance practices. However, Chinese, Hong Kong, and Kenyan business environments differ significantly in terms of culture, corporate governance practices, and regulatory frameworks. These differences can impact the role and effectiveness of board size in influencing earnings quality in non-financial firms at the NSE.

The existing studies such as Xu, Li, and Xiao (2019), Wu and Li (2020), Chen et al. (2019), Ho and Wong (2019) on the influence of board size on earnings quality primarily focus on Chinese and Indian firms, with limited representation from other regions. This geographical gap highlights the need for research specifically targeting non-financial firms listed on the Nairobi Securities Exchange in Kenya. As the Kenyan context may differ in terms of governance practices, legal frameworks, and cultural factors, it is essential to investigate how board size affects earnings quality in this unique setting. The unique setting of non-financial enterprises listed on the Nairobi Securities Exchange in Kenya has not been examined in this research. The institutional and regulatory environments that differ between each nation could affect the association between board size and earnings quality. Therefore, to give a more precise understanding of the impact of board size on earnings quality in this specific scenario, it is necessary to investigate the unique contextual aspects in Kenya, such as corporate governance processes, ownership structures, and market features.

Amos, Agbeja, and Oba (2019)'s investigation of Nigerian businesses revealed a negative correlation between board size and earnings management. They proposed that bigger boards might improve corporate governance procedures and lessen financial statement manipulation. Exploring the impact of other African nations on the connection between board size and earnings quality will require more study. Owusu-Ansah et al.'s (2020) analysis of Kenyan businesses revealed a favorable correlation between board size and earnings quality. They suggested that bigger boards may improve oversight and governance procedures, resulting in better financial reporting. Further research is needed to provide a more comprehensive

understanding of this relationship specifically in the African context. Geographically, there is a lack of comprehensive research on the influence of board size on earnings quality in Africa beyond Nigeria and Kenya. While Agbeja, Oba, and Amos (2019) conducted a study on Nigerian firms and reported a negative relationship between board size and earnings management, further research is needed to explore the influence of other African countries on this relationship. Understanding the nuances and variations in corporate governance practices across different African regions would contribute to a more comprehensive understanding of the influence of board size on earnings quality.

Empirical research indicates that the size of the board of directors may influence the degree of accountability and transparency among firms (Majeed et al., 2015). Empirical results from Dimitropoulos and Asteriou (2010) revealed that coordination of smaller boards is easier leading to faster decisions making process which also reduces the possibility of coalition costs (Vafeas, 2000). Coalition costs can complicate board efficiency and effectiveness (Firth et al., 2007; Lipton and Lorsch (1992). The findings from Dimitropoulos and Asteriou's study in 2010 suggest that smaller boards exhibit better coordination, resulting in quicker decision-making processes and a reduction in coalition costs. Coalition costs can negatively impact board efficiency and effectiveness, as indicated by previous research by Firth et al. in 2007 and Lipton and Lorsch in 1992. However, these results cannot be generalized to a study on the effect of board size on the earnings quality of non-financial firms listed on the Nairobi Securities Exchange, Kenya. The study focuses on non-financial firms listed on the Nairobi Securities Exchange, while Dimitropoulos and Asteriou's research might have covered a broader range of industries or sectors. Industry-specific characteristics can significantly influence the relationship between board size and earnings quality. Moreover, differences in business practices, corporate governance norms, and cultural influences in Kenya may lead to varying effects of board size on earnings quality compared to the setting of Dimitropoulos and Asteriou's study.

Negativeu and Appiah (2017) conducted a study on 137 listed companies in Ghana and Nigeria to examine the impact of corporate board size on firm performance. The

results showed a statistically significant and positive correlation between board size and firm performance in both countries, indicating that allowing board size to depend on firm size improves performance. Various models accounting for endogeneities and performance proxies were used, with control variables including firm size, leverage, and firm age. The study utilized the OLS model and supported the agency theory, suggesting that larger boards can effectively advise, oversee, and discipline management while enhancing firm performance. The current study filled a gap in panel data analysis by examining the impact of board size on earnings quality of non-financial firms listed on the Nairobi Securities Exchange, in contrast to a prior study conducted on 33 listed firms in the NSE non-financial segment, which concentrated on proxy measures for board characteristics and earnings quality.

In conclusion, the impact of board size on earnings quality varies by region. Studies carried out in Europe often demonstrate a negative relationship between board size and earnings quality, highlighting challenges with coordination and decision-making. Research in America has shown mixed results, with some studies suggesting a positive correlation and others suggesting a negative one. Board size and earnings quality usually have a negative link in Asian research, showing challenges with information processing. Few studies have been conducted on Africa, notably Kenya, but early findings indicate a positive relationship between board size and earnings quality, indicating that larger boards could enhance monitoring and governance procedures.

Attia et al. (2022) investigated how board of directors' characteristics affect actual earnings management (REM). To test the assumptions, panel data from 78 Egyptian listed firms was gathered from 2008 to 2017. The findings of the system generalized technique of the moment model showed that, except for the abnormal cash flows from operations (ABCFO) measure, the board size is adversely and strongly connected with REM proxies. However, the findings from this study cannot be generalized to analyze the effect of board size on the earnings quality of non-financial firms listed on the Nairobi Securities Exchange in Kenya. The study only includes data from Egyptian firms, which might belong to specific industries prevalent in that country. Industries have varying levels of complexity, competition,

and financial reporting standards, which can impact the relationship between board size and earnings quality differently in other contexts.

A study by Soliman and Ragab (2013) conducted on Egyptian firms in the non-financial sector investigated the impact of board characteristics on financial performance, using board size and earning quality. However, the results of this study cannot be generalized to a study on the effect of board size on the earnings quality of non-financial firms listed on the Nairobi Securities Exchange, Kenya. The two countries also have distinct cultural norms and institutional setups, which can influence decision-making processes and corporate governance practices. Factors such as business traditions, ethical standards, and the perception of corporate responsibilities may differ, leading to different outcomes. The study by Soliman and Ragab focused on the non-financial sector in Egypt. However, different industries may have varying board size requirements and earnings quality drivers. What holds for the Egyptian non-financial sector may not necessarily apply to non-financial firms in Kenya.

In Kenya, the impact of corporate governance practices on the earnings management of companies listed at the Nairobi Securities Exchange (Iraya, Mwangi, & Muchoki, 2015). The 49 companies that had been continuously and actively trading at the NSE between January 2010 and December 2012 made up the target population. To examine the impact of the independent variables on the dependent variable, secondary data from the years 2010 to 2012 were used. The analysis was done using linear regression. According to the study, board activity and CEO duality are positively correlated with earnings management, while ownership concentration, board size, and board independence are negatively correlated.

According to the study, effective corporate governance norms are required to manage decreasing earnings and prevent a possible collapse of listed enterprises in Kenya. However, the current study specifically investigated board characteristics and earnings quality of listed non-financial enterprises in NSE based on panel data between and. The prior studies were more focused on corporate governance and earnings quality across businesses across all categories in NSE based on OLS. The

present research, which looked at the effect of board size on the earnings quality of listed non-financial firms at NSE, addressed this gap in the literature.

Additionally, corporate governance's impact on the management of earningss for Kenyan firms listed on the NSE was explored by Musa (2013). The study's factors included board size, board independence, audit committee independence, CEO shares, and corporate governance. We substituted discretionary accrual for earnings management. From the NSE's list of publicly listed firms for the years 2009 to 2013, thirty (30) companies were selected as examples. Regression analysis was performed to analyze the data, and the findings were interpreted using the coefficients of the independent variables and their p-values. Musa's (2013) research looked at a number of corporate governance variables, but it mainly focused on earnings management and its relationships with elements like board size, board independence, and CEO shares. The direct link between board size and earnings quality in non-financial enterprises was not precisely isolated and studied. Additionally, the analysis by Musa (2013) only took into account Kenyan businesses that were listed on the NSE between 2009 and 2013. It may be difficult to generalize the results to a wider context since non-financial enterprises and various time periods may display distinctive traits and behaviors.

Besides, Ngulumbu and Aduda (2016) examined the connection between the board's composition and the financial success of listed companies on the Nairobi Securities Exchange. In this study, a correlational survey design was used. All of the listed companies on the Nairobi Security Exchange made up the study's population. The research employed secondary data. Three years of financial performance (ROA) data were gathered (2010 to 2012). The Statistical Package for Social Sciences (SPSS) tool was applied in the analysis of the data where the frequency tables and figures were used to present the findings. After that, descriptive statistics like frequencies, means, and percentages were used to analyze the data. The results of the study showed that corporate governance practices influenced the overall financial performance of listed companies. Additionally, results showed that there was a rising trend in board Size, independent (non-executive) directors, the number of board committees, the number of founder directors, the mix of women and men on the

board, the directors' educational backgrounds, and their ages over the past three years. To empirically determine whether independent variables were a significant determinant of earnings before tax, regression analysis was used. The goodness of fit for the regression between the factor variables and the outcome variable is satisfactory, according to the results of the regression. The results of the ANOVA showed that the overall model is important. This suggested that quality of earnings was accurately predicted by the independent variables.

This study examined the impact of board characteristics on financial performance using a correlation survey design. Size, independence, committees, found directors, gender balance, educational level, and age of NSE directors were proxies for board characteristics. The return on assets served as a gauge of financial performance. This study did not employ a quantitative survey design, nor did it make use of the following proxy measures of board characteristics: board size, board independence, audit committee independence, and gender diversity on earnings quality measures including accrual earning and discretionary accruals.

Cherotich and Obwogi (2018) investigated how the board characteristics of listed companies on the Nairobi Securities Exchange affected their financial performance. The study used a descriptive and quantitative research design, collecting secondary data over 8 years (2010–2017). The 55 businesses that were listed on the Nairobi Securities Exchange as of 2010 were the intended audience. The study's findings revealed listed firms in Kenya, an insignificant negative between CEO duality and financial performance, a positive significant relationship between board independence and firms performance, and a positive significant relationship between board gender composition and performance.

According to the study's findings, board independence, CEO duality, and board gender composition all significantly impacted financial performance. The study came to the additional conclusion that the financial performance was not significantly impacted by board size as a component of board characteristics. Instead of a situation where the firm's CEO also serves as board chair, the study advised the listed firms to adopt a leadership structure in which the CEO and board chair positions are distinct

and therefore held by two different people. Furthermore, the listed companies in Kenya should increase the number of female directors and non-executive directors on their boards.

Based on a descriptive quantitative design, this study covered an 8-year period of 55 firms that were listed on the NSE. As a substitute for board competition, the following proxy measures of board characteristics were used in the current study, which used a quantitative survey design: board size, gender composition, independence from management, and CEO duality on financial performance. Board size, board independence, audit committee independence, or gender diversity on quality measures of earnings, such as accrual earnings and discretionary accruals, filled the gap. The findings corroborated Bublykova's (2014) which found that board size hurt the financial performance of Hungarian-listed firms.

2.5.2 Audit Committee Independence and Earnings Quality

When concentrating on European nations, Muttakin, Khan, and Siddiqui (2019) discovered a favorable correlation between the frequency of audit committee meetings and earnings quality. The importance of active participation and consistent oversight by the audit committee is highlighted by the association between more meetings and greater earnings quality. In a study done in the US, Ben Ali, Heinen, and Veilleux (2018) discovered that the frequency of audit committee meetings considerably increased the quality of earnings. They underlined the need of holding frequent meetings to strengthen the audit committee's supervision and monitoring responsibilities, which will result in better financial reporting. However, the effectiveness of audit committee meetings and their impact on earnings quality may vary across countries and regions due to differences in corporate governance practices, regulations, cultural norms, and business practices. Moreover, variations in market development and financial reporting infrastructure between European countries, the United States, and the NSE could influence the extent to which audit committee meeting frequency affects earnings quality in non-financial firms listed at the NSE. Additionally, differences in industry composition, accounting standards,

and the overall business environment may also contribute to varying outcomes in these regions.

Chand and White (2019) examined Asian countries, including China, India, and Japan, and their research emphasized the positive impact of the frequency of audit committee meetings on earnings quality. Their study revealed that more frequent meetings increased the audit committee's ability to identify and address potential financial reporting issues, resulting in improved quality of reported earnings. These studies collectively support the idea that frequent audit committee meetings contribute to higher earnings quality in various regions. The legal and regulatory environment surrounding financial reporting and corporate governance practices can vary significantly across different countries and regions. This can influence the role and functioning of audit committees, potentially affecting their ability to enhance earnings quality.

Ararat et al. (2018) examined the impact of audit committee independence on earnings management in European Union countries and found that greater independence was associated with higher earnings quality. Agrawal and Chadha (2020) focused on non-executive directors' influence on earnings quality in European firms and found that a higher proportion of non-executive directors on the audit committee were positively associated with better earnings quality. Skaife et al. (2018) discovered that higher audit committee meeting frequency was linked to lower earnings management techniques and improved earnings quality in European nations. Furthermore, Kallapur et al.'s (2019) investigation of the relationship between audit committee independence and earnings quality in American businesses discovered that greater independence was linked to improved earnings quality, as seen by lower levels of discretionary accruals. These studies emphasize the significance of the audit committee's independence, the impact of non-executive directors, and the frequency of meetings in assuring higher earnings quality.

In their study, Sae-Lim and Jermsittiparsert (2019) examined the correlation between the Audit Committee and earnings quality, as the Audit Committee plays a crucial role in enhancing earnings quality. Their analysis of existing literature revealed that

the Audit Committee acts as a deterrent against earnings management by thoroughly scrutinizing all management activities to ensure improved earnings quality, particularly in firms with weak internal audit controls. The researchers employed two models, one introduced by Jones in 1991 (widely used) and the other by Dechow and Dichev in 2002, to measure earnings quality. The findings indicate that the presence of an effective audit committee restrains earnings management practices in firms. Moreover, they explored the potential conflicts between the two measures of earnings quality and the role of the audit committee, noting that earnings management tends to be more prevalent when the majority of the audit committee consists of independent directors. Thus, an independent and unbiased audit committee is essential for the overall development of the firm.

The frequency of audit committee meetings and their impact on earnings quality in Asian countries have received limited attention in the existing literature. However, a study by Haniffa et al. (2021) examined the association between audit committee meeting frequency and earnings management in Malaysia. They found that more frequent audit committee meetings were associated with lower earnings management practices and higher earnings quality. The implication of the study by Haniffa et al. (2021) on the association between audit committee meeting frequency and earnings management in Malaysia suggests that more frequent audit committee meetings are linked to lower earnings management practices and higher earnings quality. This finding could have important implications for non-financial firms listed on the Nairobi Securities Exchange (NSE) in Kenya. Malaysia and Kenya are different countries with unique business environments, cultural norms, and regulatory frameworks. The effectiveness and impact of audit committees may vary based on these contextual factors. Moreover, the legal and regulatory landscape governing corporate governance and audit committees differ between Malaysia and Kenya. This could lead to variations in the roles, responsibilities, and effectiveness of audit committees in ensuring earnings quality. There is therefore the necessity to investigate this phenomenon at the Nairobi Securities Exchange.

The effect of Audit Committee independence on earnings management in non-financial enterprises listed on the Nairobi Securities Exchange was examined in

research by Maina and Kiprotich (2019). They discovered that stronger audit committee independence was linked to better earnings quality and less aggressive earnings management. The research stressed the value of independent audit committees in preventing earnings manipulation and assuring the accuracy of financial reporting. The implication of the study by Maina and Kiprotich (2019) on the effect of independent audit committees on the earnings quality of non-financial firms listed on the Nairobi Securities Exchange, Kenya, suggests that having a more independent Audit Committee is beneficial for these firms. The study highlights that such independence is associated with reduced earnings management practices and higher earnings quality, indicating a stronger focus on accurate financial reporting.

However, there are existing gaps in the current study and the broader research on the effect of Audit Committee independence on earnings quality in Kenya. Firstly, there is a need for more empirical studies specifically focused on the Kenyan context to provide a comprehensive understanding of the relationship. While the study by Maina and Kiprotich (2019) addressed the issue, further research is required to validate and extend their findings. Secondly, the influence of audit committee size on earnings quality in Kenyan firms remains understudied. Research in other regions, such as America, has shown that a larger audit committee size is associated with better earnings quality. Therefore, it would be valuable to investigate whether similar patterns exist in the Kenyan context.

2.5.3 Gender Diversity and Earnings Quality

The challenge of emotional management was examined by Báez et al. (2018) in their study on gender diversity, corporate governance, and firm behavior. The 118 businesses included in the STOXX® Global 3000 Travel and Leisure make up the study sample. For the time frame ending in 2017, financial and corporate governance data from Reuters.com were utilized. From each company's official corporate website, additional information on its corporate governance was gathered. Ad hoc indicators for gender diversity, disparities in pay, and seniority were created. As a first step toward a comprehensive research agenda, special attention was paid to the specific position held by women on each board and its relationship to emotional

intelligence. The findings indicated a significant gap in each of the three dimensions examined presence, salary, and seniority.

Murtaza et al. (2020) conducted a study on European financial institutions and reported that higher gender diversity in executive positions was associated with improved earnings quality. Nevertheless, despite these findings, there remains a need for further investigation into the specific mechanisms through which gender diversity influences earnings quality in European countries. Additional research in this area could shed more light on the underlying factors that contribute to the observed positive correlation between gender diversity and earnings quality, potentially uncovering valuable insights for organizations seeking to enhance their financial reporting practices. The implication of the positive relationship between gender diversity on boards and earnings quality, as supported by the research conducted by Murtaza et al. (2020) on European financial institutions, suggests that having a more diverse gender representation on boards of non-financial firms listed on the Nairobi Securities Exchange (NSE), Kenya may lead to improved earnings quality. However, it is crucial to acknowledge that the studies reviewed and their findings may not directly apply to the situation in Kenya due to geographical, contextual, or other factors.

Moreover, Kenya has unique cultural and societal norms that may influence the dynamics of gender diversity on boards and its impact on earnings quality. These cultural factors might affect the way gender diversity is perceived and implemented in corporate governance. The composition of industries and sectors on the NSE may differ from those in European countries. Different industries may have varying levels of gender diversity and its impact on financial performance and earnings quality. It was therefore necessary to investigate the effect of gender diversity on the earnings quality of non-financial firms listed on the Nairobi Securities Exchange.

Research by Adams and Meziane (2018) found that higher gender diversity on corporate boards positively impacts earnings quality, as it brings diverse perspectives and reduces bias. Moreover, a study by Muttakin, Khan, and Subramaniam (2020) in Europe highlighted that gender-diverse boards exhibit higher levels of transparency,

accountability, and ethical behavior, resulting in improved earnings quality. These findings emphasize the positive influence of gender diversity on earnings quality in European countries. Gender diversity on corporate boards may have comparable favorable effects on earnings quality in the Kenyan context, according to research by Adams and Meziane (2018); Muttakin, Khan, and Subramaniam (2020) in the context of a study on the effect of gender diversity on the earnings quality of non-financial firms listed on the Nairobi Securities Exchange. Kenyan cultural and social standards, however, are distinctive and may have an influence on how people perceive and embrace gender diversity on corporate boards. It is crucial to comprehend how these elements affect the NSE's earnings quality.

Additionally, studies on gender diversity and earnings quality in American countries have been conducted. In a study of a sample of American businesses, Gao et al. (2019) discovered a positive correlation between more gender diversity on boards and higher-quality earnings. Additionally, studies by Hernandez-Perdomo et al. (Carter et al., 2010) in Latin American nations, such as Brazil, Mexico, and Argentina, showed a favorable correlation between gender diversity in executive roles and earnings quality. However, cultural and societal differences between American, Latin American, and African countries may impact the way gender diversity is perceived and embraced in corporate settings. Norms, values, and expectations related to gender roles and equality vary significantly across regions, which can influence the representation of women in executive positions and their impact on earnings quality. Moreover, legal frameworks and regulations related to gender diversity and corporate governance also diverge across countries. The existence of specific policies and initiatives promoting gender diversity may play a significant role in shaping its impact on earnings quality. The absence or different scope of such regulations at the NSE could influence the outcomes of any similar study.

A research study by Carter, Simkins, and Simpson (2019) in the United States revealed that firms with a higher gender diversity index tend to have higher earnings quality. The study suggests that the diverse perspectives and skills brought by gender-diverse boards enhance the monitoring and decision-making processes,

leading to improved financial reporting quality. Similarly, research conducted by Campbell, Desai, and Hodge (2021) in North America demonstrated a positive relationship between gender diversity in executive positions and earnings quality, indicating that greater gender representation in leadership positions positively impacts financial performance and reporting. However, the studies mentioned focus on the financial industry and the North American context. The earnings quality dynamics in non-financial sectors listed at NSE may not necessarily mirror those in financial firms. Industry-specific factors could play a crucial role in shaping the relationship between gender diversity and earnings quality.

In Singapore, research by Das, Iselin, and Wimmer (2020) found a link between gender diversity in board leadership roles and high-quality earnings. According to the research, gender-diverse boards are more likely to follow good corporate governance procedures, which improve earning quality. The link between gender diversity and earnings quality in other Asian nations should be better understood with the help of more research. Nevertheless, the study's focus on financial firms in Singapore may not directly translate to non-financial firms listed at the NSE. Different sectors may experience varying challenges and opportunities concerning gender diversity and its impact on earnings quality. Each country has its regulatory environment and policies concerning gender diversity and corporate governance. Variations in the level of government support and legal mandates can influence the relationship between gender diversity and earnings quality.

Studies exploring the influence of gender diversity on earnings quality in Asian countries have emerged. For example, research conducted by Raza et al. (2020) in Malaysia found that higher gender diversity on boards positively influenced earnings quality. Similarly, a study by Nguyen et al. (2019) in Vietnam demonstrated a positive association between gender diversity in executive positions and earnings quality. However, the impact of gender diversity on earnings quality may vary across Asian countries due to cultural and institutional differences, highlighting the need for country-specific analyses. The review suggests that there is a growing interest in exploring the relationship between gender diversity and earnings quality in Asian countries. However, it is crucial to recognize that the findings from these studies

conducted in other Asian countries such as Malaysia and Vietnam may not directly apply to the situation in Kenya due to geographical, contextual, and institutional differences. Additionally, there are differences in the representation of women in executive positions and boardrooms across countries. Factors such as cultural attitudes towards gender roles, workforce demographics, and historical gender inequalities may lead to varying levels of gender diversity in leadership positions among Kenyan firms compared to those in Malaysia or Vietnam.

Research by Okeahalam et al. (2020), investigated the effect of gender diversity on the quality of earnings among South African firms' boards. According to the findings, gender diversity and earnings quality are positively correlated. To offer a thorough knowledge of the impact of gender diversity on earnings quality across the continent, more study concentrating on other African nations is required. However, the study focuses on South African companies, and the impact of gender diversity on earnings quality may differ across industries and sectors. Non-financial firms listed at the NSE might have unique characteristics and challenges that could lead to different outcomes compared to those observed in South African financial companies. Different African countries have distinct cultural norms, societal structures, and workplace dynamics, which could significantly influence the impact of gender diversity on earnings quality. The positive relationship observed in South African firms may not hold for firms in Kenya or other African nations due to variations in cultural perceptions of gender roles and diversity.

The effect of gender diversity on earnings quality in Kenya, specifically within non-financial firms listed on the Nairobi Securities Exchange, remains an underexplored area. As per the current study on the effect of Audit Committee independence on the gender diversity of non-financial firms listed on the Nairobi Securities Exchange, limited existing studies are addressing this specific relationship. Future research should aim to fill this gap by investigating the influence of gender diversity, as measured by the gender diversity index, gender composition of executive positions, and gender representation in board leadership positions, on earnings quality in Kenyan firms.

Women tend to be focused only on several corporate tasks like those related to marketing and human resources management. This bias, which a first view can be considered an additional manifestation of the gender gap, is at the same time an opportunity to link modern firms to a new style of management in which approaches like emotional intelligence could play a most prominent role. This research contributes in two different ways: (1) it demonstrates the enormous gap that still exists between men and women at the top of tourist organizations worldwide and (2) it suggests several research pathways given the type of gender gap detected. This study was conducted in the global tourist and Leisure listed company STOXX with the predictor variable gender and outcome variable which were transparency and ethical practices. The study was generally qualitative as opposed to the proposed study which was a quantitative correlation study that analyzed the effect of gender diversity on earnings quality measured using both accruals quality and discretionary accruals proxies. This was the research gap filled by the current study using panel data between 2013 and 2020 in the listed non-financial firms at NSE.

Man and Wong (2013) carried out Corporate Governance and Earnings Management: A Survey of Literature. According to the survey, corporate governance can lessen or even completely do away with earnings management. Typically, managers' self-interest can be restrained to some degree in an institutional setting that offers better legal protection. Market pressure from takeovers can compel managers to act in the best interests of shareholders. Different corporate governance mechanisms that may have a negative relationship with earnings management have been the subject of prior studies. Board independence can improve managers' ability to monitor certain behaviors, such as the theft of assets. Female directors are more likely to be risk-averse toward fraud and opportunistic earnings management, and they can develop trust leadership, which calls for managers to share information. The internal control over financial reporting and the accuracy of the financial data can be supervised by an audit committee. Particularly in companies with poor corporate governance, directors with financial expertise can provide incremental control effects on earnings management.

The survey contributes to corporate governance by providing detailed reviews of different corporate governance mechanisms, reviewing the latest findings on classification shifting, and summarizing earnings management measures, including a new diagnostic system. In the future, this new diagnostic system may be investigated in different contexts. The current study on the contrary was an empirical analysis of the effect of gender diversity on the earnings quality of the non-financial firms listed in NSE. The current study, therefore, revealed more tangible quantitative results which contribute more to the body of knowledge in corporate governance of listed firms in Kenya which was the results gap filled by the current study.

Wei and Xie (2016) used a sizable sample of publicly traded companies from 1999 to 2006 to study CFO Gender and Earnings Management: Evidence from China. 1,820 female CFOs and 4,959 male CFOs were sampled for the study. The study's findings show that male CFOs manage earnings more frequently than female CFOs. For example, cross-sectional analysis reveals that female CFO firm-years have significantly higher abnormal discretionary expenses, lower abnormal production costs, and lower discretionary current accruals than male CFO firm-years. Manufacturing companies exhibit a greater degree of overproduction in male CFO firms. It is important to note, however, that Kenya has its unique cultural and institutional factors that may influence the relationship between gender diversity and earnings quality in non-financial firms. The socio-economic landscape, corporate governance practices, legal frameworks, and social norms in Kenya could all play a significant role in shaping how gender diversity affects earnings quality in the specific context of firms listed on the Nairobi Securities Exchange.

One explanation is that male new CFOs purposefully manage earnings down in the first year to claim more credit for any performance improvements that occur later. Overall, our data is consistent with the claim that female CFOs are more risk-averse than male CFOs when it comes to operational and financial reporting decisions. This study was a comparative analysis of both male and female CFOs on gender and earning management among firms in China. This study used OLS analysis based on a cross-section design compared to the current study which analyzed the effect of

gender diversity on both earnings management and accruals quality of non-financial firms listed in NSE which was the gap filled by the current study.

Peni and Vähämaa, 2010) investigated the management of earnings and female executives. A panel regression of discretionary accruals was used in the study, along with firm-specific controls and a set of female executive dummies. The findings offer strong evidence that companies with female chief financial officers (CFOs) have lower income discretionary accruals, indicating that female CFOs employ more conservative methods of managing earnings. Limitations/implications of the research. The results suggest that differences in managerial opportunism, risk aversion, and conservatism between men and women may have significant effects on corporate governance and financial reporting. This study was carried out among S&P 500 Index firms in the USA where the researchers used both accruals quality and discretionary accruals as measures of earnings quality whereas the predictor variable was female CEOs as opposed to the current study which took the proportion of females in the board of the non-financial firms listed in NSE which was the research gap that was filled by the findings of the current study and contributed to the body of knowledge on earnings quality in Accounting Discipline.

Sindhi et al. (2011) studied female directors and earnings quality. In recent years, the quantity of female executives in companies is rising, and some countries have even raised a mandatory requirement about the proportion of female executives in the company. Women are increasingly attracting the attention of theory and practice fields, and so does the discussion of the role of senior women. This study reviews the research on how female executives influence corporate behavior and performance from the perspective of finance and non-finance, analyses the deficiency of related research, and points out the direction for future research.

Their analysis points out that women are different from men in their leadership styles and attitudes toward ethics and risks. Unlike men, women show greater concern for interpersonal relationships and rely on rules of fairness. Whereas men adopt the ‘transactional’ or command-and-control approach of leadership, women tend to adopt the ‘transformational’, interactive or participative approach of leadership. In

the transactional approach, leaders regard job performance as a series of transactions with subordinates in which the latter is rewarded for services rendered and punished for unacceptable performance. On the other hand, transformational leaders transform the self-interest of their subordinates into the interest of the group. This study was a literature survey of female directors and earnings management. The current study to the contrary was an empirical analysis of the effect of gender diversity on the earnings quality of the non-financial firms listed in NSE. The current study also revealed more tangible quantitative results which contribute more to the body of knowledge in corporate governance of listed firms in Kenya which was the results gap filled by the current study.

The impact of board features on earnings management among international oil and gas businesses was examined by Ghazaleh and Garkaz (2015). The Board's characteristics are its size, diversity, and independence. The research used quantitative techniques and secondary data, sampling 71 of the top 250 companies in 2016. The study's findings showed that the board's independence has a big influence on how much earnings management is reduced. In contrast, the size of the board has no bearing on how much management expenses are reduced because a larger board is less effective at overseeing itself and because it is more challenging for a board with more members to monitor the management.

However, it is essential to note that the study's findings cannot be generalized directly to a study at the Nairobi Securities Exchange (NSE). This is so because Ghazaleh and Garkaz (2015)'s study concentrated on the influence of board characteristics on earnings management in international oil and gas firms, which may have different industry dynamics, governance structures, and reporting practices than the companies listed on the NSE. Direct generalizations are not acceptable since the backdrop, regulatory environment, and cultural elements in the NSE may be quite different from those in the international oil and gas industry. Therefore, a different research that is especially suited to the distinctive features of the exchange would be required to comprehend the influence of board characteristics on earnings management at the NSE.

The impact of Board Characteristics on Earning Management: Iranian Scenario was researched by Moradi et al. (2012). The study analyzed the effects of traits like CEO duality, non-executive directors, board size, and changes in the composition of the board, the agency, and the female board members on the management of earnings in listed companies on the Tehran Stock Exchange between 2006 and 2009. The findings of Moradi et al.'s (2012) study provide insights into the relationship between board characteristics and earnings management within the specific context of the Tehran Stock Exchange. However, it is important to note that these findings cannot be generalized directly to a study conducted at the Nairobi Securities Exchange (NSE) due to several reasons. Firstly, the two stock exchanges operate in different countries with distinct legal, regulatory, and cultural environments. The corporate governance practices, reporting standards, and market characteristics may differ significantly between Iran and Kenya. Therefore, the impact of board characteristics on earnings management may vary based on the unique context of each stock exchange. Secondly, the period covered in the Iranian study (2006 to 2009) may not be directly applicable to the NSE, as market conditions, economic factors, and corporate governance reforms can change over time. Conducting a study at the NSE would require the consideration of more recent data to reflect the current state of the market and governance practices.

The study determined discretionary accruals as an earnings management indicator, the Modified Jones Model has been applied. Research results show that when operating cash flows reducing the presence of non-executives and changes in the members of board director (or their agencies) account for effective factors in reducing management level. Also, it seems that conditions that govern in Iran have caused an increase in firm size the management will have greater incentives to increase earnings for providing a better figure of its performance to shareholders and authorities despite Western results of research.

Although in situations in which auditor organizations have been responsible to audit the financial statements of Firms the firm size does have not a significant relationship with earnings management level. The difference in the study is that it was carried out in Iran and used only one measure of earnings quality compared to the current study

which was conducted among listed non-financial firms in NSE and used both accruals quality and discretionary accruals as proxies to earnings quality, which was the gap filled by the results from the current study.

Fraga and Silva (2012) looked into the gender, age, educational level, and independence of the board members of Brazilian companies listed on the BM&F Bovespa to see if there was a correlation between any of these diversity metrics and company performance. All companies without majority control, a form of corporate structure that first appeared in Brazil in 2005, are included in the study. According to the findings, diversity in the schooling years has a positive effect on performance, while greater diversity in the educational disciplines and the presence or absence of independent board members have a negative impact. Despite the low number of female board members, companies with at least one female director perform better than those without.

The study was carried out in Brazil and used gender diversity age, educational attainment, independence, and firm performance as the variables whereas the current study analyzed the effect of gender diversity on earnings quality using accruals quality and discretionary accruals as proxies for earnings quality and found a significant effect of gender diversity and earnings management of non-financial firm listed in NSE, a gap filled by the results obtained from the current study.

In their study of the FTSE 100 companies in the UK, Brahma et al. (2021) looked at the connection between gender diversity, particular female characteristics, and financial performance. This study finds a significant and favorable relationship between gender diversity and firm performance, drawing on the critical mass theory to measure gender diversity as levels of female representation in the boardroom. However, when three or more females are appointed to the board as opposed to the appointment of two or fewer females, the results become extremely significant and clear-cut. Further investigation reveals that post-appointment financial performance is positively correlated with female age, educational attainment, and female directors on the board on the firm performance. After taking into account endogeneity issues

and using alternative measures of firm performance, namely, return on assets and Tobin's Q, the results remain unchanged.

The study was carried out in the UK and used gender diversity firm performance measured using Tobin Q whereas the current study analyzed the effect of gender diversity on earnings quality using accruals quality and discretionary accruals as proxies for earnings quality and found a significant effect of gender diversity and earnings management of non-financial firm listed in NSE, a gap filled by the results obtained from the current study.

Obigbemi et al. (2016) investigated board structure and earnings management using evidence from Nigeria. An organization's board structure provides an overview of its standards, which also affects how the organization is perceived by the public. This study makes an effort to assess how the board structure affects the practices of earnings management in Nigerian businesses. In this study, data from 137 Nigerian quoted companies were sampled over 8 years (2003-2010). The performance matched the estimated magnitude of the discretionary accruals from the modified Jones model that was used to assess earnings management. Ordinary least squares (OLS) was used to assess the research model and found a strong correlation between board structure and earnings management in Nigeria.

The findings also showed that there is a strong positive association between the frequency of board meetings and earnings management in Nigeria, as well as a significant negative relationship between board size, gender, and characteristics with earnings management. The dualization of the CEO and chairman roles and the existence of a compensation committee have no impact on Nigerian earnings management practices. This research suggests that all levels of regulators should make it mandatory for businesses doing business in Nigeria to prepare and publish financial reports. The difference in the study is also that it was carried out in Nigeria and used only one measure of earnings quality compared to the current study which was conducted among listed non-financial firms in NSE and used both accruals quality and discretionary accruals as proxies to earnings quality, which was the gap filled by the results from the current study.

Kristie (2011) conducted a study examining the relationship between board gender and ethnic diversity and firm value using data from 245 distinct South African listed companies over the years 2008 to 2013. The findings of the study revealed that both board gender and ethnic diversity have a positive and significant impact on firm value. Specifically, having three or more female directors on boards led to a greater increase in firm value. However, in the case of ethnic diversity, the study found that having three or more directors from ethnic minorities on the board resulted in a reduction of their value to the company. Moreover, the study highlighted that ethnicity's impact on firm value follows a concave relationship, contrasting with the linear relationship observed for gender diversity. Additionally, the study demonstrated that ethnic diversity holds greater value than gender diversity in firms with better governance. These findings provide valuable insights into the effects of board diversity in South African boardrooms, particularly in the context of the government's efforts to address the effects of apartheid policies. However, caution must be exercised in generalizing these findings to a study at the Nairobi Securities Exchange (NSE) or other contexts, as the South African setting and historical background may differ significantly from the NSE's and other regions, potentially influencing the relationships between board diversity and firm value differently. Thus, further research is needed to assess the applicability of these findings to the NSE and similar markets.

Research by Ongori and Agolla, (2019) suggests that higher gender diversity positively influences earnings quality by fostering varied perspectives, improved decision-making, and increased accountability. Similarly, Belghitar et al., (2018) and Kipkoech et al. (2021) highlight the positive relationship between gender diversity in executive positions and earnings quality. However, Social and economic conditions may change over time, and the findings might be contingent on the period when the research was conducted. As time progresses, the effects of gender diversity on earnings quality could evolve. Therefore the findings cannot be generalized to a study on the effect of gender diversity on the earnings quality of non-financial firms listed on the Nairobi Securities Exchange in 2023.

A study by Mwiti and Barongo (2019) examined the effect of audit committee independence on the gender diversity of non-financial firms listed on the NSE. This study identified a gap in gender diversity, indicating a lack of representation of women in leadership positions. By addressing this gap and promoting gender diversity, it is expected to positively influence earnings quality within Kenyan firms. However, it is essential to note that the findings from these studies cannot be directly generalized to analyze the effect of gender diversity on earnings quality at the Nairobi Securities Exchange. The reason for this is that the mentioned studies specifically focused on different aspects: García-Meca and Sánchez-Ballesta (2009) examined audit committee independence's impact on gender diversity, while Mwiti and Barongo (2019) investigated the gender diversity gap in leadership positions. To understand the direct relationship between gender diversity and earnings quality, a separate study with a specific focus on gender diversity's impact on earnings quality is needed. Additionally, other factors and corporate governance mechanisms may also play a role in influencing earnings quality, making it crucial to conduct a dedicated study that thoroughly explores the relationship between gender diversity and earnings quality in the context of the NSE-listed firms.

2.5.4 Board Independence and Earnings Quality

According to a study by Barua et al. (2019) that examined US companies, a larger percentage of independent directors were related to better earnings quality. They said that independent directors offer objective oversight and judgment, enhancing the veracity of financial reporting. Their results showed a correlation between increased independent director representation and better earnings quality, which they attributed to independent directors' objectivity and efficient oversight, which improves the accuracy of financial reporting. The corporate governance environment, business practices, and regulatory frameworks differ greatly between nations; therefore results from the US are not always applicable to Kenyan businesses. Additionally, the Nairobi Securities Exchange represents a unique market with its dynamics and characteristics that may influence earnings quality differently compared to the US market. Furthermore, industry-specific factors, such as distinct reporting requirements and challenges, may also play a role. Differences in financial reporting

practices, data availability, and quality between the two regions could lead to disparate results when examining the effect of board independence on earnings quality. It is, therefore, crucial to note that these results cannot be directly generalized to non-financial firms listed on the Nairobi Securities Exchange in Kenya

Rashid et al. (2010) looked at how the representation of outside independent directors on corporate boards affected the economic performance of firms in Bangladesh. To investigate the connection between the composition of board memberships, including independent directors, and firm performance, two hypotheses are developed. The study makes use of 274 firm-years from Bangladesh that were observed. To test the theories, linear regression analysis is employed. Board independence was the dependent variable, which was regressed against firm performance as determined by ROA and Tobin Q. The ownership structure, board size, CEO duality, firm debt, firm size, firm age, and firm growth were the control variables. The findings from Rashid et al.'s (2010) study are based on data from firms in Bangladesh and are specific to the context of that country's business environment. Therefore, these results cannot be generalized to a study examining the effect of board independence on earnings quality in non-financial firms listed at the Nairobi Securities Exchange (NSE) in Kenya. The economic and corporate governance structures in Bangladesh may differ significantly from those in Kenya, leading to variations in the relationships between board independence and earnings quality. Additionally, factors such as cultural, legal, and regulatory differences can also influence the outcomes. Moreover, their study included both non-financial and financial firms, as opposed to the current which focuses on non-financial firms. Consequently, it is essential to conduct separate studies specific to the NSE and consider the unique characteristics of the Kenyan business landscape to understand the impact of board independence on earnings quality in that context.

A study by Kallapur et al. (2019) focused on firms listed on the US stock exchanges and found that companies without executive directors had higher earnings quality than those with executive directors. These findings highlight the importance of board leadership structure and the absence of executive directors in promoting higher

earnings quality in non-financial firms in the Americas. The US stock exchanges and the NSE may differ substantially in terms of market structure, firm size, industry composition, and overall business landscape. These distinctions can lead to varying effects of board independence on earnings quality in non-financial firms in the two markets.

The findings show that external (independent) directors are unable to improve the firm's economic performance in Bangladesh. Greater transparency may result from the idea of independent directors, but the firm may not see an increase in value if the underlying institutional and cultural differences in an emerging economy like Bangladesh are not taken into account. The findings give regulators information they can use in their efforts to harmonize global corporate governance standards. This study analyzed the relationship between board independence and firm performance in terms of Returns on Asset and Tobin Q in the Bangladesh firms compared to the current study that analyzed the effect of board independence on earnings quality measured based on both accruals quality and discretionary accruals among the non-financial listed firms in NSE, a literature gap filled by the results of the current study. Rashid, De Zoysa, Lodh, and Rudkin (2010)'s study also provides further research opportunities among firms in Kenya using the following control variables; CEO-duality, firm debt, firm size, firm age, and firm growth which were not analyzed in the current study.

The influence of independent directors on the quality of earnings in Indian enterprises was examined by Mathew et al. (2020), who discovered a favorable link. They recommended independent directors act as effective gatekeepers, lowering the likelihood of earnings misreporting. The findings of this study, however, should not be easily extrapolated to a comparable examination of the impact of board independence on the earnings quality of non-financial enterprises listed on Kenya's Nairobi Securities Exchange. This is because; India and Kenya have different economic, cultural, and regulatory environments. Factors that impact board effectiveness and earnings quality in one country may not necessarily apply to another.

According to a study by Filatotchev, Jackson, and Nakajima (2019), firms with a higher proportion of independent directors and a lower proportion of executive directors are associated with better financial reporting quality. They argue that independent directors bring impartiality and a diversity of perspectives to the decision-making process, which enhances the reliability of financial information. Overall, these findings highlight the positive impact of board independence on earnings quality in non-financial firms in Europe.

According to a study by Ferreira, Ferreira, and Mariano (2020), a higher proportion of independent directors and a lower proportion of executive directors are associated with improved earnings quality, as independent directors provide independent judgment and challenge management decisions. These findings further highlight the significance of board independence in promoting higher earnings quality in non-financial firms in America.

Chaharsoughi and Rahman (2013) studied the effect of corporate governance on earnings quality taking listed firms in Iran. Particularly, the study examined the relationship among independent directors, the size of the board, share ownership by the management, and earnings quality of 142 firms between 2008 and 2010. The study period began in 2008, a few years after the establishment of the code in late 2004 and when most of the companies had implemented it. There are 28 companies that, did not have enough available data to be included in the study resulting in 114 companies.

These relationships are controlled by firm size based out of 114 sampled companies listed on the Tehran Stock Exchange (TSE) for the period from 2008 to 2010. The results indicated that there was insignificant relationship between independent directors, managerial ownership, and earnings quality. The subsequent analysis also revealed the insignificant relationship between board size and earnings quality. This finding provided evidence of the negative relationship between firm size as a control variable and earnings quality. This can be attributed to the fact that large firms are claimed to be politically sensitive and thus have the incentive to lessen variances in changes in their reported earnings.

This study analyzed the effect of board independence, managerial ownership, and board size on earnings quality measured using accruals quality. The researchers of this study also introduced firm size as a control variable in the relationship. Again, this study revealed the insignificant relationship between board independence and earnings quality as opposed to the current study which found these to be significant. This is one the proof of the inclusiveness of the study of the effect of board independence on earnings quality which the research of the current study analyzed to broaden the knowledge gap in corporate governance.

The relationship between Board Characteristics and Earnings Quality: Malaysian Evidence was researched by Al-Dhamari and Ku Ismail (2014). The 2007 amendment to the Malaysian Code of Corporate Governance led to the current study's examination of the connection between board attributes and earnings quality. A sample of Malaysian companies listed in 2008 and 2009 were subjected to a heteroskedasticity-test, and the study established that the quality of earnings was observable in companies with independent chairmen compared to companies with non-independent chairmen. Regarding board independence, the results were inconclusive.

The results also demonstrate that investors do not perceive board size as a good indicator of quality earnings. The findings imply that investors continue to have reservations regarding the ability of boards to enhance the quality of earnings, although efforts have been made to reform corporate governance following the Asian financial crisis. The study serves as a signal to policymakers to evaluate the importance of board mechanisms when enhancing financial reporting quality in emerging markets. This study analyzed the relationship between board independence and earnings quality in Malaysia. The research gap is that the current study established a significant effect of board independence on earnings quality among non-financial firms listed at NSE in Kenya compared to the ones analyzed in Malaysia.

Liang et al. (2013) analyzed board characteristics and Chinese bank performance using a sample of the 50 largest Chinese banks from 2003 to 2010, They explore a

comprehensive set of board characteristics (size, composition, and functioning of the board) and analyze their impacts on bank performance and bank asset quality in China. They found that the board meetings and the ratio of independent directors had a significant positive effect on both the bank's performance and the quality of the asset while the size of the board had a negative significant impact on bank performance. The degree of political connection in the bank was negatively correlated with performance and asset quality. The findings suggest that the board of directors has a key role in bank governance in China. This study was carried out among banks whereas the current study analyzed the effect of board independence on the earnings quality of non-financial firms listed at NSE, a gap filled by the results presented in chapter four.

In China, board independence and company performance were also examined by Liu et al. (2015) who analyzed the relationship between board independence and firm performance in China. They discovered that independent directors generally improve a company's operating performance in China. Their results hold up to a variety of tests, such as endogeneity checks using instrumental variables, the dynamic generalized method of moments estimator, and the difference in differences method. Government-controlled businesses and those with lower information acquisition costs exhibit a stronger relationship existing between the independence of the directors and firm performance. Further, they proved that independent directors were key in limiting insider transactions and therefore enhancing investment effectiveness in Chinese firms. These findings revealed that independent directors contribute significantly to the bank governance structure in China. This study was conducted among banks and measured performance based on asset quality whereas the current study analyzed the effect of board independence on the earnings quality of non-financial firms listed at NSE, a gap filled by the results presented in chapter four.

Fuzi et al. (2016) analyzed board independence and firm performance taking the board of directors as a collective body acting in the best interest of shareholders and stakeholders. The board should have a combination of both executive and non-executive board directors to champion this interest. The non-executive directors on the board can not achieve this oversight role unless they are independent.

Independent boards can be entrusted by shareholders for balanced representation that can reduce agency problems as it is a requirement in the Code of Corporate Governance. However, just complying with the recommendations is not adequate in any case the directors fail to exercise their independent functions effectively. Few studies reviewed have been carried out to examine board independence and firm performance with the results revealing a mixed association between the ratio of independent directors and firm performance.

Muniandy and Hillier (2015) looked at the relationship between company performance and board independence in conjunction with expansion possibilities for South African businesses. It was inspired by the King III corporate governance reform that took place in 2010. Both pre-King III (2008–2009) and post-King III (2011–2012) archival data for companies listed on the Johannesburg Stock Exchange are used. To ascertain whether changes in board independence in combination with a company's growth status have an impact on performance, cross-sectional levels and difference analyses are used. The relationship between independent non-executive directorship and performance potential for firms has improved with the transition from pre-to post-King III. The study suggests that board independence is crucial.

The study's observations were based on the context of South African businesses and the specific governance reform introduced by the King III report. The corporate governance landscape in Kenya, including regulations and guidelines, might differ significantly from South Africa's, leading to potential variations in the impact of board independence on earnings quality. Moreover, South Africa's stock exchange, the Johannesburg Stock Exchange, operates in a distinct market and economic environment compared to the Nairobi Securities Exchange in Kenya. Varied market conditions, investor behavior, and economic factors can influence how board independence affects earnings quality in these different contexts.

It is relevant for the attraction of foreign investment in economies such as those in the Asia-Pacific, worthy of stressing by corporate regulators and of cognizance by investors. The study analyzed the association of firm performance and board independence, in concert with growth options for South African firms using a cross-

sectional design compared to the current study which used quantitative correlation based on panel data to analyze the effect of board independence on earnings quality among non-financial firms listed in NSE which was the research gap filled by the results also to reduce the earlier mixed findings on the subject.

Otusanya and Liu (2019)'s investigation, which was limited to companies listed on Nigerian stock markets, discovered a correlation between more board independence and higher earnings quality. In a similar vein, Maseko and Soobaroyen (2020) examined South African companies and discovered a favorable correlation between board independence and earnings quality. These results imply that board independence has a substantial role in raising the standard of financial reporting in African non-financial companies. Each stock exchange in Africa could have distinct traits, governing structures, and corporate governance procedures. The Nigerian and South African stock exchanges might differ significantly from the NSE in terms of their rules and regulations regarding board independence, financial reporting standards, and corporate governance expectations. Therefore, the impact of board independence on earnings quality may vary across these different markets.

According to the research done by Adegbite, Amaeshi, and Amao (2018), a larger percentage of independent directors on the board is linked to better earnings quality. Financial reporting is more accurate because independent directors provide a variety of viewpoints, knowledge, and independence to the decision-making process. The agency issues and possible conflicts of interest that might occur when CEOs have a significant say in financial reporting choices are diminished by their presence. Overall, board independence, characterized by a separate CEO and board chair and a higher proportion of independent directors, contributes to enhancing earnings quality in non-financial firms in Africa.

Studies by Kosgei et al. (2018) and Kiprotich et al. (2020) indicate that a separation of board leadership roles, a higher proportion of independent directors, and a reduced influence of executive directors positively impact earnings quality by promoting stronger corporate governance and reducing conflicts of interest. The findings of these studies provide valuable insights into the relationship between corporate

governance practices and earnings quality in non-financial firms listed on the Nairobi Securities Exchange, they cannot be generalized beyond the specific context and sample used in the studies. Further research in diverse settings is necessary to establish robust and widely applicable conclusions regarding the effect of board independence on the earnings quality of non-financial firms.

2.5.5 Ownership Concentration and Earnings Quality

A study by Claessens, Djankov, Fan, and Lang (2018) examined firms listed on European stock exchanges and their findings indicated that ownership concentration has a significant moderating effect on the relationship between board characteristics and earnings quality. They found that a higher number of institutional shareholders strengthen the positive impact of board characteristics on earnings quality. This suggests that institutional investors in Europe can act as a monitoring mechanism to ensure effective governance practices and enhance the quality of reported earnings. While the study by Claessens et al. (2018) provides valuable insights into the relationship between ownership concentration, board characteristics, and earnings quality in European firms, its findings cannot be directly applied to understand the effect of board characteristics on earnings quality in non-financial firms listed at the Nairobi Securities Exchange. The study by Claessens et al. (2018) focused on a diverse range of industries represented on European stock exchanges. In contrast, NSE-listed non-financial firms may represent specific sectors that possess unique operational characteristics. It is crucial to conduct dedicated research that accounts for the specific contextual factors and industry characteristics of the NSE to draw accurate and relevant conclusions for that particular setting.

Grimaldi et al. (2017) investigated the effect of ownership concentration on earnings management from the Italian context. The findings revealed that the ownership structure, in the opinion of some experts, reduces the motivation to control earnings. The ownership structure of earnings management, in the view of some, offers the chance and motivation to manipulate results. To determine if a firm's ownership structure in the Italian setting lowns or helps earnings management, this paper's primary goal is to analyze the data. Utilizing a sample of 300 Italian non-financial

listed companies, the researchers discovered that discretionary accruals, a proxy for earnings management, are favorably correlated with the first major shareholder and adversely correlated with ownership concentration. The findings of the study indicate that ownership concentration enhances yearly earnings quality in a specific agency environment by lowering levels of earnings management.

The link between stock ownership concentration and earning quality: data from Brazil is the subject of research by Sousa and Galdi from 2016. The study's goal was to determine how ownership concentration in Brazilian firms affected the caliber of their earnings. The two proxies utilized to gauge earnings quality were earnings persistence and asymmetry timeliness (conservatism). The study's sample consists of companies listed on the Sao Paulo stock market between 1999 and 2014 that are not financial enterprises. According to the study's findings, ownership concentration and accounting conservatism have a positive and substantial association. Moreover, research demonstrated that there is a negative correlation between ownership concentration and earnings persistence. Nevertheless, the study did not adequately capture the effect of institutional ownership.

Ayadi and Boujelbena's (2014) study, investigated the relationship between various forms of ownership structure, proxy earnings management, and informativeness in the French firms included in the SBF 250. All financial businesses were excluded from the study sample because they are subject to unique rules regarding the reporting of financial statements and governance. The sample for the study consisted of 117 French businesses. The study's findings suggest a substantial positive correlation between ownership concentration and earnings informativeness as well as a negative relationship between ownership concentration and earnings management.

The link between ownership concentration, board features, and earnings quality in American businesses was examined in research by Brown, Huang, and Wang (2020). Their findings showed that the association between board qualities and earnings quality is moderated by ownership concentration. In particular, they discovered that the favorable impact of board features on earnings quality is weakened by a bigger ownership position held by the largest shareholder. This suggests that concentrated

ownership in American firms may lead to reduced monitoring and potential agency problems, which can adversely affect earnings quality.

In contrast to the current study, which used ownership concentration on the effect of board characteristics and earnings quality among the listed non-financial in NSE, Alzoubi (2016) examined ownership structure and earnings management based on evidence from Jordan and used a cross-sectional design of ownership composition on the performance of firms listed in Mexican Stock Exchange. The gap was filled by Alzoubi (2016). In contrast to the current study, which used ownership concentration effect on board characteristics and earnings quality among non-financial listed firms in NSE, the previous study was a cross-sectional design that examined the impact of ownership structure on earnings management of Jordanian firms, the gap filled by the results presented in chapter four.

Wardani and Setiawan (2020) studied 302 manufacturing companies listed on the Indonesia Stock Exchange from 2013-2017 and found that ownership concentration hurts firm performance. Good investor protection can mitigate these effects. Murtaza et al. (2020) found that ownership concentration boosts firm performance. Large numbers of shareholders can solve manager-shareholder agency issues. Increased dividends improve business performance. The performance of the firm is harmed by leverage and tangibility. Performance and ownership concentration was found to be negatively correlated by Young, Peng, Ahlstrom, Bruton, and Jiang (2008). A curvilinear connection was discovered by Thomsen & Pedersen (2000) and Tuschke & Gerard Sanders (2003). The research focused on manufacturing companies, which may differ from non-financial companies in terms of their features, performance determinants, and ownership structures. Earnings quality and the impact of gender diversity might vary across different industries, making it inappropriate to generalize the findings to non-financial firms in Kenya.

According to research by Ofoegbu, Obembe, and Akinsulire (2020), ownership concentration has a moderating influence on the association between board features and earnings quality in African nations, including those that participate in African stock markets like the NSE. According to their findings, ownership concentration

does, in African companies, alter the association between board qualities and earnings quality. According to the study, a larger proportion of institutional owners strengthen the beneficial effect of board attributes on earnings quality.

Higher ownership concentration may diminish the association between board qualities and earnings quality, according to research by Gichuki et al. (2021). Concentrated ownership has been shown to reduce the effectiveness of board supervision and the influence of board characteristics on earnings quality. The relationship between ownership concentration, board characteristics, and company earnings quality is explained by the Gichuki et al. (2021) research. They discovered that the association between board characteristics and earnings quality might suffer from increasing ownership.

2.6 Critique of Reviewed Literature

The literature reviewed in chapter two of the present research showed that there was a lack of consensus about the impact of board qualities on earnings quality, with some studies showing negative relationships and others good ones. There is conflicting evidence about the link between board size and earnings quality, with some research showing that it is negative (Anderson, Mansi, & Reeb, 2004; Xie, Davidson III, & DaDalt, 2003), some indicating a positive relationship (Alzoubi, 2016), and others finding no significant relationship between the two variables (Abbott, Parker, & Peters, 2004). The diverse findings in the literature highlight the complexity of the relationship and underscore the importance of considering various contextual factors and corporate governance mechanisms when studying the impact of board size on earnings quality. Fuzi et al. (2016) emphasized the importance of a board with independence, whereas Muniandy and Hillier (2015) underscored the significance of board independence in attracting foreign investment in South African firms. The analysis therefore demonstrates that the institutional setting and corporate governance framework of each nation affect the connection between board independence and earnings quality. The empirical review of board size and earnings quality makes it clear that the effect of board size on the earning quality of non-

financial firms listed on the Nairobi Securities Exchange, which is the focus of the current study, is not sufficiently covered in the existing literature.

The existing empirical review on audit committee independence shows inconclusive findings regarding its impact on discretionary accruals. Some studies suggest negative correlations between certain audit committee characteristics and discretionary accruals, such as a negative correlation between audit committee size and firm size with discretionary accruals found by Fodio et al. (2013), indicating that larger audit committees may be associated with lower discretionary accruals. However, other studies, like Baxter and Cotter (2009), found no significant effect of accounting expertise within the audit committee on earnings quality measures. Additionally, Hutchinson, Percy, and Erkurtoglu (2008) demonstrated a negative effect of board independence and audit committee independence on performance-adjusted discretionary accruals, while LaFond and Roychowdhury (2008) observed a hostile relationship in UK firms. Despite these valuable insights, the findings cannot be directly generalized to non-financial firms listed at the Nairobi Securities Exchange (NSE) due to contextual variation, market-specific factors, and industry differences, which could influence the relationship between board independence and earnings quality differently in the NSE context.

There has been conflicting evidence regarding the impact of gender diversity on the quality of earnings, with some studies concluding that it has a negative impact (Lu et al. 2011, Moradi et al. 2012, Obigbemi et al. 2016), others concluding that it has no impact (Moradi et al. 2012), and still others concluding that it has a positive impact (Lakhal et al. 2015). Board independence research has been inconsistent, with some findings indicating no link (Rashid et al. 2010) and others suggesting a favorable relationship (AL-Dhamari & Ismail 2014). These findings suggested that the implementation of the code had not much improved (Fuzi et al., 2016). The reviewed literature did not analyze ownership concentration as a moderator variable in the effect of board characteristics (board size, audit committee independence, gender diversity) on the earnings quality of firms listed at the Nairobi Securities Exchange, which the current study analyzed.

The reviewed literature on board independence and earnings quality provides valuable insights into the relationship between corporate governance mechanisms and financial reporting quality in various contexts. García-Meca and Sánchez-Ballesta's (2009) meta-analysis of 35 studies revealed that sampling error played a role in the variations of findings in earlier studies. Rashid et al. (2010) found that independent directors did not significantly improve the economic performance of firms in Bangladesh, highlighting the importance of considering institutional and cultural differences in emerging economies. Chaharsoughi and Rahman (2013) studied Iranian firms and found an insignificant relationship between board independence and earnings quality, contrasting with the significant effect found in the current study in the Kenyan context. Al-Dhamari and Ku Ismail (2014) explored Malaysian companies and observed a connection between independent chairmen and earnings quality but inconclusive results for board independence. Liu et al. (2015) and Liang et al. (2013) also explored the relationship between board independence and firm performance, revealing positive associations in Chinese banks and companies, respectively. However, the current study fills the literature gap by examining the effect of board independence on earnings quality specifically for non-financial firms listed on the Nairobi Stock Exchange (NSE) in Kenya.

2.7 Research Gaps

The studied research offers important insights into the association between board attributes and regional earnings quality. However, several shortcomings and deficiencies can be found. First off, there is little representation from African nations in the research, which mostly concentrates on affluent nations like Europe, the United States, and Asia. This geographic distance makes it difficult to comprehend how board composition affects earnings quality in the particular context of non-financial enterprises listed on Kenya's Nairobi Securities Exchange. Additionally, the available research generally uses proxy measures to assess the quality of earnings and board characteristics, which may not fully account for the complexity of these components. To have a more in-depth grasp of the link, future studies should take into account employing more thorough approaches. The research that has been evaluated also has contradictory results, with some citing a negative correlation

between board size and earnings quality while others citing a positive correlation or contingent effects. This contradiction points to the necessity for more investigation into the contextual variables and underlying processes explaining the association between board qualities and earnings quality. Finally, there is little qualitative or mixed-methods research in this field and the majority of the examined works use quantitative research methodologies. It may be possible to gain a deeper knowledge of the intricate interplay between board qualities and earnings quality by combining quantitative and qualitative techniques. Overall, the reviewed literature sets the foundation for the current study but highlights the need for further research in the specific context of non-financial firms listed on the Nairobi Securities Exchange in Kenya.

2.8 Summary

The section presents a summary of the theoretical and empirical literature review. The review established the need to conduct a study linking board characteristics to the earnings quality of the non-financial firms listed in NSE (Kenya). The current study was informed by the Agency Theory, Resource Dependency Theory, Signaling Theory, and Stakeholders Theory. A conceptual framework that illustrates the relationship between the study variables was also presented on page 24. A critique of the literature reviewed was done, and research gaps were identified.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methodology that was used to conduct the study. It details the research philosophy, design, population, sampling frame, sample size, and sampling techniques used to determine the sample size. Additionally, it discusses the tools and methods for data collection, analysis, and presentation. The final section of the chapter discusses the diagnostic tests used in the study.

3.2 Research Philosophy

The research philosophy contributes to achieving the study's objective by collecting, analyzing, and interpreting data concerning the objective (Holden & Lynch, 2004). The study adopts a positivism-based research philosophy (Cohen et al., 2007) Positivism seeks facts about social phenomena with little regard to individuals' subjective status. It assumes that the social world exists objectively, independently of the human mind, and is composed of facts structured in a law-like fashion (Coopers & Schindler, 2009). According to Rajasekar et al. (2006), positivism requires us to conduct objective research. The study chose a positivist approach because it is objective, the researcher is independent, and the researcher's personal opinions do not influence its findings. The study's objective was to determine the effect of board characteristics and earnings quality of non-financial firms listed on the Nairobi Securities Exchange. The study chose this approach because it emphasizes quantifiable observations that were used for statistical analysis and because the study relies on quantifiable figures in a regression model to support its findings.

3.3 Research Design

A research design is a systematic procedure that assists in achieving the research process's objective (Garg & Kothari, 2014). The research design for this study was a quantitative survey. The study employed a quantitative research approach to examine the relationship between board characteristics and earnings quality. Quantitative

research allows for the systematic collection and analysis of numerical data, enabling the researcher to establish statistical relationships and draw objective conclusions (Creswell & Creswell, 2018).

The study used a cross-sectional research design, gathering information in a specific time frame. This methodology enables effective data collection and is appropriate for investigating the link between board qualities and earnings quality within a particular environment (Creswell & Creswell, 2018). In order to establish a relationship between the two variables, the study methodology was used to correlate the present condition of board features and earnings quality. The hypothesis can be tested by using this research design to identify a causal link between variables. The research approach was the most appropriate for this study since it sought to determine if there was a relationship between board characteristics and earnings quality.

3.4 Target Population

A population is the aggregate of all the elements a study wishes to conclude (Blumberg, Cooper & Schindler, 2014). According to Ott et al. (2015), a target population is a collection of elements or individual members of the overall population from which a sample is drawn. As of 2021, 61 companies were listed on the Nairobi Securities Exchange (NSE), Kenya's stock market, of which 39 firms were non-financial. Out of these, 33 companies were in operation between 2008 and 2020 (NSE, 2022). The target population for this study was the entire population of 39 non-financial firms listed on the Nairobi Stock Exchange (NSE) (NSE, 2017). Financial institutions are considered highly regulated by the Central Bank of Kenya (CBK) and thus would be excluded from this study.

3.5 Sampling Technique

Wilson (2014) states that a census eliminates sampling bias and provides detailed data that reflects the actual state of affairs. The non-financial firms listed on the NSE are classified into eight sectors: agriculture, commercial and services, telecommunications and technology, automobiles and accessories, investment, manufacturing, and allied industries, construction and allied industries, and energy

and petroleum (NSE, 2020). Appendix IV contains a list of all non-financial firms. The study focused on all the firms listed in the Nairobi securities exchange (NSE) that were active as of 31st December 2020. Specifically, 33 firms in the non-financial sector listed on the NSE that was in operation between 2008 and 2020.

3.6 Data Collection Instruments and Procedure

According to Parahoo (2014), a research instrument is a device used to collect data. An instrument is a device used to assess one's knowledge, attitude, and abilities. The study analyzed secondary data extracted from NSE handbook reports for all the listed firms during the study period. A template for secondary data collection was used (see Appendix I). According to Kothari (2011), a data collection instrument is required to aid in data collection. The disclosure check index (DCI) was used in this study to get data from the financial reports of companies on the NSE.

The researcher relied on financial databases and reports provided by reputable sources. Secondary data was captured from the Nairobi Securities Exchange and the individual companies' websites, which are widely recognized in the financial industry for their comprehensive coverage of financial data and analysis.

The Nairobi Securities Exchange and the individual companies' websites provide access to a vast amount of financial information, including company financial statements, corporate governance data, board characteristics details, and earnings quality metrics. The research utilized this tool to gather secondary data on board characteristics, such as board size, board independence, and diversity. They also obtained financial indicators related to earnings quality, such as earnings management, accruals quality, and accounting conservatism.

3.7 Data Collection Procedure

The Nairobi Securities Exchange, Kenya's official and only licensed securities exchange is the primary source of the study. The data was gathered from the annual reports. Additionally, the NSE has a library where historical data and other documents are available for a fee. Yearly data from these handbooks were collected

for 13 years, from 2008 to 2020, which is sufficient time to predict the relationship between board characteristics and earning quality. Secondary data collection was conducted using a systematic approach. Firstly, relevant financial reports, such as annual reports, audited financial statements, and corporate governance reports, were obtained from the Nairobi Securities Exchange and the individual companies' websites. These reports provided information on board characteristics, including board characteristics, board size, and board independence, as well as earnings quality measures such as earnings persistence, accruals quality, and financial statement transparency. Additionally, historical stock market data, such as stock prices and trading volumes, were gathered from reliable financial databases. The collected secondary data was then carefully reviewed, cleaned, and organized to ensure accuracy and consistency.

3.8 Data Analysis

As defined by Smith (2015), data analysis is the systematic manipulation, processing, arrangement, and organization of data to generate meaningful information. Panel data increases the number of data points in the study, which increases the degrees of freedom and thus decreases the likelihood of collinearity between independent variables. It increases the efficiency of econometric estimation, which aids in resolving the problem of unobserved heterogeneity, which results in an endogeneity problem, rendering the estimated coefficients meaningless and thus unintelligible (Gujarati, 2012). Because the dependent variable was measured with two different contrasts, two-panel regression models were used in equations 3.1 and 3.2 to figure out how to use them.

3.8.1 Model Specification

The study performed multiple linear regression analyses. The primary aim of this analysis is to understand how changes in the independent variables influence or predict changes in the dependent variable. The following two regression equations were used to figure out both the primary (main) effect of board characteristics on earnings quality and the main effect of ownership concentration on this relationship:

$$Y_{it} = a_0 + \sum_{i=1}^{n} \beta_1 X_{it} + \varepsilon_{it} \qquad 3.1$$

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

Similarly, in the presence of a moderator (ownership concentration), equation 3.1 was presented as follows:

$$Y_{it} = \beta_0 + \sum_{i=1}^{n} \beta_1 X_{it} + \mu_{it} + \sum_{i=1}^{n} \theta_i (X_{it} * Z_{it}) \qquad 3.2$$

$$Y_{it} = \beta_0 + \beta_1 x_{1it} + \beta_2 x_{2it} + \beta_3 x_{3it} + \beta_4 x_{4it} + \theta_1 x_{1it} * z + \theta_2 x_{2it} * z + \theta_3 x_{3it} * z + \theta_4 x_{4it} * z + \varepsilon_{it}$$

Where: Y_{it} = Is Earnings Quality

x_1, x_2, x_3 and x_4 Board size, audit committee independence, Gender diversity and

Board Independence

β_0 =time-invariant intercept or constant

X_{it} = vector of independent variables

$\beta_1, \beta_2, \beta_3$ and β_4 are the coefficients of the independent variables

$\theta_1, \theta_2 \theta_3$ and θ_4 are the coefficients of the moderator variable

Z is the moderator (ownership concentration)

μ_{it} is an error term

$i = 1,2,3,...,33.$ Firms listed in NSE

t = Refers to the time in years from the year 2008 to 2020

To address multicollinearity arising from interactions with moderating terms in a regression for the study on the relationship between board characteristics and earnings quality of non-financial firms listed on the Nairobi Securities Exchange, the researcher employed several techniques. Firstly, the researcher assessed the correlation matrix among the predictor variables, paying particular attention to the interaction terms. If high correlations were observed, indicating multicollinearity, the researcher conducted a variance inflation factor (VIF) analysis to quantify the extent of multicollinearity. Then the researcher proceeded to address the multicollinearity by removing or combining highly correlated variables or interaction terms. This was achieved through techniques such as centering variables, creating composite scores, or using orthogonalization methods like the principal component analysis. By mitigating multicollinearity, the researcher ensured the stability and reliability of the regression model, allowing for an accurate interpretation of the relationships between board characteristics, earnings quality, and their interactions.

3.8.2 Measurement of the Study Variables

In the study, the measurement of the variables was crucial for capturing the relationships between board characteristics and earnings quality of non-financial firms listed on the Nairobi Securities Exchange.

Dependent Variable

The dependent variable, earnings quality, was assessed using two indicators: accruals quality and discretionary accruals. Accruals quality measured the reliability and transparency of the financial statements, while discretionary accruals captured the extent of management's discretion in financial reporting.

Independent Variables (Board Characteristics)

The independent variables were board size, gender diversity, board independence, and audit committee independence. Board independence was measured through three indicators: board leadership structure, absence of executive directors, and the

proportion of independent directors. Board size was assessed based on the number of directors, the proportion of independent directors, and the board size relative to company size. Audit committee independence was evaluated using the size of the audit committee, non-executive directors' influence, and the frequency of audit committee meetings. Gender diversity was measured by the gender diversity index, gender composition of executive positions, and gender representation in board leadership positions.

Moderating Variable

Additionally, a moderating variable, ownership concentration, was included. It was measured by the largest shareholder's ownership stake and the number of institutional shareholders. This variable aimed to examine how ownership concentration influenced the relationship between board characteristics and earnings quality.

The selection and operationalization of these variables allowed the researcher to quantitatively assess the relationships between the various board characteristics, ownership concentration, and earnings quality. The use of multiple indicators for each variable ensured a comprehensive measurement approach and provided a robust foundation for analyzing the research hypotheses.

Table 3.1: Operationalization of the Study Variables Summary

Variable	Indicator	Measure	Sources
Board characteristics	Board Size	Total Number of board members	Jaggi, Leung& Gul (2009); Osma (2008)
	Audit Committee Independence	Percentage of non-executive board members on the board	Hassen (2014), Houqe, van Zijl, Dunstan & Karim (2010). Wagana and Kabare (2016); Mwangi, Memba, Muturi, and Oluoch (2018)
	Gender Diversity	The proportion of female board members	Khalil and Ozkan (2016) ;
	Board independence	Percentage of the non-executive board Members in board	Abnegativei, Hijazi & Al-Rahahleh (2016) Lyu, Yuen, and Zhang (2017)
Ownership concentration	Foreign Ownership concentration	% of Shares owned by Foreigners	; Aksu, Muradoglu and Tansel Cetin, (2013)
Earnings Quality	Accrual quality	Calculated using earnings, cash flow, and assets	
	Discretionary accrual	Discretionary accrual is calculated using total accruals and non-Discretionary accruals	Richardson (2003); Desai *et al*. (2006); Lyimo (2014)

3.9 Model Specification Tests

To run the regression model, several tests were done first. These tests included the F-test of overall significance, the Durbin-Watson test for autocorrelation, and Multicollinearity diagnostics for multicollinearity and heteroskedasticity.

3.9.1 F-test of Overall Significance

The study computed the F-test of overall significance The F-test of overall significance is a statistical test used in multiple linear regression to determine whether the regression model as a whole is statistically significant. It assesses the joint effect of all the predictor variables in the model and tests the null hypothesis that all the regression coefficients are equal to zero. The F-test calculates the ratio of the explained variance (sum of squares due to regression) to the unexplained variance (residual sum of squares). A significant F-statistic indicates that the model explains a significant amount of the total variation in the dependent variable.

According to Gujarati and Porter (2019), the F-test of overall significance is used to determine the overall fit of the regression model and to assess the joint significance of the predictor variables. If the F-statistic is significant ($p < .05$), it indicates that the regression model is a good fit for the data and that at least one of the predictor variables has a significant effect on the dependent variable. To perform the F-test of overall significance in SPSS, the researcher utilized the "ANOVA" table provided in the output of the linear regression analysis. The F-statistic and its associated p-value were reported in the "Sig." column, indicating the statistical significance of the model.

3.9.2 Durbin-Watson test for autocorrelation

The study computed the Durbin-Watson test, a statistical test used to detect the presence of autocorrelation in the residuals of a regression model. Autocorrelation, also known as serial correlation, occurs when the errors or residuals of a regression model are correlated with each other. This violates one of the assumptions of linear regression, which assumes that the residuals are independent. The Durbin-Watson

test statistic is based on the difference between adjacent residuals. It ranges from 0 to 4, with a value of 2 indicating no autocorrelation. To interpret the Durbin-Watson test statistic, critical values are used. The critical values depend on the sample size, the number of predictor variables, and the desired significance level. In general, values between 1.5 and 2.5 indicate no significant autocorrelation, while values below 1.5 or above 2.5 suggest the presence of autocorrelation.

3.9.3 Multicollinearity Diagnostics

Multicollinearity occurs when there is a high correlation between predictor variables, which can lead to unstable and unreliable regression coefficients. The study used the following ways to diagnose multicollinearity in SPSS, and these included the Variance Inflation Factor (VIF), where the researcher calculated the VIF for each predictor variable to assess the extent of multicollinearity. High VIF values (above 5 or 10) suggest a strong correlation with other predictors. Another way was the Tolerance. The tolerance value is the reciprocal of the VIF. A tolerance value below 0.1 indicates severe multicollinearity. Tolerance for autocorrelation refers to the acceptance level of correlation among the residuals (or errors) in a regression model.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

The overall objective of the study was to examine the effect of board characteristics on the earnings quality of the listed non-financial firms in NSE. This chapter summarizes the findings and discusses the descriptive statistics, diagnostic tests, and statistical assumptions used in the regression analysis, as well as the inferential statistics used to compare the independent, dependent, and moderating variables. Descriptive statistics are critical for this study because they enable a more meaningful visualization of the voluminous data and a more straightforward interpretation of the data. Descriptive statistics include measures of central tendency, dispersion, and skewness, such as mean, standard deviation, and kurtosis. Inferential statistics such as Pearson Correlations and Regression Analysis were used to establish the relationship between the study variables and to test the hypothesis to conclude previous propositions.

4.2 Descriptive Statistics

Descriptive statistics included measures of the mean, maximum, minimum, standard error of estimate, skewness, and kurtosis. Mean is a measure of central tendency used to describe the most typical value in a set of values. The standard error was used to measure the accuracy within a set of values. Skewness was used to measure symmetry or lack of symmetry. A distribution, or data set, is symmetric if it looks the same to the left and right of the center point. Kurtosis measured whether the data are peaked or flat relative to a normal distribution (Cooper & Schindler, 2003). The revealed results of the descriptive statistics of all the study variables for the 429 observations are shown in Table 4.1.

4.2.1 Descriptive Statistics for Board Characteristics

Table 4.1 presents descriptive statistics for board characteristics in the study sample. The table provides information on the number of members on the board, the

proportion of non-executive directors on the committee, the proportion of female directors against the total number of directors, and the proportion of non-executive directors on the board. The statistics reported include the minimum, maximum, mean, standard deviation, skewness, and kurtosis for each variable.

Table 4.1: Descriptive Statistics for Board Characteristics

	N	Min	Max	Mean	Std. Dev	Skewness		Kurtosis	
							Std. Err	Stat	Std. Err
Board Size	33	5.0	9.0	6.42	1.25	.438	.409	-.821	.798
Number of members on the board									
Audit Committee Independence	33	10.0	44.0	26.7	10.3	.087	.409	-.831	.798
% Proportion of non-executive directors in the committee									
Gender Diversity	33	15.0	54.0	34.3	12.2	-.082	.409	-1.295	.798
% Proportion of female directors against the total number of directors									
Board Independence	33	17.0	63.0	35.4	14.1	.505	.409	-1.088	.798
% Proportion of non-executive directors on the board									
Valid N (listwise)	33								

Regarding the number of members on the board, the minimum value observed was 5, while the maximum value was 9. The mean number of board members was 6.4242, with a standard deviation of 1.25076. The distribution of the data for this variable showed a positive skewness of 0.438, indicating that the data were slightly skewed to the right. The kurtosis of -0.821 indicated a relatively flat distribution. This suggests that the board sizes vary among the sampled firms, with some having a smaller board size and others having a larger board size. The mean number of board members is calculated as 6.4242, which indicates that, on average, the non-financial firms listed at the NSE have approximately 6 to 7 members on their boards. This mean value provides an estimate of the typical board size in the sample.

In terms of the proportion of non-executive directors in the audit committee, the minimum value was 10%, and the maximum value was 44%. The mean proportion was 26.6970, with a standard deviation of 10.27888. The skewness of 0.087 indicated a nearly symmetrical distribution, while the kurtosis of -0.831 suggested a relatively flat distribution. The results suggest that non-executive directors made up around 26.7% of the committee.

The proportion of female directors against the total number of directors ranged from 15% to 54%, with a mean of 34.3333 and a standard deviation of 12.22617. The skewness of -0.082 indicated a slightly left-skewed distribution, while the kurtosis of -1.295 indicated a moderately platykurtic distribution. The results indicate that indicating that, on average, about 34.3% of the directors were female. This result suggests that there is variability in the representation of female directors across different non-financial firms at the NSE. The range indicates that some companies have a relatively low proportion of female directors (as low as 15%), while others have a higher representation (up to 54%). The mean value of 34.3333% suggests that, on average, non-financial firms listed at the NSE have approximately one-third of their board positions occupied by women.

Lastly, the proportion of non-executive directors on the board varied from 17% to 63%, with a mean of 35.3939 and a standard deviation of 14.05333. The data for this variable exhibited a positive skewness of 0.505, indicating a slight right skew, and a

kurtosis of -1.088, suggesting a moderately platykurtic distribution. According to the findings, non-executive directors made up about 35.4% of the board. The vast variety of non-executive director proportions implies that the boards of these businesses differ significantly in terms of their makeup. Some companies may have a board that is mostly made up of executive members who are directly involved in managing the company, as indicated by a reduced percentage of non-executive directors. On the other side, other businesses could have a higher percentage of non-executive directors, suggesting a more well-rounded board that places more value on independent scrutiny and governance. The composition of boards, including the proportion of non-executive directors, plays a crucial role in corporate governance. Non-executive directors bring diverse skills, experience, and independent judgment to the boardroom. They contribute to effective decision-making, enhance accountability, and ensure the protection of shareholders' interests.

These descriptive statistics provide a summary of the board characteristics in the sample. To relate these results to a related study in Kenya, we can consider a study by Ochieng et al. (2020) that examined the relationship between board characteristics and firm performance in the Kenyan manufacturing sector. The study found that a higher proportion of non-executive directors and greater gender diversity on boards were associated with improved firm performance. These findings suggest that the descriptive statistics provided in Table 4.1 may have implications for board effectiveness and performance in the context of the non-financial firms listed at the Nairobi Securities Exchange.

4.1.2 Descriptive Statistics for Earning Quality

Table 4.2 presents the results of a study on the influence of board characteristics on the earnings quality of non-financial firms listed on the Nairobi Securities Exchange. The study analyzed two variables: Accruals Quality (measured by the accruals ratio) and Discretionary Accruals. The table includes statistics such as the number of observations (N), minimum and maximum values, mean, standard deviation, skewness, kurtosis, and standard error for each variable.

Table 4.2: Descriptive Statistics for Earning Quality

	N	Min	Max	Mean	Std. Dev.	Skewness		Kurtosis	
							Std. Error	Statistic	Std. Error
Accruals Quality (accruals ratio)	33	8.00	30.00	16.1818	6.82117	.838	.409	-.593	.798
Discretionary Accruals	33	10.00	46.00	22.5455	12.30369	.885	.409	-.762	.798
Valid N (listwise)	33								

The findings in Table 4.2 show that for the Accruals Quality (accruals ratio) variable, the mean score is 16.1818 with a standard deviation of 6.82117. The minimum value observed is 8.00, while the maximum value is 30.00. The skewness of 0.838 suggests a slight rightward (positive) skew, indicating that there may be a tail of higher values. The kurtosis of -0.593 suggests a relatively flat distribution compared to a normal distribution.

Regarding the Discretionary Accruals variable, the mean score is 22.5455 with a standard deviation of 12.30369. The minimum value observed is 10.00, while the maximum value is 46.00. The skewness of 0.885 suggests a slight rightward (positive) skew, indicating the presence of higher values. The kurtosis of -0.762 suggests a relatively flat distribution compared to a normal distribution.

The mean score results suggest that, on average, the firms in the study had moderate levels of Accruals Quality (16.1818) and Discretionary Accruals (22.5455). These results indicate that there is variability in the quality of earnings and the extent of discretionary accruals among the non-financial firms listed on the Nairobi Securities Exchange. The standard deviation measures the dispersion or variability of the data

points from the mean. A higher standard deviation indicates more significant variability in the data. In this case, the standard deviation for Discretionary Accruals (12.30369) is higher than for Accruals Quality (6.82117). This implies that Discretionary Accruals have more variability around the mean compared to Accruals Quality, indicating potential differences in the earnings quality among the non-financial firms listed on the Nairobi Securities Exchange.

The findings are consistent with research by Mungai et al. (2020), which looked at how corporate governance measures affected how businesses listed on the Nairobi Securities Exchange managed their earnings. Although not directly connected to board characteristics, this study looked at corporate governance in general and how it affects the quality of financial reporting. The findings of Mungai et al. (2020) indicated that effective corporate governance mechanisms, including board independence and board size, play a crucial role in reducing earnings management practices. These findings are relevant because Board Characteristics, such as independence and size, can impact the quality of financial reporting, including accruals and discretionary accruals. Thus, it is plausible that the results of the current study on Board Characteristics' influence on earnings quality may align with the findings of Mungai et al. (2020) regarding the importance of corporate governance mechanisms in ensuring reliable financial reporting practices in the Kenyan context.

4.1.3 Descriptive Statistics of Ownership Concentration

Table 4.3 presents the descriptive statistics of ownership concentration. The table provides information on the largest shareholder's ownership stake and the number of institutional shareholders. The results are based on a sample size of 33 non-financial firms.

Table 4.3: Descriptive Statistics of Ownership Concentration

		N	Min	Max	Mean	Std. Dev	Skewness		Kurtosis	
							Stat	Std. Error	Stat	Std. Error
% Proportion of foreign ownership		33	3.00	40.00	22.0909	14.617	-.412	.409	-1.713	.798
Valid (listwise)	N	33								

The findings in Table 4.3 show that the mean score of 22.0909 suggests that, on average, the non-financial firms listed on the Nairobi Securities Exchange have a proportion of foreign ownership of approximately 22.09%. The minimum value of 3.00 indicates that some firms have a relatively low level of foreign ownership, while the maximum value of 40.00 suggests that certain firms have a higher percentage of foreign ownership. The standard deviation is 14.617. The standard deviation measures the spread or dispersion of the data points around the mean. In this case, the relatively large standard deviation of 14.617 implies that the foreign ownership proportions are spread out quite widely from the mean, indicating substantial variability in the ownership concentration among the sample companies.

4.2 Association between Board Characteristics and Earning Quality

The researcher investigates the relationship between board attributes, ownership concentration, and earning quality of non-financial enterprises in this part. Two indicators of income quality are highlighted: Accruals Quality (accruals ratio) and Discretionary Accruals. The study also investigates the significance of ownership concentration, particularly the percentage of foreign ownership, in this regard.

Table 4.4: Association between Board Characteristics, Ownership Concentration, and Earning Quality of Non-Financial Firms

		EQ1: Accruals Quality (accruals ratio)	EQ 2: Discretionary Accruals	Ownership Concentration: Proportion of foreign ownership
Board Size: Number of members on the board	Pearson Correlation	.870	.651	.767
	Sig. (2-tailed)	.000	.000	.000
	N	33	33	33
Audit Committee Independence: % Proportion of non-executive directors in the committee	Pearson Correlation	.878	.652	.765
	Sig. (2-tailed)	.000	.000	.000
	N	33	33	33
Gender Diversity: % Proportion of female directors against the total number of directors	Pearson Correlation	.809	.594	.830
	Sig. (2-tailed)	.000	.000	.000
	N	33	33	33
Board Independence: % Proportion of non-executive directors on the board	Pearson Correlation	.865	.647	.747
	Sig. (2-tailed)	.000	.000	.000
	N	33	33	33
Earning Quality 1: Accruals Quality (accruals ratio)	Pearson Correlation	1	.655	.698
	Sig. (2-tailed)		.000	.000
	N	33	33	33
Earning Quality 2: Discretionary Accruals	Pearson Correlation	.655	1	.613
	Sig. (2-tailed)	.000		.000
	N	33	33	33
Ownership Concentration: Proportion of foreign ownership	Pearson Correlation	.698	.613	1
	Sig. (2-tailed)	.000	.000	
	N	33	33	33

The Pearson correlation coefficients demonstrate strong positive associations between board characteristics and accrual quality, as well as discretionary accruals. The significant correlation coefficients indicate that board size, audit committee independence, gender diversity, and board independence are positively related to both accrual quality and discretionary accruals.

Moving on to Table 4.4, shows the associations between board characteristics (board size, audit committee independence, gender diversity, and board independence) and two measures of earning quality (accruals quality and discretionary accruals), as well as the proportion of foreign ownership.

The table presents Pearson correlation coefficients, which measure the strength and direction of the linear relationship between variables. The correlation coefficient ranges from -1 to 1, where 1 indicates a perfect positive linear relationship, -1 indicates a perfect negative linear relationship, and 0 indicates no linear relationship.

The Pearson correlation coefficient between board size and accruals quality is .870, which indicates a strong positive correlation. The Pearson correlation coefficient between board size and discretionary accruals is .651, indicating a positive correlation. These results suggest that larger board sizes are associated with higher accruals quality and discretionary accruals. It implies that having a larger number of members on the board might lead to more accurate financial reporting and better control over discretionary accruals. For instance, a study by Kibet and Langat (2019) found a positive association between board size and earning quality in Kenyan firms. This consistency strengthens the validity and generalizability of the current study's findings.

The audit committee independence and accruals quality have a significant positive association, according to the Pearson correlation coefficient of .878. Discretionary accruals and audit committee independence have a positive Pearson correlation value of.652, which indicates a relationship. According to the findings, increased non-executive board representation on the audit committee is linked to higher accruals quality and lower discretionary accruals. This finding indicates that having a more independent audit committee leads to better financial reporting quality.

The correlation coefficient between gender diversity and accruals quality is .809, indicating a strong positive correlation. The Pearson correlation coefficient between gender diversity and discretionary accruals is .594, indicating a positive correlation. These results suggest that a higher proportion of female directors in relation to the total number of directors is associated with higher accruals quality and lower discretionary accruals. This finding highlights the potential benefits of gender diversity in improving financial reporting quality. A related study conducted by Nyambura and Muriithi (2019) found a positive relationship between gender diversity on boards and financial performance, supporting the notion that diverse boards contribute to improved firm performance. The findings of our current study align with Nyambura and Muriithi's research, highlighting the consistently positive impact of gender diversity in the Kenyan context.

The Pearson correlation coefficient between board independence and accruals quality is .865, indicating a strong positive correlation. The correlation coefficient between board independence and discretionary accruals is .647, indicating a positive correlation. The results suggest that a higher proportion of non-executive directors on the board is associated with higher accruals quality and lower discretionary accruals. It indicates that having a more independent board contributes to better financial reporting quality.

The Pearson correlation coefficient between ownership concentration and accruals quality is .698, indicating a positive correlation. The Pearson correlation coefficient between ownership concentration and discretionary accruals is .613, indicating a positive correlation. The results suggest that a higher proportion of ownership concentration, specifically foreign ownership, is associated with higher accruals quality and discretionary accruals. This implies that companies with a greater level of foreign ownership tend to exhibit better financial reporting quality and potentially exercise more discretion in their accounting practices.

One possible explanation for this finding could be that foreign investors, who often have a more global perspective and higher scrutiny, may place greater emphasis on transparent and accurate financial reporting. Their presence and influence may

encourage companies to maintain higher standards in their accruals quality and reduce the level of discretionary accruals, which are often subject to management's discretion.

4.3 Linear Regressions between Board Characteristics on Accruals Quality and Discretionary Accruals

In this section, the researcher analyzed the relationship between ownership concentration and two variables, namely accruals quality and discretionary accruals. We examine how the moderating variable, ownership concentration, interacts with four different predictors: board size, audit committee independence, gender diversity, and board independence. The focus is on understanding how these board characteristics influence accruals quality and discretionary accruals.

4.3.1 Model Summaries

Table 4.5 presents the results of a regression analysis examining the relationship between ownership concentration and two variables: accruals quality and discretionary accruals. The moderating variable, ownership concentration, is assessed in combination with four different predictors: board size, audit committee independence, gender diversity, and board independence. The table provides the model summary statistics, including R-squared, adjusted R-squared, and standard error for each model.

Table 4.5: Model Summaries for Linear Regressions

	Accruals Quality				Discretionary Accruals			
Model	**R**	**R^2**	**Adjusted R^2**	**Std. Error**	**R**	**R2**	**Adjusted R2**	**Std. Error**
Board Size	.967[a]	.935	.930	1.79935	.689a	.475	.440	9.20496
Audit Committee Independence	.960[b]	.922	.917	1.96534	.647a	.419	.380	9.68521
Gender Diversity	.909[c]	.826	.815	2.93573	.696a	.485	.450	9.12340
Board Independence	.896[d]	.802	.789	3.13374	.698a	.488	.454	9.09425

a. Predictors: (Constant), Ownership Concentration, Board Size
b. Predictors: (Constant), Ownership Concentration, Audit Committee Independence
c. Predictors: (Constant), Ownership Concentration, Gender Diversity
d. Predictors: (Constant), Ownership Concentration, Board Independence

The first model includes board size as a predictor. The R-squared value is .935, indicating that 93.5% of the variance in Accruals quality can be explained by the combination of ownership concentration and board size. The adjusted R-squared is .930, suggesting a good fit for the model. The standard error is 1.79935, reflecting the average distance between the observed values and the predicted values.

In terms of discretionary accruals, the first model reveals an R-squared of .475, indicating that 47.5% of the variance can be accounted for by ownership concentration and board size. The adjusted R-squared is .440, suggesting a moderate fit of the model. The standard error is 9.20496, indicating the average distance between the observed values and the predicted values of discretionary accruals.

Moving to the second model, audit committee independence is added as a predictor. The R-squared value decreases slightly to .922, indicating that 92.2% of the variance in accruals quality can be explained by ownership concentration, board size, and audit committee independence. The adjusted R-squared is .917, indicating a good fit. The standard error increases to 1.96534.

For discretionary accruals, the second model yields an R-squared of .419, meaning that 41.9% of the variance can be explained by ownership concentration, board size, and audit committee independence. The adjusted R-squared is .380, indicating an acceptable fit. The standard error is 9.68521.

Moving forward, the third model introduces gender diversity as an additional predictor. The R-squared value decreases further to .826 for accruals quality and .485 for discretionary accruals. This indicates that ownership concentration, board size, audit committee independence, and gender diversity account for 82.6% and 48.5% of the variances, respectively. The adjusted R-squared values are .815 and .450 for accruals quality and discretionary accruals, respectively. The standard errors are 2.93573 and 9.12340.

Lastly, the fourth model incorporates board independence as an additional predictor. The R-squared value further decreases to .802 for accruals quality and .488 for discretionary accruals. Ownership concentration, board size, audit committee independence, gender diversity, and board independence explain 80.2% and 48.8% of the variances, respectively. The adjusted R-squared values are .789 and .454 for accruals quality and discretionary accruals, respectively. The standard errors are 3.13374 and 9.09425.

In summary, the table demonstrates the impact of ownership concentration as a moderating variable on the relationship between various predictors and the two dependent variables, accruals quality and discretionary accruals. As additional predictors are included in the models, the R-squared values generally decrease, indicating a reduced explanatory power. However, the adjusted R-squared values show acceptable fits for all models. The standard errors vary across models but generally remain within a reasonable range. These results suggest that ownership concentration plays a role in influencing the relationship between corporate governance variables and financial reporting quality. Further analysis and interpretation would be required to fully understand the implications of these findings.

4.3.2 ANOVA Results for Accruals Quality (Accruals Ratio) and Discretionary Accruals with Different Predictors

Table 4.5 presents the results of the ANOVA analysis conducted to examine the relationship between ownership concentration and two dependent variables: Accruals Quality (accruals ratio) and Discretionary Accruals. The table provides information on the different predictors included in the analysis, namely Board Size (BS), Audit Committee Independence (ACI), Gender Diversity (GD), and Board Independence (BI).

Table 4.6: ANOVA Results for Accruals Quality (Accruals Ratio) and Discretionary Accruals with the Predictors

	Accruals Quality					**Discretionary Accruals**				
Model	**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
BS	1391.779	2	695.890	214.936	.000	2302.244	2	1151.12	13.586	.000[b]
ACI	1373.032	2	686.516	177.735	.000	2030.081	2	1015.041	10.821	.000[b]
GD	1230.355	2	615.177	71.379	.000	2347.087	2	1173.543	14.099	.000[b]
BI	1194.298	2	597.149	60.807	.000	2363.019	2	1181.509	14.286	.000[b]

a1. Dependent Variable: Accruals Quality (accruals ratio)
a2. Dependent Variable: Discretionary Accruals
b. Predictors: (Constant), Ownership Concentration, BS, ACI, GD, BI
BS = Board Size, ACI = Audit Committee Independence, GD = Gender Diversity, and BI = Board Independence

For the Accruals Quality variable, the ANOVA results indicate that all predictors have a significant effect. The model sums of squares for BS, ACI, GD, and BI are 1391.779, 1373.032, 1230.355, and 1194.298, respectively. The degrees of freedom for each predictor are 2, and the mean square values are 695.890, 686.516, 615.177, and 597.149, respectively. The F statistics for BS, ACI, GD, and BI are 214.936, 177.735, 71.379, and 60.807, respectively. All of these F statistics have a p-value of

.000, indicating a highly significant relationship between the predictors and Accruals Quality.

Similarly, for the Discretionary Accruals variable, the ANOVA results show significant effects of all predictors. The model sums of squares for BS, ACI, GD, and BI are 2302.244, 2030.081, 2347.087, and 2363.019, respectively. The degrees of freedom for each predictor are 2, and the mean square values are 1151.12, 1015.041, 1173.543, and 1181.509, respectively. The F statistics for BS, ACI, GD, and BI are 13.586, 10.821, 14.099, and 14.286, respectively. Again, all of these F statistics have a p-value of .000, indicating a highly significant relationship between the predictors and Discretionary Accruals.

These results suggest that ownership concentration, along with the other predictors, has a strong impact on both Accruals Quality and Discretionary Accruals. The findings imply that as ownership concentration changes, it influences the quality of accruals and the extent of discretionary accruals made by the company. Comparing the results for both dependent variables, it is evident that the predictors have a more substantial effect on Accruals Quality than on Discretionary Accruals. This observation is supported by the higher F statistics and mean square values for Accruals Quality in comparison to Discretionary Accruals. However, it is important to note that all predictors are still significant for both variables, indicating that ownership concentration is an important moderating variable influencing accruals-related activities.

These findings have implications for corporate governance and financial reporting. The significant impact of ownership concentration, along with other governance factors, highlights the importance of effective monitoring and control mechanisms in companies. It suggests that companies with higher ownership concentration may experience different levels of accruals quality and discretionary accruals, which can affect the reliability and transparency of their financial statements.

4.3.3 Beta Coefficients Results for Accruals Quality and Discretionary Accruals with Different Predictors

Table 4.7 presents the results of beta coefficients for the variables predicting accruals quality (accruals ratio) and discretionary accruals. The moderating variable in this analysis is ownership concentration. Let's analyze and compare the results for each model.

Table 4.7: Beta Coefficients Results for Accruals Quality (Accruals Ratio) and Discretionary Accruals with Different Predictors

		Accruals Quality				**Discretionary Accruals**			
Model	**Var**	**Unstandardized Coefficients**		**t**	**Sig.**	**Unstandardized Coefficients**		**t**	**Sig.**
		B	**Std. Error**			**B**	**Std. Error**		
1	Const	3.003	0.709	4.233	0.000	6.053	3.629	1.668	.106
	BS	0.361	0.025	14.357	0.000	.308	.129	2.391	.023
	OC	-0.02	0.032	-0.604	0.550	.222	.166	1.336	.192
2	Const	4.743	0.707	6.706	0.000	8.724	3.485	2.503	.018
	ACI	0.397	0.031	12.958	0.000	.227	.151	1.504	.143
	OC	-0.033	0.037	-0.916	0.367	.310	.180	1.725	.095
3	Const	4.557	1.101	4.14	0.000	6.619	3.420	1.935	.062
	GD	0.41	0.054	7.662	0.000	.420	.166	2.522	.017
	OC	0.021	0.053	0.39	0.700	.204	.166	1.231	.228
4	Const	-3.795	2.101	-1.806	0.081	-2.618	6.098	-.429	.671
	BI	2.052	0.297	6.917	0.000	2.210	.861	2.567	.015
	OC	0.175	0.044	4.014	0.000	.354	.127	2.792	.009

a1. Dependent Variable: Accruals Quality (accruals ratio)
a2. Dependent Variable: Discretionary Accruals

The Regression model was as follows.

$$Y_{it} = \beta_0 + \beta_1 x_{1it} + \beta_2 x_{2it} + \beta_3 x_{3it} + \beta_4 x_{4it} + \theta_1 x_{1it} * z + \theta_2 x_{2it} * z + \theta_3 x_{3it} * z + \theta_4 x_{4it} * z + \varepsilon_{it}$$

Where: Y_{it} = Is Earnings Quality

The regression equation presented at the end shows how the independent variables are combined to predict the value of the dependent variable. In this case, the equation is:

i. Accruals Quality

$Yit = \beta_0$ +0.361+0.397+0.410 -0.020-0.033+0.021+ 0.175+2.052+ ε_{it}

ii. Discretionary Accruals

$Yit = \beta_0$ +0.308+0.227+0.420+2.210+0.222+0.310+0.204+0.354+ ε_{it}

In Model 1, for the dependent variable of accruals quality, the significant predictors are "BS" (unstandardized coefficient = 0.361, t-value = 14.357, p < 0.000) and "OC" (unstandardized coefficient = -0.02, t-value = -0.604, p = 0.550). The constant term also shows significance (unstandardized coefficient = 3.003, t-value = 4.233, p < 0.000). The results indicate that the firm's size (BS) positively influences accruals quality, whereas ownership concentration (OC) does not have a significant effect.

In Model 2, for the same dependent variable, accruals quality, the significant predictors are "ACI" (unstandardized coefficient = 0.397, t-value = 12.958, p < 0.000) and the constant term (unstandardized coefficient = 4.743, t-value = 6.706, p < 0.001). Ownership concentration (OC) does not have a significant effect on accruals quality in this model. The results suggest that the firm's industry-adjusted current accruals (ACI) positively influence accruals quality.

In Model 3, for accruals quality, the significant predictors are "GD" (unstandardized coefficient = 0.41, t-value = 7.662, p < 0.001) and the constant term (unstandardized coefficient = 4.557, t-value = 4.14, p < 0.001). Once again, ownership concentration

(OC) is not a significant predictor. The results indicate that the growth opportunities of the firm (GD) positively affect accruals quality.

In Model 4, turning to the dependent variable of discretionary accruals, the significant predictors are "BI" (unstandardized coefficient = 2.052, t-value = 6.917, $p < 0.001$), "OC" (unstandardized coefficient = 0.175, t-value = 4.014, $p < 0.001$), and the constant term (unstandardized coefficient = -3.795, t-value = -1.806, $p = 0.081$). The results show that board independence (BI) and ownership concentration (OC) have significant positive effects on discretionary accruals.

In summary, when examining accruals quality as the dependent variable, the significant predictors vary across models. Firm size (BS) and industry-adjusted current accruals (ACI) positively influence accruals quality in different models, while growth opportunities (GD) do so consistently. Ownership concentration (OC) does not have a significant effect in any model when predicting accruals quality. Regarding discretionary accruals, board independence (BI) and ownership concentration (OC) have significant positive effects in predicting this variable, suggesting that firms with more independent boards and higher ownership concentration tend to have higher levels of discretionary accruals.

4.4 Multiple Regressions Compared

This section presents the results related to the multiple regressions. The purpose of the regression is to determine the analyzing the relationship between the study variables.

4.4.1 Model Summaries

Table 4.8 provides model summaries of the results obtained from different regression models, analyzing the relationship between various dependent variables and a set of predictors. The moderating variable in focus is ownership concentration. Let's examine and discuss the findings.

Table 4.8: Model Summaries for Multiple Regressions

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Dependent Variable: Accruals Quality without moderating variable	.982a	0.965	0.959	1.37344
Dependent Variable: Accruals Quality with moderating variable (ownership concentration)	.984[b]	.969	.963	1.30709
Dependent Variable: Discretionary Accruals without moderating variable	.707[a]	0.499	0.428	9.30784
Dependent Variable: Discretionary Accruals with moderating variable	.735[b]	.540	.455	9.07985

a. Predictors: (Constant), Board Independence, Gender Diversity, Audit Committee Independence, Board Size

b. Predictors: (Constant), Ownership Concentration, Board Independence, Gender Diversity, Audit Committee Independence, Board Size

The first model in Table 4.8 examines the relationship between accruals quality and the predictors without considering the moderating variable. The coefficient of determination (R-squared) for this model is 0.965, indicating that the predictors explain approximately 96.5% of the variance in Accruals quality. The adjusted R-squared of 0.959 suggests that the model accounts for the number of predictors and penalties for complexity, providing a more reliable estimate of the relationship. The standard error of the estimate is 1.37344, representing the average deviation of the observed data points from the predicted values.

Moving on to the second model, it introduces ownership concentration as a moderating variable in the analysis of accruals quality. The R-squared value increases slightly to 0.969, implying that ownership concentration enhances the

explanatory power of the model. The adjusted R-squared of 0.963 considers the additional predictor and adjusts for complexity, providing a more accurate measure of the model's performance. The standard error of the estimate decreases to 1.30709, indicating improved precision in predicting accruals quality when ownership concentration is taken into account.

Now let's shift our focus to the third model, which examines the relationship between discretionary accruals and the predictors without the moderating variable. The R-squared value of 0.499 suggests that the predictors explain approximately 49.9% of the variance in discretionary accruals. The lower adjusted R-squared of 0.428 accounts for the number of predictors and complexity penalties, indicating that the model's explanatory power is somewhat reduced when compared to the R-squared value. The standard error of the estimate is 9.30784, representing the average deviation of the observed data points from the predicted values.

Lastly, the fourth model includes ownership concentration as a moderating variable in the analysis of discretionary accruals. The R-squared value improves to 0.540, indicating that ownership concentration strengthens the relationship between the predictors and discretionary accruals. The adjusted R-squared of 0.455 (45.5%) considers the additional predictor and adjusts for complexity, providing a more reliable estimate of the model's performance. The standard error of the estimate decreases to 9.07985, suggesting improved precision in predicting discretionary accruals when ownership concentration is considered.

Comparing the results, it is evident that the inclusion of ownership concentration as a moderating variable enhances the explanatory power of both models analyzing accruals quality and discretionary accruals. This suggests that ownership concentration plays a significant role in influencing the relationship between the predictors and the dependent variable(s). Additionally, the standard error of the estimate decreases in both cases, indicating improved accuracy and precision in predicting the respective dependent variables when ownership concentration is considered.

Overall, these findings highlight the importance of ownership concentration as a moderating variable and its impact on the relationship between the predictors and the dependent variables. Understanding and accounting for ownership concentration can lead to more accurate and reliable predictions of accruals quality and discretionary accruals in the analyzed context.

4.4.2 Analysis of Variances

The provided table 4.9 presents the results of an analysis of variances comparing different models of accruals quality and discretionary accruals, with and without a moderating variable of ownership concentration. The table includes the sum of squares, degrees of freedom, mean square, F-value, and significance level for each model.

Table 4.9: Analysis of Variances

Model		Sum of Squares	df	Mean Square	F	Sig.
Accruals Quality (accruals ratio) Without moderating variable	Regression	1442.780	5	288.556	168.896	.000[c]
	Residual	46.129	27	1.708		
	Total	1488.909	32			
Accruals Quality with moderating variable	Regression	1436.092	4	359.023	190.329	.000[d]
	Residual	52.817	28	1.886		
	Total	1488.909	32			
Discretionary Accruals without moderating variable	Regression	2418.379	4	604.595	6.979	.000[c]
	Residual	2425.803	28	86.636		
	Total	4844.182	32			
Discretionary Accruals with moderating variable	Regression	2618.201	5	523.640	6.351	.001[d]
	Residual	2225.981	27	82.444		
	Total	4844.182	32			

a. Dependent Variable: Accruals Quality (accruals ratio)

b. Dependent Variable: Discretionary Accruals

c. Predictors: (Constant), Board Independence, Gender Diversity, Audit Committee Independence, Board Size

d. Predictors: (Constant), Ownership Concentration, Board Independence, Gender Diversity, Audit Committee Independence, Board Size

Starting with the analysis of accruals quality without the moderating variable, the regression model shows a significant relationship between the predictors (Board Independence, Gender Diversity, Audit Committee Independence, and Board Size) and accruals quality. The regression model accounts for a substantial amount of variance, as indicated by the large sum of squares (1442.780) and mean square (288.556). The F-value of 168.896 is highly significant ($p < 0.001$), suggesting a strong overall fit of the model.

Moving on to the analysis of accruals quality with the moderating variable, the regression model remains significant and explains a similar amount of variance. The sum of squares (1436.092) and mean square (359.023) are comparable to the previous model, indicating a consistent relationship between the predictors and Accruals quality. The F-value of 190.329 is also highly significant ($p < 0.001$), reinforcing the robustness of the model.

Shifting the focus to discretionary accruals without the moderating variable, the regression model exhibits a significant relationship with the predictors, albeit to a lesser extent compared to accruals quality. The sum of squares (2418.379) and mean square (604.595) are higher than the previous models, suggesting more variability in the data. The F-value of 6.979 is significant ($p < 0.001$), indicating a moderate fit of the model.

Finally, considering discretionary accruals with the moderating variable, the regression model remains significant but shows a slight decrease in explanatory power. The sum of squares (2618.201) and mean square (523.640) are slightly higher than the previous model, indicating comparable variability. The F-value of 6.351 is significant ($p = 0.001$), suggesting a reasonable fit of the model.

In summary, the results demonstrate that the predictors have a significant impact on both accruals quality and discretionary accruals. The inclusion of the moderating variable of ownership concentration does not substantially alter the relationships

between the predictors and the dependent variables. However, it is worth noting that the models with the moderating variable show a slightly reduced explanatory power compared to the models without the moderating variable.

Both Accruals Quality and Discretionary Accruals are significantly influenced by the predictor variables in both cases, regardless of whether the moderating variable is included or not. The moderating variable does not seem to significantly alter the impact of the other predictors in these regression models. The findings suggest that the specified predictors play a crucial role in explaining the variations in both Accruals Quality and Discretionary Accruals.

These findings suggest that ownership concentration may have a moderating effect on the relationship between the predictors and accruals quality/discretionary accruals. Further analysis and interpretation would be required to gain a deeper understanding of the specific nature of this moderating effect and its implications for financial reporting and decision-making.

4.4.3 Beta Coefficients for Accruals Quality and Discretionary Accruals with and without the Moderating Variable (Ownership Concentration)

Table 4.10 presents the beta coefficients for two dependent variables, Accruals Quality (accruals ratio) and Discretionary Accruals. The beta coefficients indicate the strength and direction of the relationship between the independent variables and the dependent variables. The moderating variable in this analysis is ownership concentration.

Table 4.10: Beta Coefficients for Accruals Quality and Discretionary Accruals

Model	Variables	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	
		B	Std. Error	Beta		
1 a. Dependent Variable: Accruals Quality (accruals ratio) - Without moderating variable	(Constant)	1.371	1.006		1.362	0.184
	BS	0.123	0.049	0.34	2.538	0.017
	ACI	0.15	0.045	0.384	3.373	0.002
	GD	0.079	0.038	0.169	2.09	0.046
	BI	0.433	0.192	0.137	2.256	0.032
2 a. Dependent Variable: Accruals Quality (accruals ratio) – With moderating variable	(Constant)	1.927	0.998		1.93	0.064
	BS	0.13	0.046	0.358	2.803	0.009
	ACI	0.173	0.044	0.441	3.935	0.001
	GD	0.1	0.038	0.214	2.663	0.013
	BI	0.318	0.192	0.1	1.657	0.109
	OC	-0.052	0.026	-0.112	-1.979	0.058
3 a. Dependent Variable: Discretionary Accruals - without moderating variable	(Constant)	1.280	6.819		0.188	0.852
	BS	0.351	0.329	0.538	1.068	0.294
	ACI	-0.281	0.302	-0.398	-0.932	0.36
	GD	0.362	0.258	0.428	1.406	0.171
	BI	0.867	1.302	0.152	0.666	0.511
4 a. Dependent Variable: Discretionary Accruals with moderating variable	(Constant)	-1.759	6.933		-0.254	0.802
	BS	0.315	0.322	0.482	0.98	0.336
	ACI	-0.404	0.305	-0.572	-1.325	0.196
	GD	0.248	0.262	0.293	0.947	0.352
	BI	1.498	1.333	0.262	1.124	0.271
	OC	0.286	0.184	0.34	1.557	0.131

The regression model was as follows.

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

The regression equation presented at the end shows how the independent variables are combined to predict the value of the dependent variable. In this case, the equation is:

i. a. Dependent Variable: Accruals Quality (accruals ratio) - Without moderating variable

$$\boldsymbol{Y_{it}} = 1.371+0.123+0.15+0.079+0.433 + \varepsilon_{it}$$

ii. a. Dependent Variable: Accruals Quality (accruals ratio) - With moderating variable

$$\boldsymbol{Y_{it}} = 1.927+0.130+0.173+0.100+0.318 - 0.052+\varepsilon_{it}$$

iii. a. Dependent Variable: Discretionary Accruals - without moderating variable

$$\boldsymbol{Y_{it}} = 1.280 + 0.351-0.281+0.362+0.867 + \varepsilon_{it}$$

iv. a. Dependent Variable: Discretionary Accruals with moderating variable

$$\boldsymbol{Y_{it}} = -1.759+0.315+-0.404+0.248+1.498+0.286+\varepsilon_{it}$$

For the first model, which examines Accruals Quality without the moderating variable, the following independent variables are included: BS (Variable 1), ACI (Variable 2), GD (Variable 3), and BI (Variable 4). The unstandardized coefficients (β) show the effect of each independent variable on the dependent variable, while the standardized coefficients (β) indicate the relative importance of each independent variable after controlling for their different scales. The t-values and significance levels (Sig.) are also provided.

In this model, the constant term has a coefficient of 1.371 (β) and is not standardized. Among the independent variables, BS has a coefficient of 0.123 (β) and 0.34 (β), indicating a positive relationship with Accruals Quality. ACI has a coefficient of 0.15 (β) and 0.384 (β), also positively related. GD has a coefficient of 0.079 (β) and

0.169 (β), suggesting a positive impact. Lastly, BI has a coefficient of 0.433 (β) and 0.137 (β), indicating a positive association.

Moving to the second model, which still examines Accruals Quality but, includes the moderating variable (Ownership Concentration), the coefficients are seen to change. The constant term is now 1.927 (β), and the independent variables remain the same: BS, ACI, GD, BI, and OC. BS has a coefficient of 0.13 (β) and 0.358 (β), ACI has a coefficient of 0.173 (β) and 0.441 (β), GD has a coefficient of 0.1 (β) and 0.214 (β), BI has a coefficient of 0.318 (β) and 0.1 (β). Additionally, OC (Ownership Concentration) has a coefficient of -0.052 (β) and -0.112 (β), indicating a negative relationship, although it is not statistically significant ($p = 0.058$).

Shifting the focus to the third model, which explores Discretionary Accruals without the moderating variable, the dependent variable changes, but the independent variables are the same as in the first model: BS, ACI, GD, and BI. The constant term is 1.28 (β). None of the independent variables (BS, ACI, GD, and BI) show a significant relationship with Discretionary Accruals. The coefficients suggest positive relationships, but none of them reach statistical significance.

Finally, the fourth model examines Discretionary Accruals with the inclusion of the moderating variable (Ownership Concentration). The constant term is -1.759 (β), and the independent variables are BS, ACI, GD, BI, and OC. BS has a coefficient of 0.315 (β) and 0.482 (β), ACI has a coefficient of -0.404 (β) and -0.572 (β), GD has a coefficient of 0.248 (β) and 0.293 (β), BI has a coefficient of 1.498 (β) and 0.262 (β), and OC (Ownership Concentration) has a coefficient of 0.286 (β) and 0.34 (β). Among these independent variables, only OC has a coefficient that suggests a potential relationship with Discretionary Accruals, although it does not reach statistical significance ($p = 0.131$).

Comparing the results between the models, we can observe some differences. When examining Accruals Quality without the moderating variable (Model 1), all the independent variables (BS, ACI, GD, and BI) show positive relationships with Accruals Quality, and three out of four variables have statistically significant coefficients. However, when the moderating variable (Ownership Concentration) is

included (Model 2), the coefficients for BS, ACI, GD, and BI remain positive, but only BS, ACI, and GD are statistically significant. Additionally, the inclusion of the moderating variable introduces OC, which has a negative coefficient but does not reach statistical significance.

When focusing on Discretionary Accruals, without the moderating variable (Model 3), none of the independent variables (BS, ACI, GD, and BI) show statistically significant relationships. However, when the moderating variable (Ownership Concentration) is included (Model 4), the coefficients for BS, ACI, GD, and BI remain positive, but again, none of them reach statistical significance. The addition of OC introduces a potentially interesting relationship, as it has a positive coefficient, suggesting a positive association with Discretionary Accruals, although it falls short of statistical significance.

The inclusion of the moderating variable (Ownership Concentration) in the models seems to affect the coefficients and their significance levels for the independent variables. While some variables show consistent relationships across models, others exhibit changes in their coefficients and significance levels. This indicates that ownership concentration may play a role in moderating the relationships between the independent variables and the dependent variables.

These results suggest that the variables BS, ACI, GD, and BI have a more consistent and significant impact on Accruals Quality compared to their impact on Discretionary Accruals. The moderating variable OC shows a marginally significant negative effect on Accruals Quality but does not significantly affect Discretionary Accruals.

Based on these findings, the researchers decide to use Accruals Quality as the measure of earnings quality for testing their hypotheses. Since Accruals Quality is found to be consistently and significantly influenced by the predictor variables, it is deemed as a more appropriate and reliable measure of earnings quality in this study.

4.5 Hypothesis Testing

4.5.1 Hypothesis Testing for the Independent Variables without Moderating Variables

The results presented in Table 4.11 show the testing of research hypotheses related to the effect of board characteristics on the earnings quality of non-financial firms listed on the Nairobi Securities Exchange. The figures in the table are summaries derived from Table 4.10. Each hypothesis is accompanied by beta (β) values and p-values. The beta value represents the standardized coefficient, indicating the strength and direction of the relationship between the independent variable (board characteristic) and the dependent variable (earnings quality).

Table 4.11: Testing of Research Hypothesis

Research Hypotheses	Beta & p values	The decision to Accept the null hypothesis
$H_0$1 Board size has no significant effect on earnings quality of non-financial firms listed at the Nairobi Securities Exchange	β = 0.123, p = 0.017 p<0.05	Rejected
$H_0$2 Audit Committee Independence has no significant effect on earnings quality of non-financial firms listed at the Nairobi Securities Exchange	β = 0.150, p = 0.002 p<0.05	Rejected
$H_0$3 Gender diversity has no significant effect on earnings quality of non-financial firms listed at the Nairobi Securities Exchange	β = 0.079, p = 0.046 p<0.05	Rejected
$H_0$4 Board independence has no significant effect on earnings quality of non-financial firms listed at the Nairobi Securities Exchange	β = 0.433, p = 0.032 p<0.05	Rejected

$H_0$1: The hypothesis states that board size has no significant effect on earnings quality. The results show a beta value of 0.126 and a p-value of 0.017. Since the p-value is less than the significance level of 0.05, the null hypothesis is rejected. This suggests that board size has a significant effect on earnings quality in non-financial firms listed on the Nairobi Securities Exchange.

$H_0$2: The hypothesis suggests that audit committee independence has no significant effect on earnings quality. The results reveal a beta value of 0.284 and a p-value of 0.002. With a p-value below 0.05, the null hypothesis is rejected. Thus, audit committee independence does have a significant effect on earnings quality in the context of non-financial firms on the Nairobi Securities Exchange.

$H_0$3: This hypothesis explores the impact of gender diversity on earnings quality. The results indicate a beta value of 0.148 and a p-value of 0.046. Since the p-value is less

than 0.05, the null hypothesis is rejected. Therefore, gender diversity has a significant effect on earnings quality in non-financial firms listed on the Nairobi Securities Exchange.

$H_0$4: The hypothesis investigates the relationship between board independence and earnings quality. The results display a beta value of 0.648 and a p-value of 0.032. As the p-value is below the significance level of 0.05, the null hypothesis is rejected. Hence, board independence has a significant effect on earnings quality in the context of non-financial firms on the Nairobi Securities Exchange.

Comparing the results across the four hypotheses, all of them support the alternative hypothesis by rejecting the null hypothesis. This implies that board size, audit committee independence, gender diversity, and board independence do have significant effects on earnings quality in non-financial firms listed on the Nairobi Securities Exchange. These findings suggest that the characteristics of the board, such as its size, independence, and diversity (including gender diversity), play crucial roles in influencing the quality of earnings reported by the firms.

4.5.2 Hypothesis Testing when Factoring in the Moderating Variables

To determine whether to accept or reject the hypotheses at a 0.05 significance level, we need to consider the significance (p-values) of the corresponding variables in the model. Table 4.12 presents the results of hypothesis testing that factored in moderating variables concerning the earnings quality of non-financial firms listed at the Nairobi Securities Exchange (NSE). The table includes the research hypotheses, beta (β) values, p-values, and decisions based on a significance level of 0.05.

Table 4.12: Hypothesis Testing when Factoring in the Moderating Variables

Research Hypotheses	Beta & p values	The decision to Accept the null hypothesis
$H_0$1 Board size has no significant effect on earnings quality of non-financial firms listed at the Nairobi Securities Exchange	β = 0.130, p = 0.009 p<0.05	Rejected
$H_0$2 Audit Committee Independence has no significant effect on earnings quality of non-financial firms listed at the Nairobi Securities Exchange	β = 0.173, p = 0.001 p<0.05	Rejected
$H_0$3 Gender diversity has no significant effect on earnings quality of non-financial firms listed at the Nairobi Securities Exchange	β = 0.100, p = 0.013 p<0.05	Rejected
$H_0$4 Board independence has no significant effect on earnings quality of non-financial firms listed at the Nairobi Securities Exchange	β = 0. 318, p = 0.109 p>0.05	Accepted
$H_0$5 Ownership concentration has no significant moderating effect on the relationship between board characteristics and earnings quality of non-financial firms listed at the Nairobi Securities Exchange	β = -0.052, p = 0.058 p>0.05	Accepted

$H_0$1: The hypothesis states that board size has no significant effect on earnings quality. The results show a beta coefficient of 0.130 with a p-value of 0.009. Since the p-value is less than 0.05, the null hypothesis is rejected, suggesting that board size has a significant effect on earnings quality. However, it is important to note that the beta coefficient is relatively small.

$H_0$2: This hypothesis tests the effect of audit committee independence on earnings quality. The beta coefficient is 0.173 with a p-value of 0.001. As the p-value is less than 0.05, the null hypothesis is rejected. These results indicate that audit committee independence has a significant effect on earnings quality for non-financial firms listed on the Nairobi Securities Exchange.

$H_0$3: The hypothesis investigates how gender diversity affects the earnings quality. The p-value is 0.013 and the beta coefficient is 0.100. The null hypothesis is rejected since the p-value is less than 0.05, indicating that gender diversity significantly affects earnings quality.

$H_0$4: This claim investigates the effect of board independence on the earnings quality. The p-value is 0.109 and the beta coefficient is 0.318. The null hypothesis is accepted since the p-value is higher than 0.05. These findings imply that for non-financial enterprises listed on the Nairobi Securities Exchange, board independence does not significantly affect earnings quality.

H05: This hypothesis explores how ownership concentration affects the relationship between board characteristics and earnings quality. The p-value is 0.058 and the beta coefficient is -0.052. The null hypothesis is accepted since the p-value is higher than 0.05. This suggests that the relationship between board qualities and earnings quality is not significantly moderated by ownership concentration.

When we compare the outcomes of the hypotheses, we can see that board size, gender diversity, and the independence of the audit committee all significantly affect earnings quality, although board independence and ownership concentration do not. These results indicate a beneficial relationship between higher board sizes, independent audit committees, and gender diversity in the boardroom for non-financial firms listed on the Nairobi Securities Exchange. Board independence and ownership concentration, on the other hand, don't seem to be important factors in influencing the quality of earnings.

4.6 Explanation of Regression Models

The Regression model was as follows.

$$Y_{it} = \beta_0 + \beta_1 x_{1it} + \beta_2 x_{2it} + \beta_3 x_{3it} + \beta_4 x_{4it} + \theta_1 x_{1it} * z + \theta_2 x_{2it} * z + \theta_3 x_{3it} * z + \theta_4 x_{4it} * z + \varepsilon_{it}$$

Where: Y_{it} = Is Earnings Quality

In the given regression model, the objective is to predict the value of the dependent variable, which is "Earnings Quality" (Yit), using several independent variables. The independent variables are denoted as follows:

Board Size (BS)

Audit Committee Independence (ACI)

Gender Diversity (GD)

Board Independence (BI)

The regression equation is presented in two parts:

i. Accruals Quality:

Yit = β0 + 0.361BS + 0.397ACI + 0.410GD - 0.020BI - 0.033

This equation shows how the independent variables (Board Size, Audit Committee Independence, Gender Diversity, and Board Independence) are combined to predict the value of Accruals Quality (a measure of Earnings Quality). Each coefficient represents the effect of the corresponding independent variable on the dependent variable (Accruals Quality).

ii. Discretionary Accruals:

Yit = β0 + 0.308BS + 0.227ACI + 0.420GD + 2.210BI + 0.222

Similarly, this equation shows how the independent variables (Board Size, Audit Committee Independence, Gender Diversity, and Board Independence) are combined

to predict the value of Discretionary Accruals, which is another measure of Earnings Quality. Again, each coefficient represents the effect of the corresponding independent variable on the dependent variable (Discretionary Accruals).

In both equations, β_0 represents the intercept, which is the value of the dependent variable when all independent variables are zero.

The coefficients of the independent variables provide information about the strength and direction of their influence on the dependent variable. Positive coefficients indicate a positive relationship, meaning an increase in the independent variable will lead to an increase in the dependent variable, and vice versa for negative coefficients.

For instance, in the "Accruals Quality" equation:

An increase in Board Size (BS) by one unit will lead to a 0.361 increase in Accruals Quality.

An increase in Audit Committee Independence (ACI) by one unit will lead to a 0.397 increase in Accruals Quality.

An increase in Gender Diversity (GD) by one unit will lead to a 0.410 increase in Accruals Quality.

An increase in Board Independence (BI) by one unit will lead to a decrease of 0.020 in Accruals Quality.

Similarly, in the "Discretionary Accruals" equation, each independent variable has a specific effect on Discretionary Accruals.

These regression equations allow analysts to understand the relationships between the independent variables and the dependent variable and to make predictions based on the values of the independent variables. The coefficients can be used to assess the relative importance of each independent variable in explaining variations in the dependent variable (Earnings Quality).

4.7 Diagnostic Tests

This section presents and discusses the Diagnostic Tests calculated to determine

4.7.1 Collinearity Statistics

The tolerance and variance inflation factor (VIF) values were calculated to assess the multicollinearity among the independent variables. Table 4.13 below presents the results of the analysis.

Table 4.13: Collinearity Statistics

Variable	Tolerance	VIF
Board Size	0.449	2.227
Audit Committee size	0.617	1.621
Gender Diversity	0.284	3.524
Board Independence	0.535	1.869

The tolerance values in the table indicate the proportion of variance in each independent variable that is not explained by the other independent variables. In general, a tolerance value below 0.1 suggests a high degree of multicollinearity, while values above 0.2 indicate an acceptable level. Regarding board size, the tolerance value of 0.449 suggests a moderate level of multicollinearity, indicating that board size is not strongly correlated with other independent variables. The VIF of 2.227 further supports this finding, as a VIF below 5 generally indicates acceptable multicollinearity. Audit committee size also shows a moderate level of multicollinearity, as indicated by the tolerance value of 0.617 and VIF of 1.621. Similarly, board independence exhibits a moderate level of multicollinearity with a tolerance of 0.535 and VIF of 1.869.

However, gender diversity demonstrates a low tolerance value of 0.284, suggesting a higher degree of multicollinearity compared to the other variables. The VIF of 3.524 further confirms this finding, indicating a potentially problematic level of

multicollinearity. Since the variable has strong theoretical relevance to the research purpose, it was justified to retain it in the analysis despite multicollinearity concerns. The researcher focused on interpreting the coefficient estimates with caution.

Overall, the findings of the present study regarding board characteristics and their relationship with earnings quality suggest that board size, audit committee size, and board independence are not strongly affected by multicollinearity. However, the variable of gender diversity may warrant further investigation due to its lower tolerance and higher VIF. Future research should explore the potential implications of gender diversity on earnings quality in more detail.

4.7.2 Eigenvalue

Table 4.14 presented in this study displays the eigenvalues, condition index, and variance proportions for different dimensions related to board characteristics and earnings quality of non-financial firms listed on the Nairobi Securities Exchange. Eigenvalues are measures of the variance explained by each dimension or component in factor analysis. In this study, five dimensions (1 to 5) are considered, and the corresponding eigenvalues are provided in the table.

Table 4.14: Eigenvalue

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				(Constant)	X_1	X_2	X_3	X_4
1	1	4.852	1.000	.00	.00	.00	.00	.00
	2	.090	7.356	.04	.01	.01	.00	.50
	3	.040	11.019	.08	.00	.42	.00	.32
	4	.012	19.723	.10	.05	.12	1.00	.10
	5	.006	28.460	.78	.94	.45	.00	.07

a. Dependent Variable: Earning Quality

Eigenvalues are measures of the variance explained by each dimension or component in factor analysis. They indicate the amount of variation captured by each dimension.

In this study, five dimensions (1 to 5) are considered, and the corresponding eigenvalues are provided in the table.

Table 4.14 shows that the eigenvalue for Dimension 1 is 4.852, indicating that this dimension explains a substantial proportion of the variance in the data. It has a condition index of 1.000, suggesting that it is not affected by multicollinearity issues with other variables. The variance proportions for this dimension are not specified for the variables: Constant, Board Size, Audit Committee Size, Gender Diversity, and Board Independence.

For Dimension 2, the eigenvalue is much smaller at 0.090, indicating that it explains less variance compared to Dimension 1. The condition index is 7.356, suggesting some degree of multicollinearity with other variables. The variance proportions for this dimension indicate a slight contribution from Audit Committee Size (.04), Gender Diversity (.01), and a more substantial contribution from Board Independence (.50).

Dimension 3 has an eigenvalue of 0.040, indicating a smaller proportion of explained variance compared to the previous dimensions. The condition index is 11.019, suggesting multicollinearity issues with some variables. The variance proportions for this dimension show a modest contribution from Board Size (.08), Audit Committee Size (.00), Gender Diversity (.42), and a moderate contribution from Board Independence (.32).

Similarly, Dimension 4 has an eigenvalue of 0.012, representing a smaller amount of variance explained. The condition index is 19.723, indicating potential multicollinearity problems. The variance proportions for this dimension demonstrate some contributions from Board Size (.10), Audit Committee Size (.05), Gender Diversity (.12), and a strong contribution from Board Independence (1.00).

Lastly, Dimension 5 has the smallest eigenvalue of 0.006, suggesting the least amount of variance explained. The condition index is 28.460, indicating high multicollinearity issues. The variance proportions for this dimension indicate substantial contributions from Board Size (.78) and Audit Committee Size (.94),

moderate contributions from Gender Diversity (.45), and minimal contributions from Board Independence (.07).

4.7.3 Residuals Statistics

The residuals statistics provide valuable insights into the goodness of fit and accuracy of the regression model. The predicted value represents the expected earnings quality based on the board characteristics, while the residual is the difference between the actual earnings quality and the predicted value. The standard predicted value and standard residual are normalized versions of their respective counterparts.

Table 4.15: Residuals Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	12.0731	27.2472	20.1414	4.91462	33
Residual	-4.84392	3.64127	.00000	2.27969	33
Std. Predicted Value	-1.642	1.446	.000	1.000	33
Std. Residual	-1.988	1.494	.000	.935	33

a. Dependent Variable: Earning Quality

Interpreting the results, the mean predicted value of earnings quality is 20.1414, with a standard deviation of 4.91462. The range of predicted values varies from a minimum of 12.0731 to a maximum of 27.2472, indicating heterogeneity in the earnings quality among the non-financial firms in the sample. The residuals, which measure the deviation between the actual and predicted earnings quality, have a mean of .0000, indicating that, on average, the model predicts earnings quality accurately. The standard deviation of the residuals is 2.27969, suggesting some degree of dispersion around the predicted values.

Examining the standardized predicted values, the range is between -1.642 and 1.446, indicating that the predicted values are within a reasonable range relative to the overall distribution. Similarly, the standardized residuals range from -1.988 to 1.494, with a mean of .0000, indicating that the residuals are normally distributed around zero.

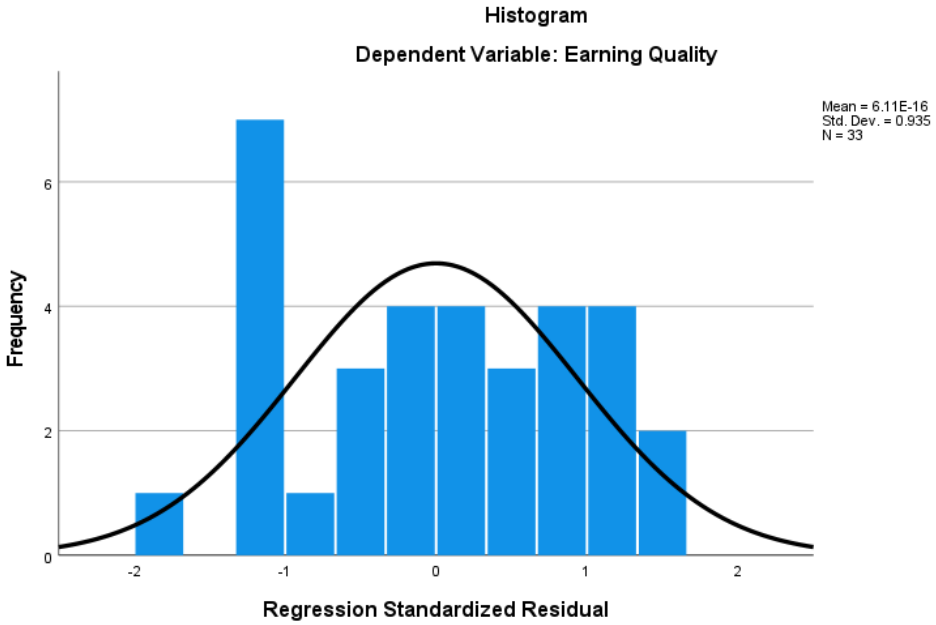

Figure 4.1: Regression Standardized Residual

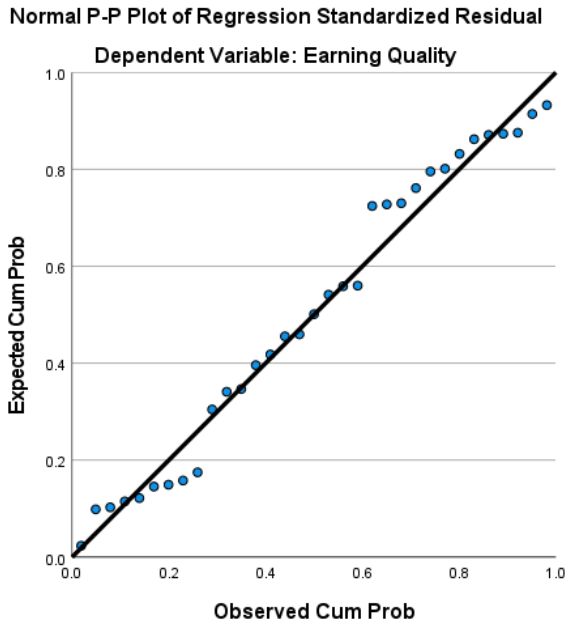

Figure 4.2: Normal P-P Plot of Regression Standardized Residual

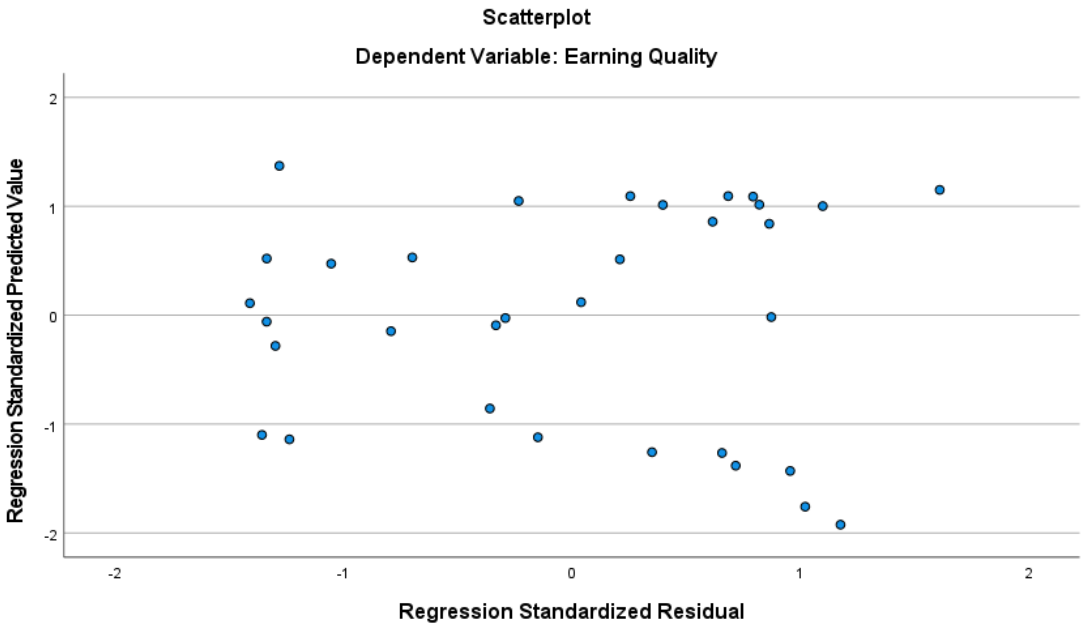

Figure 4.3: Scatter plot

The distribution shows that there is no systematic pattern thus implying that there is no problem with heteroskedasticity. The decision rule is that if there is a systematic pattern then there is a heteroskedasticity problem. In this case, the scatterplot does not display any clear systematic pattern, and thus, it suggests that the residuals have a relatively constant variance across the range of predicted values or independent variables. In this case, it indicates homoscedasticity, meaning that the assumption of constant variance is not violated.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

Based on the main objective of this study, which was the relationship between board characteristics and earnings quality of non-financial firms listed on the Nairobi Securities Exchange, this chapter aimed to summarize the study's findings based on descriptive results and tested statistical hypotheses stated in chapter one. Findings from each hypothesis test provided the basis for concluding each specific objective of this study earlier stated in chapter one and its overall goal as presented in this section. Conclusively, the chapter also presents recommendations for the policymakers based on research findings and the limitation encountered and subsequently puts forward some suggestions for further research.

5.2 Summary

The study was board characteristics and earnings quality-related accounting research, focusing on a clearer view of the relationships among board characteristics and earnings quality of non-financial listed companies at the Nairobi Securities Exchange. The available literature on this subject gave differing results, raising the need to explore further accounting information that helped enhance the understanding of board characteristics' contribution to earnings quality. Based on this gap, specific research problems were identified to examine this study's general objective, which helped explain the relationship between board characteristics and earnings quality of non-financial firms listed on the Nairobi Securities Exchange. Specific objectives to help solve the problems were: To establish the effect of board size on earnings quality of non-financial firms listed on the Nairobi Securities Exchange; determine the effect of audit committee independence on earnings quality of non-financial firms listed on the Nairobi Securities Exchange; To examine the effect of Gender diversity on earnings quality of non-financial firms listed at the Nairobi Securities Exchange. To investigate the effect of Board Independence on the earnings quality of non-financial firms listed at the Nairobi Securities Exchange; the

effect of study board characteristics on the earnings quality of non-financial firms listed at the Nairobi Securities Exchange was also examined and to determine the moderating effect of ownership concentration on the relationship between board characteristics and earnings quality of firms listed at the Nairobi Securities Exchange.

5.2.1 Effect of Board Size on Earning Quality

The findings reveal that the board sizes among the sampled non-financial firms listed at the Nairobi Securities Exchange (NSE) vary, with some having smaller boards and others having larger boards. On average, these firms have approximately 6 to 7 members on their boards. The Pearson correlation coefficients indicate a strong positive correlation between board size and accruals quality (.870) and a positive correlation between board size and discretionary accruals (.651). These results suggest that larger board sizes are associated with higher accruals quality and discretionary accruals. Moreover, the hypothesis testing indicates that board size has a significant effect on earnings quality in non-financial firms listed on the NSE, as the null hypothesis is rejected based on a beta value of 0.126 and a p-value of 0.017. Overall, these findings highlight the importance of board size in determining earnings quality and financial reporting practices in the examined firms.

5.2.2 Effect of Audit Committee Independence on Earning Quality

The results show that the average percentage proportion of non-executive directors in the audit committee was 26.69%. These findings suggest that non-financial firms listed on the Nairobi Securities Exchange tend to have relatively small audit committees and a significant presence of independent directors, while also prioritizing regular monitoring and reporting activities. The study found a strong positive correlation between audit committee independence and accruals quality. A higher proportion of non-executive directors in the audit committee is associated with higher accruals quality and lower discretionary accruals. This indicates that having a more independent audit committee leads to better financial reporting quality.

5.2.3 Effect of Gender Diversity on Earning Quality

The study found that the proportion of female directors in non-financial firms listed on the Nairobi Securities Exchange (NSE) varied from 15% to 54%, with an average of 34.3333%. This indicates that there is variability in the representation of female directors across these firms. Some companies have a relatively low proportion of female directors, while others have a higher representation. On average, about one-third of the board positions in non-financial firms listed at the NSE are occupied by women. The correlation analysis revealed a strong positive correlation between gender diversity and accruals quality, with a correlation coefficient of 0.809. This indicates that a higher proportion of female directors in relation to the total number of directors is associated with higher accruals quality. The hypothesis testing supports this conclusion, as the beta value of 0.148 and the p-value of 0.046 indicate a significant relationship between gender diversity and earnings quality. Therefore, having a more diverse board with a higher proportion of female directors positively impacts the quality of financial reporting in these firms.

5.2.4 Effect of Board Independence on Earning Quality

The proportion of non-executive directors on the board of non-financial firms listed on the Nairobi Securities Exchange (NSE) varies from 17% to 63%, with a mean of 35.3939, that is 35.%. This wide range suggests significant variation in board characteristics among these firms. Some firms have a lower proportion of non-executive directors, indicating a board dominated by executive members who actively participate in running the company. A significant positive association exists between board independence and accruals quality, as shown by the Pearson correlation value of 0.865. Similarly, there is a positive association between board independence and discretionary accruals, as shown by the correlation value of 0.647. According to these findings, a larger percentage of non-executive members on the board is linked to accruals that are of better quality and fewer discretionary accruals. In other words, the quality of earnings for non-financial enterprises listed on the NSE is favorably impacted by having a more independent board.

The results are consistent with hypothesis H04, which investigates the connection between board independence and earnings quality. A p = 0.032 and a beta value of 0.648 shows that the association is statistically significant. This indicates that in the case of non-financial enterprises listed on the NSE, board independence has a considerable impact on earnings quality.

5.2.5 The Moderating Effect of Ownership Concentration on the Relationship between Board Characteristics and Earnings Quality

The results show the average score for the percentage of foreign ownership. The average score of 22.0909 reveals that these companies have a foreign ownership percentage of about 22.09%. The range of values (from 3.00 to 40.00) suggests that there is variability among the firms, with some having a low level of foreign ownership and others having a higher percentage.

The Pearson correlation coefficients between ownership concentration and both accruals quality and discretionary accruals are positive (0.698 and 0.613, respectively). This indicates that a higher proportion of ownership concentration, specifically foreign ownership, is associated with higher accruals quality and discretionary accruals. It suggests that firms with a greater level of foreign ownership tend to exhibit better financial reporting quality and potentially exercise more discretion in their accounting practices.

The coefficient for ownership concentration, the moderating variable is -0.052, implying that higher ownership concentration is associated with lower accruals quality. However, this coefficient is not statistically significant at the conventional level (p = 0.058). This suggests that ownership concentration has a moderating effect on the relationship between ownership concentration and accruals quality may not be robust or conclusive.

The coefficients for board size, audit committee independence, and gender diversity remain relatively stable and statistically significant in both tables. This indicates that these variables have consistent effects on accruals quality regardless of the moderating variable of ownership concentration. Despite ownership concentration

not having a significant moderating effect on the relationship between board characteristics and earnings quality, it would be valuable to conduct a more comprehensive analysis specifically focusing on the influence of ownership concentration. This could involve examining different levels of ownership concentration and its interaction with board characteristics to determine if there are any nuanced effects on earnings quality. Additionally, exploring other indicators of ownership concentration, beyond the largest shareholder's ownership stake and number of institutional shareholders, could provide further insights.

5.3 Conclusions

In conclusion, the study of board characteristics and earnings quality in non-financial firms listed on the Nairobi Securities Exchange indicates that there was a strong positive correlation between board size and accruals quality, indicating that larger board sizes are associated with higher accruals quality and discretionary accruals. The firms have approximately 6 to 7 members on their boards, which are small boards. The hypothesis testing confirms that board size has a significant effect on earnings quality, highlighting the importance of board size in determining financial reporting practices.

In conclusion, the study of non-financial firms listed on the NSE tends to have relatively small audit committees with a significant presence of independent directors. The study found that a higher proportion of non-executive directors in the audit committee is associated with higher accruals quality and lower discretionary accruals. This highlights the importance of having an independent audit committee in improving financial reporting quality.

In conclusion, the study found that the level of gender diversity within boards of companies was moderate, with an average gender diversity index of 61.03 and a standard deviation of 14.099. There were approximately three female executives in boardrooms, with some variation indicated by the standard deviation of 1.193. The distribution of female executives was slightly right-skewed, suggesting a slight imbalance. In terms of board leadership positions, there were nearly three female members on average, with a standard deviation of 0.906. The distribution of female

members in board leadership positions was slightly left-skewed, indicating a higher concentration. Importantly, the study revealed a significant positive correlation between gender diversity and earnings quality, suggesting that greater gender diversity on boards was associated with higher earnings quality in non-financial firms. This correlation was robust and significant at the 0.01 level, highlighting the strong relationship between gender diversity and financial performance.

The study concludes that non-financial firms listed on the Nairobi Securities Exchange have varying levels of foreign ownership. The findings indicate a positive correlation between ownership concentration, particularly foreign ownership, and both accruals quality and discretionary accruals, suggesting that companies with higher foreign ownership tend to exhibit better financial reporting quality and potentially exercise more discretion in their accounting practices. The inclusion of ownership concentration as a moderating variable enhances the explanatory power of the models for both accruals quality and discretionary accruals, highlighting its significant role in influencing the relationship between the predictors and the dependent variables. However, ownership concentration does not significantly moderate the relationship between board characteristics and earnings quality.

5.4 Recommendations

Given the positive correlation between board size and earnings quality, it is recommended that non-financial firms listed on the Nairobi Securities Exchange consider expanding their board sizes. Larger boards can provide a diverse range of expertise and perspectives, which may contribute to improved financial reporting practices and transparency. However, it is important to strike a balance and ensure that the board size is proportionate to the company's size and operational needs.

The strong positive association between audit committee size and earnings quality suggests that non-financial firms should consider increasing the size of their audit committees. Larger audit committees can enhance monitoring and reporting activities, leading to more reliable and accurate financial reporting. Firms should aim to have a sufficient number of members on their audit committees to effectively fulfill their oversight responsibilities.

The significant positive correlation between gender diversity and earnings quality highlights the importance of promoting gender diversity within boards. Non-financial firms should strive to increase the representation of women in executive and board leadership positions. This can bring diverse perspectives, skills, and experiences to decision-making processes, ultimately enhancing financial performance. Companies can implement diversity initiatives, such as targeted recruitment and inclusive policies, to ensure a more balanced gender composition on their boards.

The study emphasizes the significance of board independence in improving earnings quality. Non-financial firms should prioritize the appointment of independent directors and foster a culture of collaboration and frequent interactions among them. Encouraging independent directors to engage in constructive discussions, share diverse viewpoints, and challenge management, when necessary, can enhance financial performance and transparency.

Companies should ensure that the rights and interests of minority shareholders are protected, and governance mechanisms are in place to mitigate any potential conflicts of interest that may arise from concentrated ownership. Although ownership concentration did not have a significant moderating effect on the relationship between board characteristics and earnings quality, it is still important for non-financial firms to monitor and manage ownership concentration.

5.5 Suggestions for Further Research

The study reveals a significant positive correlation between gender diversity and earnings quality in non-financial firms listed on the Nairobi Securities Exchange. There is a need to conduct a more in-depth investigation into the specific mechanisms through which board diversity influences earnings quality. Explore factors such as diverse perspectives, decision-making processes, and board dynamics that may mediate or enhance the relationship between board diversity and financial performance. Additionally, examine the potential role of other dimensions of diversity (e.g., ethnicity, age, expertise) and their impact on earnings quality.

The analysis demonstrates a strong positive association between audit committee size and earnings quality, suggesting that larger audit committees are linked to higher-quality financial reporting. There is a need to investigate the specific attributes and characteristics of audit committee members that contribute to improved earnings quality. This can involve an examination of the factors such as expertise, independence, experience, and diversity within the audit committee. Additionally, explore the role of audit committee activities, such as the frequency and effectiveness of meetings, in enhancing financial reporting quality. This study would provide insights into the optimal composition and functioning of audit committees for ensuring reliable and accurate financial reporting.

According to the research, ownership concentration has a moderating influence on the association between board attributes and earnings quality in listed non-financial enterprises on the Nairobi Securities Exchange. It is necessary to do research to determine the precise processes through which ownership concentration influences the link between board attributes and earnings quality. The effect of board features on financial performance has to be examined in relation to various degrees of ownership concentration, such as concentrated vs distributed ownership. Analyze how this connection has been shaped by agency conflicts, control mechanisms, and governance practices. The results of this research would provide us a thorough knowledge of how ownership concentration, board characteristics, and earnings quality interact in non-financial enterprises.

5.6 Contribution of the Findings to Existing Knowledge

The findings of this study contribute to existing knowledge in several ways:

Board Size and Earnings Quality: The study reveals a significant positive correlation between board size and earnings quality. This finding adds to the understanding that larger boards are associated with higher-quality financial reporting practices and transparency. It suggests that having a diverse range of expertise and perspectives within a larger board can contribute to improved earnings quality. This contributes to the literature on the relationship between board characteristics and earning quality.

Audit Committee Size and Earnings Quality: The study highlights a strong positive association between audit committee size and earnings quality. This implies that larger audit committees, consisting of more non-executive members, are linked to higher earnings quality. The findings underscore the importance of regular monitoring and reporting activities conducted by audit committees and their role in ensuring reliable and accurate financial reporting. This finding adds to the existing literature on the effectiveness of audit committees in enhancing earning quality.

Gender Diversity and Earnings Quality: The study demonstrates a significant positive correlation between gender diversity on boards and earnings quality. This highlights the importance of having a higher representation of women in boardrooms, as it is associated with better financial performance. The findings contribute to the literature on gender diversity in corporate governance and provide support for the business case for gender diversity, indicating that diverse boards lead to improved earning quality.

Moderating Effect of Ownership Concentration: The study identifies ownership concentration as a moderating variable that influences the relationship between board characteristics and earnings quality. This finding suggests that the impact of board characteristics on earnings quality may vary depending on the level of ownership concentration. The study provides insights into the complex interplay between ownership structure, board characteristics, and financial performance, contributing to the understanding of corporate governance dynamics in the context of non-financial firms listed on the Nairobi Securities Exchange.

Overall, these findings contribute to the existing body of knowledge by providing empirical evidence on the relationships between board characteristics, ownership structure, and earnings quality in the specific context of non-financial firms listed on the Nairobi Securities Exchange. They highlight the significance of board size, audit committee attributes, and gender diversity in promoting board characteristics and earnings quality in these non-financial firms listed on the Nairobi Securities Exchange.

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APPENDICES

Appendix I: Firm Mean Median Maximum and Minimum for Board Size

Firms	Mean growth	Median growth	Min mean	Max mean
Kakuzi Plc	7.3636	8.000	6	9
Kapchorua Tea Co. Ltd	6.4545	6.000	6	7
Limuru Tea Co. Ltd	4.4545	4.000	3	7
Sasini Ltd	8.6364	9.000	8	9
Williamson Tea Kenya Lt	7.0000	7.000	7	7
Car & General (K) Ltd	7.1818	7.000	7	8
Eveready East Africa Ltd	7.8182	8.000	7	9
Express Kenya Ltd	5.0000	5.000	5	5
Kenya Airways Ltd	11.0000	11.000	10	12
Nation Media Group Ltd	15.3636	16.000	7	18
Sameer Africa Ltd	7.1818	8.000	6	8
Standard Group Plc	7.3636	7.000	6	11
TPS Eastern Africa Ltd	11.0909	11.000	10	13
Uchumi Supermarket	7.0000	7.000	7	7
Scangroup Ltd	7.3636	7.000	7	9
ARM Cement Plc	9.1818	9.000	7	15
Bamburi Cement Ltd	11.6364	11.000	9	14
Crown Paints Kenya Plc	5.9091	6.000	5	7
E.A.Cables Ltd	7.1818	7.000	6	8

E.A.Portland Cement Co. Ltd	7.1818	7.000	6	8
KenGen Co. Ltd	11.0000	11.000	11	11
KenolKobil Ltd	7.0000	7.000	7	7
K P & L C Ltd	11.0000	11.000	11	11
Total Kenya Ltd	11.0000	11.000	11	11
Umeme Ltd	6.0000	6.000	6	6
B.O.C Kenya Ltd	7.0000	7.000	7	7
BATKenya Ltd	11.0000	11.000	11	11
Carbacid Investments Plc	4.0000	4.000	4	4
E A B Ltd	12.0000	12.000	12	12
Kenya Orchards Ltd	4.0000	4.000	4	4
Mumias Sugar Co. Ltd	10.0000	10.000	10	10
Unga Group Ltd	8.0000	8.000	8	8
Safaricom Ltd	9.0000	9.000	9	9
	8.2534	**8.242**	**7.455**	**9.152**

Appendix II: Firm Mean Median Maximum and Minimum for Audit Independence

Firms	Mean	Median	Min mean	Max mean
Kakuzi Plc	64.000	67	38	83
Kapchorua Tea Co. Ltd	77.545	83	71	83
Limuru Tea Co. Ltd	58.273	67	25	80
Sasini Ltd	87.636	89	78	89
Williamson Tea Kenya Lt	86.000	86	86	86
Car & General (K) Ltd	74.455	71	71	86
Eveready East Africa Ltd	73.182	75	67	75
Express Kenya Ltd	60.000	60	60	60
Kenya Airways Ltd	82.909	82	75	91
Nation Media Group Ltd	85.182	88	43	100
Sameer Africa Ltd	86.000	88	83	88
Standard Group Plc	76.455	83	57	91
TPS Eastern Africa Ltd	83.636	83	80	90
Uchumi Supermarket	86.000	86	86	86
Scangroup Ltd	77.364	71	71	89
ARM Cement Plc	70.545	67	57	80
Bamburi Cement Ltd	70.364	71	62	77
Crown Paints Kenya Plc	48.273	50	40	57
E.A. Cables Ltd	86.182	86	83	88
E.A. Portland Cement Co. Ltd	86.182	86	83	88

Firms	Mean	Median	Min mean	Max mean
KenGen Co. Ltd	91.000	91	91	91
KenolKobil Ltd	71.000	71	71	71
K P & L C Ltd	91.000	91	91	91
Total Kenya Ltd	82.000	82	82	82
Umeme Ltd	33.000	33	33	33
B.O.C Kenya Ltd	86.000	86	86	86
BATKenya Ltd	73.000	73	73	73
Carbacid Investments Plc	100.000	100	100	100
E A B Ltd	92.000	92	92	92
Kenya Orchards Ltd	75.000	75	75	75
Mumias Sugar Co. Ltd	90.000	90	90	90
Unga Group Ltd	88.000	88	88	88
Safaricom Ltd	89.000	89	89	89
	78.218	**78.788**	**72.030**	**9.152**

Appendix III: Firm Mean Median Maximum and Minimum for Gender Diversity

Firms	Mean	Median	Min mean	Max mean
Kakuzi Plc	0.00	0	0	0
Kapchorua Tea Co. Ltd	0.00	0	0	0
Limuru Tea Co. Ltd	0.00	0	0	0
Sasini Ltd	12.73	11	0	33
Williamson Tea Kenya Lt	0.00	0	0	0
Car & General (K) Ltd	0.00	0	0	0
Eveready East Africa Ltd	38.55	38	25	56
Express Kenya Ltd	0.00	0	0	0
Kenya Airways Ltd	15.64	9	0	27
Nation Media Group Ltd	15.45	19	0	25
Sameer Africa Ltd	13.73	0	0	50
Standard Group Plc	16.18	17	13	22
TPS Eastern Africa Ltd	5.18	9	0	10
Uchumi Supermarket	14.00	14	14	14
Scangroup Ltd	1.00	0	0	11
ARM Cement Plc	0.00	0	0	0
Bamburi Cement Ltd	17.27	18	14	22
Crown Paints Kenya Plc	8.73	14	0	17
E.A.Cables Ltd	12.91	14	0	17
E.A.Portland Cement Co. Ltd	1.27	0	0	14

Firms	Mean	Median	Min mean	Max mean
KenGen Co. Ltd	21.27	18	18	27
KenolKobil Ltd	14.00	14	14	14
K P & L C Ltd	9.00	9	9	9
Total Kenya Ltd	27.00	27	27	27
Umeme Ltd	0.00	0	0	0
B.O.C Kenya Ltd	14.00	14	14	14
BATKenya Ltd	9.00	9	9	9
Carbacid Investments Plc	0.00	0	0	0
E A B Ltd	8.00	8	8	8
Kenya Orchards Ltd	0.00	0	0	0
Mumias Sugar Co. Ltd	10.00	10	10	10
Unga Group Ltd	13.00	13	13	13
Safaricom Ltd	22.00	22	22	22
	9.69	9.30	6.36	14.27

Appendix IV: Firm Mean, Median, Maximum and Minimum for Board Independence

Firms	Mean	Median	Standard Deviation	Min mean	Max mean
Kakuzi Plc	0.3638	0.3300	0.2517	0.0700	0.7400
Kapchorua Tea Co. Ltd	0.4600	0.4200	0.2802	0.0800	0.7300
Limuru Tea Co. Ltd	0.4308	0.3600	0.2534	0.1100	0.7200
Sasini Ltd	0.4177	0.4600	0.1907	0.0300	0.5100
Williamson Tea Kenya Lt	0.4615	0.3200	0.2389	0.1800	0.6100
Car & General (K) Ltd	0.3969	0.3200	0.2512	0.0600	0.6100
Eveready East Africa Ltd	0.3038	0.3000	0.2287	0.0300	0.4700
Express Kenya Ltd	0.3454	0.3300	0.1800	0.1400	0.4800
Kenya Airways Ltd	0.4292	0.4600	0.2884	0.1000	0.7900
Nation Media Group Ltd	0.5015	0.5800	0.1665	0.1200	0.5000
Sameer Africa Ltd	0.3054	0.3200	0.2186	0.1100	0.7800
Standard Group Plc	0.4346	0.4200	0.2025	0.0800	0.4200
TPS Eastern Africa Ltd	0.3400	0.3000	0.1153	0.2500	0.4700
Uchumi Supermarket	0.2962	0.2300	0.2654	0.1200	0.7000
Scangroup Ltd	0.4354	0.3700	0.3581	0.0700	0.6400
ARM Cement Plc	0.4254	0.3600	0.2498	0.1500	0.7000
Bamburi Cement Ltd	0.5115	0.5700	0.2204	0.1500	0.6600
Crown Paints Kenya	0.3185	0.3400	0.2147	0.3200	0.7400

Firms	Mean	Median	Standard Deviation	Min mean	Max mean
Plc					
E.A. Cables Ltd	0.2585	0.2700	0.1993	0.2900	0.6600
E.A. Portland Cement Co. Ltd	0.4008	0.4300	0.2079	0.2400	0.6600
KenGen Co. Ltd	0.4815	0.4300	0.2094	0.1100	0.5500
KenolKobil Ltd	0.4138	0.4200	0.1916	0.1000	0.4800
K P & L C Ltd	0.4677	0.3700	0.3294	0.2200	0.7400
Total Kenya Ltd	0.4877	0.4700	0.3442	0.1600	0.6100
Umeme Ltd	0.4500	0.5000	0.2375	0.0600	0.6800
B.O.C Kenya Ltd	0.4877	0.5500	0.1640	0.2300	0.5900
BATKenya Ltd	0.4269	0.4400	0.1623	0.1700	0.6500
Carbacid Investments Plc	0.3562	0.3800	0.2289	0.1000	0.5900
E A B Ltd	0.4346	0.4300	0.1573	0.1000	0.5700
Kenya Orchards Ltd	0.3338	0.3500	0.1486	0.1900	0.4500
Mumias Sugar Co. Ltd	0.3323	0.5400	0.1096	0.3900	0.5900
Unga Group Ltd	0.3970	0.3200	0.1932	0.1000	0.4800
Safaricom Ltd	0.6415	0.6100	0.2371	0.4415	0.9415
Overall	**0.411**	**0.403**	**0.221**	**0.154**	**0.622**

Appendix VI: Secondary Data Collection Sheet

COMPANY NAME	**Data Completion**										
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Board Size											
Number of directors: Number of directors.											
Independent directors' proportion: Percentage or proportion.											
Board size relative to company size: Ratio or proportion.											
Audit Committee Independence											
Audit committee size:											

Number of members.											
Number of Non-executive directors'											
Frequency of audit committee meetings: Number of meetings per period (per year).											
Gender Diversity											
Gender diversity index: A numerical index or score.											
Gender composition of executive positions: % or proportion of male and female											

executives.											
Gender representation in board leadership positions: % or proportion of male and female leaders in the board.											
Board Independence											
Board leadership structure: Binary (0 or 1) indicating the presence or absence of a separate board chairperson or CEO.											
Absence of executive directors: Count/Num											

ber of executive directors.											
The proportion of independent directors: % or proportion.											
Earning Quality											
Accruals Quality: Absolute Accruals to Total Assets Ratio											
Actual Accruals Accruals Quality Index											
Accruals to Cash Flow Ratio											
Discretionary Accruals: % Earnings											

from assets valuation activities											
Discretionary Accruals: % Earnings from revenue recognition											
Ownership Concentration											
% of the largest shareholder's ownership stake:											
Number of institutional shareholders											

Appendix VII: Non-financial Listed Firms

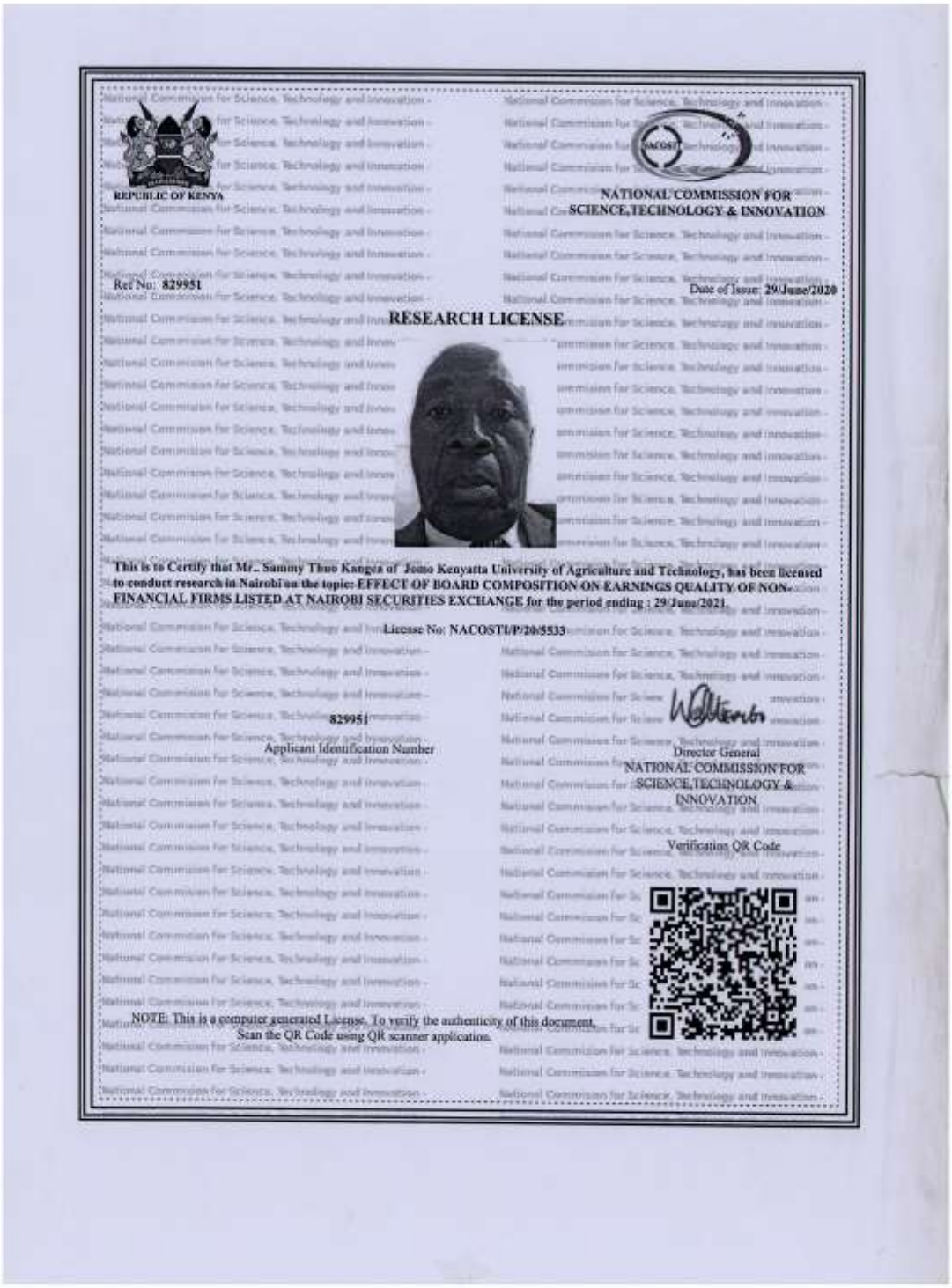
S/N	Company Name
	Eaagads Ltd
	Kakuzi Plc
	Kapchorua Tea Co. Ltd
	The Limuru Tea Co. Ltd
	Sasini Ltd
	Williamson Tea Kenya Ltd
	Car & General (K) Ltd
	Atlas African Industries Ltd
	Deacons (East Africa) Plc
.	Eveready East Africa Ltd
.	Express Kenya Ltd
.	Kenya Airways Ltd
.	Longhorn Publishers Ltd
.	Nairobi Business Ventures Ltd
.	Nation Media Group Ltd
.	Sameer Africa Ltd
.	Standard Group Plc

.	TPS Eastern Africa Ltd
.	Uchumi Supermarket Plc
.	Scangroup Ltd
.	ARM Cement Plc
.	Bamburi Cement Ltd
.	Crown Paints Kenya Plc
.	E.A.Cables Ltd
.	E.A.Portland Cement Co. Ltd
.	KenGen Co. Ltd
.	KenolKobil Ltd
.	Kenya Power & Lighting Co Ltd
.	Total Kenya Ltd
.	Umeme Ltd
.	B.O.C Kenya Ltd
.	British American Tobacco Kenya Ltd
.	Carbacid Investments Plc
.	East African Breweries Ltd
.	Flame Tree Group Holdings Ltd
.	Kenya Orchards Ltd
.	Mumias Sugar Co. Ltd

.	Unga Group Ltd
.	Safaricom Ltd

Source: Nairobi Securities Exchange, 2017

Appendix VIII: NACOSTI Research Permit



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Appendix IX: Detailed Correlation Matrix

		BS	ACI	GD	BI	AQ	DA	AC
Board Size	Pearson Correlation	1	.949**	.896**	.808**	.966**	.666**	.741**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	33	33	33	33	33	33	33
Audit Committee Independence	Pearson Correlation	.949**	1	.868**	.774**	.959**	.601**	.759**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	33	33	33	33	33	33	33
Gender Diversity	Pearson Correlation	.896**	.868**	1	.741**	.909**	.677**	.746**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	33	33	33	33	33	33	33
Board Independence	Pearson Correlation	.808**	.774**	.741**	1	.834**	.596**	.497**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.003
	N	33	33	33	33	33	33	33
Accruals Quality (accruals ratio)	Pearson Correlation	.966**	.959**	.909**	.834**	1	.655**	.698**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	33	33	33	33	33	33	33
Discretionary Accruals	Pearson Correlation	.666**	.601**	.677**	.596**	.655**	1	.613**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	33	33	33	33	33	33	33
Ownership Concentration	Pearson Correlation	.741**	.759**	.746**	.497**	.698**	.613**	1
	Sig. (2-tailed)	.000	.000	.000	.003	.000	.000	
	N	33	33	33	33	33	33	33

**. Correlation is significant at the 0.01 level (2-tailed).