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Impact of board diversity on Environmental, Social and Governance disclosure in listed companies in Kenya.

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IMPACT OF BOARD DIVERSITY ON ENVIRONMENTAL, SOCIAL AND GOVERNANCE DISCLOSURE IN LISTED COMPANIES IN KENYA.

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DECLARATION

Declaration

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the dissertation contains no material previously published or written by another person except where due reference is made in the dissertation itself.

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ABSTRACT

The study undertaken focused on companies listed on the Nairobi Securities Exchange, to determine the impact of board diversity on ESG disclosure between the years 2018- 2022. In the 21st century, there has been a notable surge in sustainability concerns among governments, multinational corporations, public and private companies, as well as their stakeholders. Board plays a pivotal role in facilitating efficient disclosures as they embody firm's values and connect with stakeholders. Using the Code of Corporate Governance, 2015 as a guide for board diversity variables, those that were assessed are; board age diversity, board gender diversity, board independence and board capabilities & skills, and the controlled variables; firm size, firm age and firm leverage. The empirical literature on board diversity and ESG disclosures has explored board diversity variables like independence, age, gender, and skills, but few studies have specifically identified the most crucial among these variables and this study aimed to fill this gap. Objectives included assessing the impact of board diversity practices on ESG disclosures, compliance levels with policies and regulations, and stakeholder perceptions. The study was pegged on the agency and resource dependency theories. The study adopted the positivist philosophy. The population comprised 60 NSE-listed companies, A descriptive research design was employed, where quantitative data collected through content analysis and the use of a questionnaire. Secondary data underwent panel regression analysis, while primary data was subjected to descriptive analysis. The findings of the study were that board gender diversity and board independence had a significant negative relationship with ESG whereas board capabilities and skills had a significant positive relationship. The following industries had a positive and significant relationship with ESG: banking industry, commercial industry and the construction industry and finally the years 2021 and 2022 had a positive significant relationship with ESG. Study findings will assist in developing more efficient policies to promote the disclosure of ESG activities of firms listed on the NSE and the encouragement of creation of awareness on ESG matters to stakeholders. By adding to existing literature on board diversity and ESG disclosure, the study will contribute to advancing discussions around ways in which the board attributes can be managed for efficient and effective disclosure.

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ESG- Environmental, Social, Governance

NSE- Nairobi Securities Exchange

RDT-Resource Dependence Theory

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CHAPTER ONE

INTRODUCTION

The chapter highlighted the background of the study, statement of the problem, the general and specific research objectives and the research questions. The scope and significance of the study are tackled towards the end of the chapter.

1.1 Background of the study

The concern over climate change has spurred governments around the world to adopt the Sustainable Development Goals as part of their agendas, and extending their influence on firms to do the same (United Nations, 2023). Sustainable development is defined in the United Nations report: Our Common future, as 'meeting the needs of the present without compromising the ability of future generations to meet their own needs' (WCED, 1987). Environmental, Social and Governance is a framework that is utilized to analyze sustainability practices to assign a score (Clement, Robinot, & Trespeuch, 2023), assess performance (Birindelli, Dell'Anti, Iannuzzi, & Savioli, 2018) or even disclosure (Fahad & Rahman, 2019) in relation to sustainability.

Investors, shareholders, regulatory bodies, and other stakeholders hold firms accountable on their contribution towards sustainability through the environmental, social and governance (ESG) disclosures (Birindelli, Dell'Anti, Iannuzzi, & Savioli, (2019); Arayssi, Jizi, & Tabaja, (2020); Kamaludin, Ibrahim, Sundarasen, & Faizal, (2022); Cucari, De Falco, & Orlando, (2018). The firms that seek to incorporate the environmental, social and governance disclosures in their reports indicate their awareness of the long-term aspirations and are enabled to distinguish themselves in the market from their competitors (Birindelli, Dell'Anti, Iannuzzi, & Savioli, (2019); Arayssi, Jizi, & Tabaja, (2020)).

The focus on ESG also enhances the viewpoint that companies do not only exist for profit maximization and they reflect the stakeholder's pressure to disclose their contribution to society (Ismail & Latiff, (2019); Bravo & Reguera-Alvarado, (2019)). Stakeholders such as investors stress the need to incorporate sustainable investments and disclosure of sustainable practices of firms (Arayssi, Jizi, & Tabaja, 2020), and regulators have also noted the importance of ESG through requesting listed firms to disclose either voluntarily or compulsorily through regulations (Ismail & Latiff, 2019).

Disclosure is a key aspect of the economy and stakeholders such as investors rely on company information to allocate capital and assess their risks properly. Transparency thus becomes a vital attribute that needs to be upheld to maintain market integrity, avoid manipulation and unethical activities which will in turn affect firm value through the generation of substantial costs to cover their tracks (Fayyaz, Jala, & Venditti, 2022)

Suttipun (2021), argued that the significance of ESG disclosure enables businesses to grow more efficiently. Therefore, corporations decrease the risk of fraud and raise the quality, productivity, and marketability of the products if they have transparency and high-quality internal management as a result of giving ESG disclosure. ESG reporting, over the years has been referred to as ‘non-financial reporting’, ‘sustainability reporting’ and ‘social and environmental reporting’ (Luque-Vilchez, Co6rdazzo, Rimmel, & Tilt, 2023); and for the purpose of this study, the paper shall utilize the term ESG disclosure for streamlining purposes.

1.1.1 ESG disclosures

Nearly all of the leading 250 global corporations—the bulk of large businesses worldwide—report on their sustainability efforts (Larrinaga & Bebbington, (2021); Ehnert, Parsa, Roper, Wagner, & Muller-Camen, (2016); Junior, Best, & Cotter, (2014). Despite the fact that ESG reporting has been considered voluntary for companies to disclose, it is considered a de facto law for businesses, in such a manner that companies are not yet disclosing their reports are under a considerate amount of pressure to do so (Larrinaga & Bebbington, 2021). This pressure is steered and recognised by both regulators and researchers in assessing ways in which the disclosure can be done more effectively and efficiently (Li & Wahid, 2018).

Since its creation, the Global Reporting Initiative (GRI) tried to create a common vocabulary to help businesses report on sustainability in a way that "enables informed dialogue and decision making around those impacts" (GRI, 2023). The GRI principles comprise of accuracy, clarity, comparability, completeness, timeliness and verifiability (Boshnak, 2021). The framework gives precise disclosure guidelines for each of the various ESG factors, while the universal standards serve as the framework and point of entry for implementing the GRI standards. The United Nation’s actions and the GRI's recommendations have increased the focus on sustainability reporting globally and put pressure on businesses to participate in sustainable development and to disclose this information in their financial reports (Qureshi, Kirkerud, Theresa, & Ahsan, 2019).

In Kenya, there was the introduction of the Nairobi Securities Exchange-ESG Disclosure Manual that requires companies to utilize the standards to guide their disclosure when preparing and releasing their annual sustainability report (NSE, 2021). The manual contains a comprehensive and sector specific disclosure items for companies listed on the NSE. The specific sectors include; telecommunications sector, insurance sector, commercial and services sector, energy and petroleum sector, construction and allied sector, agricultural sector, manufacturing sector, investment services sector, investment sector and the banking sector

In addition to that, the manual acts as a form of support to the Code of Corporate Governance Practices for Issuers of Securities to the public 2015, that requires companies to place ESG frameworks and propose public disclosure of ESG performance in their annual reports (CMA, 2023). Moreover, the Mwongozo Code of Governance for State Corporations requires that the board should ensure that the strategy of the organization aligns to the long-term goals of the organization on sustainability. The Board should also monitor the organization's performance and ensure sustainability.

Some listed companies such as Safaricom Ltd, East African Breweries Limited, Kenya Commercial Bank, Amalgamated Banks of South Africa Limited (Kenya), Equity Bank, Co-operative bank, the National Bank of Kenya, Nation Media Group, British American Tobacco and New Gold Issuer (RP) Ltd, just to name a few, were disclosing their ESG reports voluntarily before the NSE brought about the introduction of the manual in 2021. In Kenya, the rates of disclosure have been relatively low in comparison to countries in the continent of Asia, Europe and the region of the Americas.

According to a report done by ACCA, Kenya as at 2022 had a 40% incorporation of climate change and ESG agenda into its financial reports (ACCA, 2022), by which this figure was behind Ethiopia who had 48% and Tanzania at 46.3% (ACCA, 2022). This goes to show that in Kenya, the slow but steady uptake of the ESG disclosure displays the need for improvement on the same, thus the NSE directive to give the companies one year allowance before making it officially mandatory, made sense. However, Tilt, Qian, Kuruppu, & Dissanayake, (2021) stated that despite the increase in regulations governing the disclosure of ESG activities, it contains a notation of comply or explain approach despite them being mandatory as such.

1.1.2 Board diversity and ESG disclosure

Due to their mutually reinforcing nature, board diversity and ESG disclosure, have garnered more attention over time (Boukattaya, Ftiti, Arfa, & Omri, 2022; Kahloul, Sbai, & Grira, 2022; Veltri, Mazzotta, & Rubino, 2021). According to Birindelli et al. (2019); Kamaludin et al. (2022); and Arayssi et al. (2020), a company's board of directors is regarded as a crucial component of the overall success of the company and plays a crucial role in implementing ESG across the entire organization. In addition to the other duties of the board, which include providing oversight, advisory services & counsel, and monitoring of operations in a firm (Kamaludin, Ibrahim, Sundarasen, & Faizal, 2022), Menicucci & Paolucci (2022) stated that the board plays a fundamental role in guaranteeing that the interests of the firm are aligned with respect to ESG. Thus it is imperative the board is composed of competent individuals who are well versed with the operations of a company to ensure its smooth running (Birindelli, Dell'Anti, Iannuzzi, & Savioli, (2019); Cucari, De Falco, & Orlando, (2018).

Diverse attributes are believed to enrich the board's debates, foster creativity, facilitate the enhancement of creativity, problem solving capabilities and promote the exchange of ideas. The diversity brings new insights and perspective which lead to better and quality decision making by the board (Fayyaz, Jala, & Venditti, 2022). This study shall focus on the following attributes of board diversity: board age diversity, board capabilities and skills, board independence and board gender diversity.

The board age diversity can be classified based on generations for instance, there is the baby boomers, the veterans, generations X and Y, millennials, and others (Ismail & Latiff, 2019). For example with regard to the veterans they were deemed to be hard working and the baby boomers were radical people who believed in change, who actually can be attributed to the save the environment movement (Cucari, De Falco, & Orlando, (2018); Ferrero-Ferrero, Fernandez-Izquierdo, & Munoz-Torres, (2016). Fahad & Rahman (2019), argued that senior directors favor the safe and conventional method of running the company since they have more expertise and a more conservative outlook. They could be less willing to take chances when it comes to ESG initiatives and novel company ventures. On the other hand, younger directors who have just finished their schooling are frequently perceived as being more willing to take risks and eager to come up with fresh, original business ideas. Thus the variable of age of the

board can shed light on the adaptability of the board to changes of society such as up and coming requirements of sustainability.

Educational background and experience of the board that is classified in this study under capabilities and skills (Arayssi, Jizi, & Tabaja, 2020). The board requires knowledgeable individuals who can contribute to the sustainability reports by ensuring that they are knowledgeable on the topic (Birindelli, Dell'Anti, Iannuzzi, & Savioli, (2019); (Cucari, De Falco, & Orlando, (2018). According to Cucari et al. (2018), senior advisors on the board contributed substantial knowledge and acquired skill-based capabilities. Their knowledge aids in strategic planning and well-informed decision-making. Younger directors, on the other hand, are sometimes characterized as being more energetic, technologically astute, and adaptable, which enables them to actively drive corporate success and long-term planning.

Moreover Ismail & Latiff (2019), argued that underlying awareness and comprehension among all members and executives are necessary for board commitment to sustainability problems. This entails adopting firm-wide sustainability management rules as well as integrating sustainability issues into the firm's risk management framework. Effective management and integrating sustainability into corporate practices and decision-making processes depend on the competencies and skills of board members.

Fahad & Rahman, (2019), stated that a board with more independent directors due to their contact with the external environment would be more knowledgeable on the environmental and social values. Birindelli et al. (2019) stated that independent directors have more effective oversight due to their minimal ties to the company operations thus their contribution to corporate social responsibilities. As it is regarded as a critical factor for assessing the alignment of a firm's strategic policies with the interests and expectations of stakeholders, board independence is a commonly examined variable in board research (Menicucci & Paolucci, 2022).

With regard to gender, incorporating the interests of several stakeholders and improving corporate governance are both facilitated by the inclusion of women on boards (Kamaludin, Ibrahim, Sundarasen, & Faizal, 2022). This is because they can exert a higher level of sensitivity towards the adoption of socially responsible approaches and act in more socially responsible ways (Cucari, De Falco, & Orlando, 2018). Women directors also play a role in deciding the type and the quality of ESG initiatives undertaken by a company. It also noted

that the diversity that women bring onto the board also has an effect on the type of leadership traits that are displayed to facilitate the decision making process. For instance, male leaders are seen to tend towards being more perspective focused and female leaders are more likely to exhibit empathy and gentleness (Ismail & Latiff, 2019). This type of leadership can influence the decision to take up ESG initiatives in a firm.

1.2 Statement of the problem

Although some empirical literature has examined the relationship between corporate governance and ESG disclosures (Buchetti, Arduino, & De Vito, 2022), there is a noticeable gap in the research landscape. Most studies tend to focus primarily on gender diversity(Bravo & Reguera-Alvarado, 2019; Arayssi, Jizi, & Tabaja, 2020; Cucari, De Falco, & Orlando, 2018; Harjoto, Laksmana, & Lee, 2015) when considering board diversity, with little attention paid to other crucial variables like age, independence, and capabilities & skills (Al-Qahtani & Elgharbawy, (2020); Khan, Khan, & Zhang, (2019); Kagzi & Guha, 2018). Thus, it remains unclear which board diversity variables have the most significant impact on ESG disclosure within the Kenyan context.

Furthermore, existing literature provided inconclusive results regarding the impact of board diversity variables on ESG disclosure. This ambiguity may be attributed to methodological limitations in previous studies, which predominantly employed panel regression models to analyse data collected solely through content analyis (Suttipun, 2021; Kamaludin, Ibrahim, Sundarasen, & Faizal, 2022; Fayyaz, Jala, & Venditti, 2022). These studies neglected the valuable insights that can be derived from the company employees, such as the perceptions of managers who possess in-depth knowledge of their firms' ESG disclosure processes. To bridge these gaps and gain a more holistic understanding of the relationship between board diversity and ESG disclosures, this study adopted a multifaceted approach. In addition to employing panel regression models to analyse historical data, this research incorporated a questionnaire to capture real-time insights from stakeholders, including managers in Kenyan listed firms.

Numerous studies have examined the relationship between SDGs and sustainable reporting in developed nations, yet numerous research inquiries regarding developing countries remain unaddressed (Githaiga & Kosgei, (2023); Dissanayake, (2023); Manini, (2023); Asogwa, Varua, Humphreys, & Datt, (2021); Tilt, Qian, Kuruppu, & Dissanayake, (2021). This research examined the characteristics of board diversity in Kenya, a developing country, and its

influence on ESG disclosure, by taking into consideration the specific business environment and economic circumstances of African markets, this study offers valuable insights that contribute to the wider global conversation on corporate governance and ESG disclosures.

1.3 Research Objectives

1.3.1 General Objective

The study assessed the impact of board diversity on ESG disclosure in listed firms in Kenya.

1.3.2 Specific Objectives

i. To evaluate the implementation of board diversity attributes and their impact on ESG disclosures for NSE listed companies.
ii. To assess the relationship between board diversity and the level of compliance to disclosure regulation and policies by NSE listed companies.
iii. To assess the perception of stakeholders on the relationship between board diversity attributes and ESG disclosure of listed firms in Kenya.

1.4 Research Questions

i. What is the extent of board diversity practices and ESG disclosures for NSE listed firms?
ii. What is the relationship between board diversity and the level of compliance to disclosure regulation and policies by NSE listed companies?
iii. What is the perception of stakeholders on the relationship between board diversity attributes and ESG disclosure of listed firms in Kenya?

1.5 Scope of the study

This research study aimed to investigate the impact of board diversity on the environmental, social and governance disclosures of the 60 firms listed on the Nairobi Securities Exchange from the period 2018-2022. The study looked at the components of board diversity as per the description of the Code of Corporate Governance Practices for Issuers of Securities to the Public of 2015. The factors considered in the study were; the board independence, board capabilities and skills (academic qualifications, technical expertise, relevant industry knowledge, and experience), board age diversity and board gender diversity. The control variables applied were firm size, firm age and firm leverage. Board independence was assessed through the percentage of independent board members and board age was assessed through the average age of the board members. With reference to the board capabilities and skills, it was

assessed through an investigation of academic background. Lastly the board gender diversity was assessed through the percentage of women on the respective boards of the institutions. There are 60 currently operating listed companies on the securities exchange. The managers of these companies shall be contacted to fill out a questionnaire with the aim of finding the effect of Corporate Governance and ESG disclosure. The targeted population shall be 60 managers (i.e. 1 manager per company).

1.6 Significance of the study

1.6.1 Listed Companies

This study on the impact of board diversity on ESG disclosure in listed companies in Kenya provided valuable insights to listed companies by examining the relationship between board diversity and the implementation of ESG disclosures. The findings shed light on the role of age, independence, gender diversity and board capabilities & skills within the board and how these factors can influence the company's ability to integrate ESG disclosures effectively. By understanding the potential contributions of board diversification, listed companies can make informed decisions regarding board composition to enhance their sustainable practices and meet the evolving expectations of stakeholders.

1.6.2 Policy makers

The study's contribution to policy makers is significant, as it provided empirical evidence on the relationship between board diversity and ESG disclosure implementation. Policy makers can utilize these findings to inform and shape regulatory frameworks and guidelines regarding board composition requirements. The study's results support the development of policies that encouraged greater diversity on boards and emphasize the importance of diverse perspectives in driving ESG reporting practices. By integrating these findings into policy-making processes, regulators can foster a more sustainable and responsible business environment

1.6.3 Academicians and researchers

This study contributed to the academic community by addressing the existing gaps and controversies in previous research on board diversity and ESG disclosure. Academicians can build upon this research to further explore the nuances of board diversity and its impact on ESG practices in different contexts. The study's findings served as a foundation for future studies, enabling scholars to delve deeper into the specific mechanisms through which age, independence, and gender diversity influence ESG disclosure. Moreover, this study should

inspire further research on the effectiveness of regulatory interventions, such as the Nairobi Securities Exchange-ESG Securities Exchange Manual, in driving ESG disclosure practices and sustainable business outcome.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter evaluated past research on board diversity variables and it reviews both theoretical and empirical literature which guided the study's conceptual framework. This section gave an in depth look at the significance of board diversity on ESG disclosure.

2.2 Theoretical review

2.2.1 Agency theory

The relationship between principles (shareholders or owners) and agents (top management) has been explained by agency theory. In this scenario, the former appoints the latter to run a business organization on their behalf in order to maximize company value and other benefits (Jensen & Meckling, 1976). In an ideal situation conflicts between the two parties are uncommon as long as the interests of the agent and the principles coincide. However, conflicts of interest can arise when the needs of the agent and the principles are completely dissimilar. Jensen & Meckling, (1976) argued also that managers prioritize short-term profit maximization to be able to cater to their own financial interests which presents conflicting interests with the long-term sustainability goals of a firm. This can result in the increase of agency costs and thus reducing the overall value of the cooperation (Fama & Jensen, 1983).

Fayyaz et al. (2022), stated that the agency costs that are incurred can be curbed by structuring the board in such a manner that ensures social and ethical performance which would guarantee long-term returns and benefits for both shareholders and also the stakeholders. Aguilera et al. (2007) posited that in order to contain top management opportunism within a firm, it is suggested to the owners of the firm, should be monitored accordingly. The monitoring responsibility can be carried out through the use of ESG reports that disclose on the sustainability activities in terms of environmental, social and governance issues thus improving transparency to the owners of the firm i.e. the shareholders and the diversification of the board offers an incentive for the disclosure to be carried out effectively. This is in line with the 2015 Code of Corporate Governance Practices for Issuers of Securities to the Public, which mandates that boards of publicly traded corporations develop formal plans to advance sustainability by tackling ESG concerns that are significant to the operations of the organization.

The research conducted by Jensen and Meckling provided a comprehensive critique of agency theory as it pertains to the board. One significant limitation identified by the researchers is the assumption of perfect rationality and information symmetry between the principal (owners) and the agent (board). This assumption fails to capture the intricacies of decision-making and information asymmetry within the board, thereby giving rise to potential conflicts. Additionally, Jensen and Meckling argued that agency theory oversimplifies the motivations and behaviors of board members, neglecting to recognize the diverse and multifaceted nature of their roles and responsibilities. Consequently, this oversimplification hampers the theory's ability to furnish an in-depth understanding of board dynamics and its implications for agency conflicts. Furthermore, their study emphasized the necessity of considering the dynamic and evolving nature of board-owner relationships, which traditional agency theory may not adequately address. The static nature of the theory overlooks changes in governance landscapes and their impact on mitigating conflicts of interest between boards and owners. Lastly, Jensen and Meckling shed light on the challenges associated with aligning the interests of boards and owners, specifically in situations involving diverse ownership structures and strategic objectives.

2.2.2 Resource Dependency Theory

According to Pfeffer & Salancik (1978), Resource Dependence Theory views companies as systems that rely on their external environment per se in order to function effectively and efficiently. In order to understand an organizations behavior, one needs to understand the organizations environment. Resource dependence theory takes into account the inter-organizational relations that are necessary to understand the interactions and society in general. Since organizations are not entirely self-sufficient and depend on other entities, uncertainties about interdependence can arise, creating situations where survival and success become an uncertain phenomena. This interdependence leads to an emergence of power dynamics both within and between organizations, influencing organizational behavior, hence the importance of a well structured and composed board.

Hillman et al. (2009), in their review of Pfeffer & Salancik (1978) theory on resource dependency, found that they had strong assertions with regard to the board, that in order to effectively manage firm's environmental dependencies, the firm's needs, need to be reflected by the composition of the board. Thus the theory supports the main benefits that directors bring

to a firm i.e. advisory and counsel services, assisting in the flow of information, management of resources and they also enhance the legitimacy of an organisation (Fayyaz, Jala, & Venditti, 2022). Thus the formation of a demographic of diverse boards to advice management to facilitate better disposal of resources is an important factor (Ben-Amar, Francoeur, Hafsi, & Labelle, 2013). Rupley et al. (2012) and Hillman & Dalziel, (2003) stated also that due to their varied backgrounds and experiences, the directors of boards with various features may contribute fresh viewpoints and insights, particularly when it comes to the implementation of socially responsible actions

Despite the extensive use of the Resource Dependency Theory to understand the relationship between board diversity and ESG disclosure, it is still important to look at the limitations of the theory. RDT may not fully address the qualitative aspect of the ESG disclosures which goes beyond the resource utilisation but also looks at the social and ethical concerns (Cucari, De Falco, & Orlando, 2018). Therefore RDT's focus which can be considered to be narrow on resource management may not fully capture the diverse nature of ESG disclosure and board diversity. Furthermore, the focus of RDT on resource acquisition might cause one to ignore the full scope of board diversity's effects on ESG disclosure. RDT emphasizes how diverse boards improve decision-making and problem-solving skills, but it could not adequately address the social and governance components of ESG.

2.3 Empirical Review

2.3.1 Implementation of board diversity practices and ESG Disclosure

The configuration of a board is considered one of the key determinants as to what a board can do. Corporate governance, particularly the internal board structure plays a vital role in the legitimacy gap through extending the ESG disclosures. Thus analyzing the governance of the board, it refers to the analysis of its composition and also size thus bringing forth the idea of board diversity (Cucari, De Falco, & Orlando, 2018). In this study, the researcher took up the following variables as inspired from the Code of Corporate Governance by focusing mainly on the board age diversity, board independence, board capabilities and skills and board gender diversity.

Menicucci & Paolucci, (2022) conducted a study on on the influence of board diversity and the ESG performance of 105 listed Italian banks between the period of 2017- 2021. In relation to board age diversity, they found that board age had no significant relationship with ESG

performance, reasoning that the ESG performance of the banks that were deemed to be better, did not necessarily have an older board but emphasized the need for a more skillful and experienced board that was compatible to the size, complexity and risk profile of the firm. However, Fayyaz et al. (2022) who conducted a study that looked at the diversity of boards and firm performance while moderating ESG disclosure found that the age of board members had a significiant positive influence on firm performance while moderating for ESG. The authors also noted the heterogenous relationship between board age and board knowledge and skills.

In addition to the board diversity variables commonly assessed or studied as aforementioned, they underline that knowledge and comprehension among all members and executives is necessary for board-level commitment to sustainability concerns and promote knowledge among the stakeholders both within and outside the organization (Venn, Paquita, & Vandenbussche, 2022). Despite the positive conclusions on the relationship with ESG disclosure, Khan et al. (2019) found that there was a significant negative relationship between the education background of the board of directors and ESG disclosure. This was reasoned as due to the fact that they board would be composed of members of diverse educational backgrounds this would reduce their contribution to the quality of the firms' ESG disclosure. Cucari et al. (2018) who conducted a study on ESG disclosure in the Italian banking sector, encouraged the presence of a competent sustaibility committee within the board, to contribute to the implementation of sustainable policies and socially responsible activities, thus resulting in a positive significant relationship between the variables.

In relation to the assessment of the alignment of a firm's strategic policies with the interests and expectations of stakeholders, board independence as a variable in board research is viewed as an important factor in board diversity (Ortas, Alvarez, & Zebultzu, (2017); Rao & Tilt, (2016). Kamaludin et al. (2022) looked at ESG in the boardroom, in reference to the companies listed in the Kuala Lumpur stock exchange, found a significant positive relationship between ESG and board independence. This was attributed to the pressure independent board members put on the board to disclose on their ESG activities and the monitoring duty they uphold while in the board. However Fahad & Rahman, (2019) who looked at board diversity and CSR disclosure found that the relationship with each ESG indicator i.e Environmental, Social and Governnace disclosure to be lacking of significance thus placing question on the role of

monitoring of the agency theory promotes, that board members are required to uphold by the owners of the firm i.e. the shareholders.

Bravo & Reguera-Alvarado (2018), assessed the link between female gender representation on the audit committees and the specific attributes of ESG disclosure and found that there is a positive association between gender diversity in the audit committee and the quality of voluntary ESG reporting whereby it leads to greater comprehensiveness and general relevance of the reports. Qureshi et al. (2019) and Suttipun, (2021) who conducted their study in European listed firms and Thailand stock exchange respectively found a similar positive association. However, not the same can be stated by Fahad & Rahman, (2019) since their study concluded that there was an inverse relationship between women on board ESG disclosure, who further suggested that this may be as a result of the few participation numbers of women on the board. This was a point with which it would be deemed appropriate that firms were advised to increase participation in order to improve their disclosure levels.

2.3.2 Board diversity and Compliance levels of listed firms to ESG disclosure regulations and policies

Corporate ESG reporting standards provide people a way to contrast items and encourage behavioral adjustments that will lead to continued social and ecological prosperity (Rowbottom, 2023). The 1992 UN conference on the Environment and Development called for actors such as private sector institutions to back the UN and states agreements to steer the implementation of sustainable initiatives (Thistlethwaite & Paterson, 2016). The disclosure of company information as mentioned earlier enables investors and stakeholders to make properly informed decisions. This allows the interested parties to not only manage their risks but also allows the efficient allocation of capital. The insufficiency of their disclosure can lead to the manipulation of the firm activities which can further hurt its reputation among the members of society among which it operates. (Fayyaz, Jala, & Venditti, 2022)

In order to respond to the changing environment on ESG, government and policy bodies around the world are encouraging companies to disclose their reports on this matter, while others have placed regulations deeming mandatory that the firms state exactly how they are managing their efforts towards sustainability. The GRI serves as guide for this which was developed by the United Nations to get firms around the world more involved.

For instance, there is the European Union's Non-Financial Reporting Directive that was released in 2015 that became mandatory in 2018 for large companies in Europe to disclose their non-financial ESG statements within their annual report (Cicchiello, Marrazza, & Perdichizzi, 2022). In the United States of America, the Securities Exchange Commission has a requirement that the listed firms should disclose their ESG related information to investors however this mandate is voluntary despite the country being a pioneer in the field of sustainability and the comparatively large amount of wealth already in the country (Zhang, Nakajima, & Hamori, 2021). Comparatively the EU has a higher ESG disclosure than the USA. The same voluntary conditionality exists in Asia too, however the level of disclosure is not as high in comparison to the USA and EU.

In Asia, countries such as Malaysia in the year 2015, Bursa Malaysia amended its listing requirements and required the listed companies to integrate in their companies', sustainability practices and to support it. In 2018 they released a Sustainability Reporting Guide to enhance the practices further. However only 75 companies in the year ended 31st December 2020 took up the initiative to release their ESG reports, this accounted for less than 10% of the companies at the time (Kamaludin, Ibrahim, Sundarasen, & Faizal, 2022).

In Thailand, the Stock Exchange of Thailand adapted the Global Reporting Initiative guideline for their listed companies. This was supposed to facilitate the capital market to not only to assess but also evaluate the long-term ESG performances (Suttipun, 2021). To encourage ESG disclosure and decision making, an organization known as ThaiPat which is an organization within the Stock Exchange of Thailand, provided a ThaiPat ESG index that can be relied upon by the investors and companies can compare one another when looking at how to improve themselves competitively speaking.

In Africa, Kenya to be specific which this study contributed to, the level of ESG does not compare to the countries in Europe or even a country like the USA. The board according to the policies in place are required to ensure that the information with regard to ESG is disclosed, not just to adhere to the regulations set by the NSE-ESG manual which was released in 2021. The NSE-ESG manual is meant to facilitate comparability of the ESG reports among the companies listed on the NSE. ESG reporting in Kenya has been voluntary and now it is headed to become a mandatory report. Based on the voluntary reports, some were stand-alone ESG

(sustainability reports) reports, and others were incorporated either in the annual report/integrated reports.

In relation to the board of the listed firms, the Capital Markets Authority released the Code of Corporate Governance which advocates for the importance on the diversity of the board and this goes hand in hand with the requirement to for the board to ensure adequate ESG disclosure. Moreover, to enhance corporate reporting, the Nairobi Securities Exchange (NSE), the Capital Markets Authority (CMA), and the Institute of Certified Public Accountants of Kenya (ICPAK), a professional accounting organization, have urged listed companies to embrace sustainability reporting and engage in high-quality sustainability reporting (Injeni, Mangena, Mathuva, & Mudida, 2022). In addition to that, there is also the creation of the Financial Reporting Excellence Award (FiRE Awards) which encourages firms to improve the quality of their disclosure, which has an inclusion of sustainability disclosures when it comes to consideration for the winners of the award.

Management competence, risk management and non-financial performance have become a key indicator for ESG. Some of the content covered by ESG from the Nairobi Securities Exchange ESG Manual that takes into account not only the ESG indicators as inspired by the Global Reporting Initiative but also gives a breakdown of industries and their required relevant disclosures. These industries are the banking industry, the telecommunications sector, insurance sector, commercial & services sector, energy & petroleum sector, construction and allied sector, agricultural sector, manufacturing sector, investment services sector, investment sector and the banking sector (Nairobi Securities Exchange, 2021).

The ESG indicators include the following sections: the environment indicators which cover matters such as waste management, water use, energy use, biodiversity, environmental compliance, environmental monitoring, materials sourcing, emissions such as carbon footprint and electronic waste management. When looking at the social factor there is the attention to human rights, labour working conditions, training and education, financial products and services information to customers, growth and inclusivity, political funding and cyber security. The section of general disclosures looks at the governance, strategy, ethics and integrity, stakeholder engagement, business models, risk management and internal controls and shared value. And lastly, there is an Economics section that has the following sample of indicators i.e

economic performance, market presence, indirect economic impacts, socially responsible investments and taxes (Nairobi Securities Exchange, 2021).

The board in a firm are required not only by regulations to uphold these standards, but also by the shareholders who are keen in acquiring information on the on-goings of the company. The board of directors since they are in charge of emphasizing the corporate responsibility, corporate culture and monitoring of the accomplishment of strategic objective they are deemed to be crucial to the companies' success (Menicucci & Paolucci, 2022). Moreover, the board has the responsibility to steer company effort into the integration of sustainability in the business strategy through ensuring that they uphold the required standards and adhere to them accordingly. For instance in Kenya as aforementioned there is the Nairobi Securities Exchange-ESG manual 2021, the Corporate Governance Code of Ethics 2015, and the Mwongozo Code of Corporate Governance that requires the same.

2.4 Summary of literature and research gaps

Table 1: Summary of literature and gaps

Author	Study Objective	Methodology Used	Findings	Research Gaps
Menicucci & Paolucci, (2022)	The objective of this study was to investigate the relationship between Board of Directors (BoD) diversity and Environmental, Social and Governance (ESG) performance in the European banking sector by examining a sample of 105 Italian banks.	This study used a econometric model to investigate the relationship between board diversity and ESG dimensions.	This study found that board size, board age, board gender diversity, board independence, and the presence of a CSR/sustainability committee all had a positive relationship with ESG performance. Additionally, the presence of a CSR/sustainability committee was found to be an important means to maximize opportunities for the sustainable development of a company.	Need to understand how the structure of the board affects ESG dimensions and if the presence of CSR committee is of importance.
Qureshi, Kirkerud, Theresa, & Ahsan, (2019)	The objectives of the study were to investigate the impact of board gender diversity on ESG disclosure of European-listed firms, and to investigate the impact of	The study utilized the econometric model.	The findings of the study were that sustainability (ESG) disclosure by European-listed firms enhances their firm value, increased representation of female directors on boards increases firm value, firms in sensitive industries present better social and	The study sought to fill the gap that previous significant studies didn't take into account the impact of ESG disclosure on the performance or value of the financial and non-

	sustainability (ESG) disclosure on firm value.		governance performance, and firms with more female directors on their boards present better ESG performance.	financial listed firm in European countries.
Fayyaz, Jala, & Venditti, (2022)	The objectives of the study are to investigate the impacts of ESG disclosure and board gender diversity on firm value, to investigate the impact of board gender diversity on ESG disclosure of European-listed firms, and to investigate the impact of sustainability (ESG) disclosure on firm value.	The study used the econometric model for the methodology.	The findings of this study indicate that firms with a structurally and demographically diverse board of directors perform significantly better. Moreover, when viewed through the lens of stakeholder theory, the findings indicate that ESG disclosure moderates and partially mediates the relationship between board diversity and firm performance.	The study demonstrated a considerable gap between the theoretical and empirical support for various board indicators (structural and demographic), their relationship to performance, and how ESG acts as an intervening element in increasing firm financial performance.
Cucari, De Falco, & Orlando, (2018)	The objectives of this study were to investigate the association between environmental, social, and governance (ESG) disclosure and diversity of the board of directors (BoD) in Italian listed companies.	Used the econometric model.	The findings of this study indicate that firm's CSR disclosure is associated with independent director and committee CSR. In addition, women on BoDs is negatively correlated while the age of the board is not significant. The presence of independent directors was found to be positively associated with ESG disclosure, and an increase of outside directors was found to reduce voluntary disclosure.	Scarce literature in Italy focusing on the relationship between board diversity and ESG disclosure.
Suttipun, (2021)	The objectives of this study were to investigate the extent, level, and pattern of ESG disclosure in annual report of listed companies in the SET, to determine different level of ESG disclosure between groups of interest in terms of board composition, and to examine the influence	Content analysis of ESG disclosures and econometric models.	The findings of this study showed that the most common ESG disclosure was governance information disclosure following by social and environmental information disclosures. There was an increase of ESG disclosure in annual reporting during 2015–2019 by listed companies in the SET. Moreover, there was a significantly different level of ESG disclosure between groups of audit committee, nomination committee, compensation	Determine the most common ESG disclosure between Environmental indicators, Social Indicators and Governance.

	of board composition on ESG disclosure of Thai listed companies.		committee, CSR committee, and firm size. Finally, there was a significantly positive influence of board size, female board, compensation committee, CSR committee, and remuneration on ESG disclosure, while there was a negative influence of audit committee and CEO compensation on ESG disclosure.	

2.5 Conceptual Framework

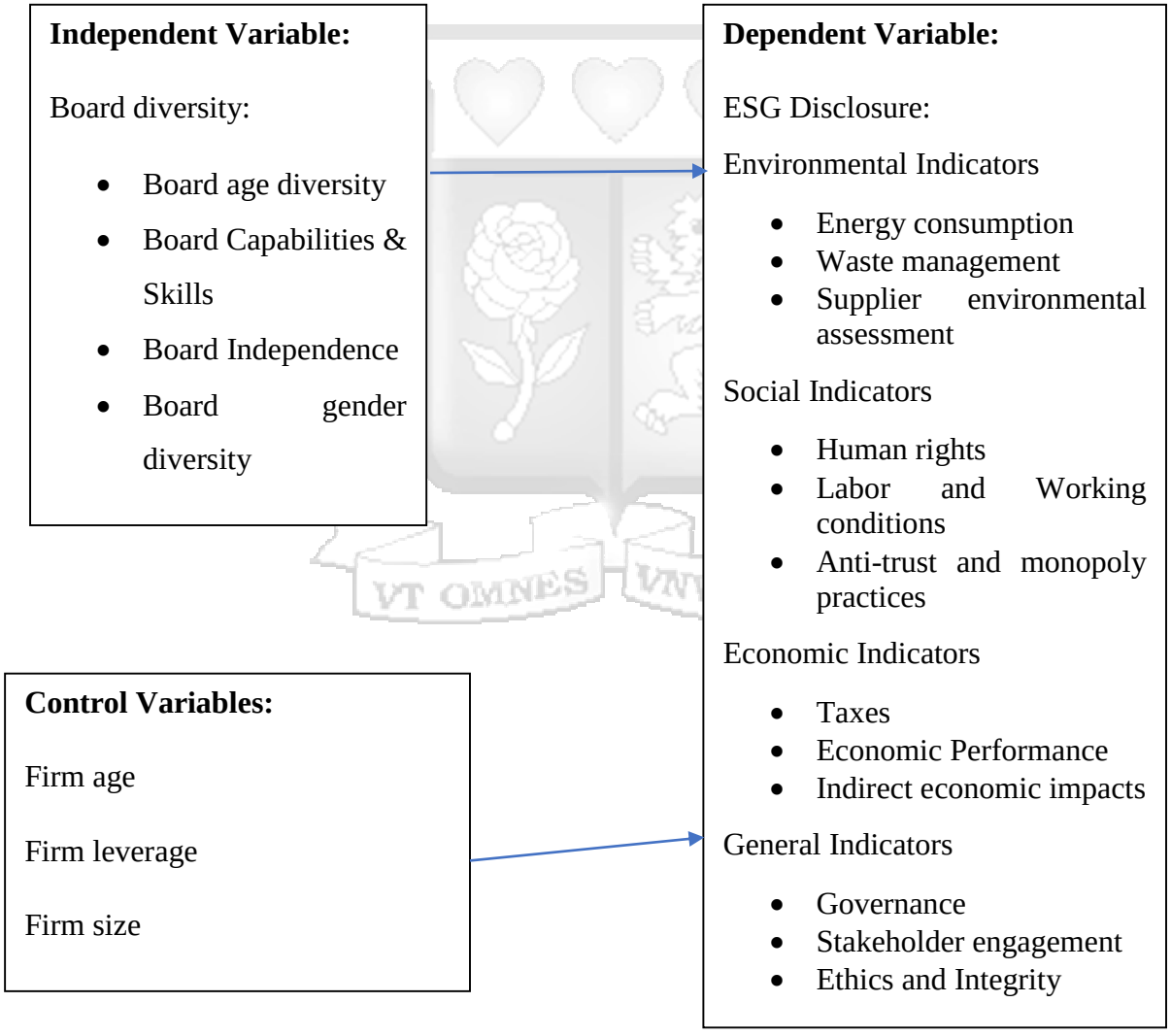


Figure 1: Conceptual Framework

2.6 Operationalization of the study's variable

Table 2: Operationalization of the study

Variable	Specific variable name	Type of variable	Measurement	Literature source	Data source	Theory supported
Dependent variable						
ESG	ESG Disclosure	Categorical variable	ESG was measured by ESG index adopted from the NSE-ESG Manual	(Suttipun, 2021)	Annual reports 2015-2019	Resource Dependecy Theory
Independent (test) variables						
Board Age Diversity	Board age	Discrete data	=Board average age (the time-varying age in years of directors in board)	(Menicucci & Paolucci, 2022)	Company reports	Agency theory
Board Independence	Independent directors	Discrete data	= % of independent directors on the company's board	(Husted & Do Sousa-Filho, 2019)	Company reports	Agency theory

Board Capabilities and Skills	Academic background and experience on board	Categorical variable	= % of board members who have an industry specific background or financial background	(Arayssi, Jizi, & Tabaja, 2020)	Company reports	Agency theory
Board Gender Diversity	Women on the board	Discrete variable	= % of women on the firm's board of directors	(Husted & Do Sousa-Filho, 2019)	Company reports	Agency theory
Control Variables						
Firm size	Net assets	Discrete variable	=Natural log of total assets	(Fayyaz, Jala, & Venditti, 2022)	Company audited financial reports	Resource Dependency theory
Firm leverage	Debt leverage	Discrete variable	=Ratio of total debt to total equity	(Fayyaz, Jala, & Venditti, 2022)	Company audited financial reports	Resource Dependency theory
Firm Age	Age	Discrete variable	=Age of firm from date of incorporation.	(Fayyaz, Jala, & Venditti, 2022)	Company audited financial reports	Resource Dependency theory

CHAPTER THREE

RESEARCH METHODOLOGY

Beginning with a discussion of research philosophy, design, population and sampling, data collecting and analysis, research quality, validity, and dependability, this chapter went on to describe these topics in more detail. The chapter was concluded by highlighting the ethical issues.

3.1 Research philosophy

Saunders et al. (2009), defines research philosophy as an overarching word that refers to how knowledge develops and how knowledge is formed. One's chosen research philosophy should involve crucial presumptions about how one sees the world. The research plan and the methodologies one selects as part of that strategy that are supported by these hypotheses. The chosen philosophy influenced practical factors in part.

This study's philosophy was the positivist research philosophy which supports experiment design and execution whereby existing ideas are utilised to develop testable hypotheses and research is thus used to test beliefs that eventually become laws (Creswell & Creswell, 2017). Johnson & Onwuegbuzie (2004), argued that this philosophy underpins the quantitative approaches in research thus emphasizing empirical observation and measurement to understand the phenomena. Park et al. (2020) also stated that positivism uses operationalizing variables and other measurements to validate beliefs or hypothetical positions.

The study examined the impact of board diversity on ESG disclosure in listed firms in Kenya. In order to achieve this, in this study the researcher took into account the numerical measures for the board diversity attributes ie board age (Menicucci & Paolucci, 2022), board gender (Husted & Do Sousa-Filho, 2019), board independence (Husted & Do Sousa-Filho, 2019) and board capabilities and skills (Arayssi, Jizi, & Tabaja, 2020) and assign ESG scores to measure for disclosure level among the listed firms. This was done through observation, analysis and use of the panel regression analysis, specifically random effects regresison. This facilitated the researcher being able to achieve a conclusion with recommendations for further research and action.

3.2 Research design

According to Saunders et al. (2009), the research design is the broad approach taken to addressing the research question(s). It contains specific goals that are generated from the research question(s), list of sources planned to be used to gather data from, and take into account the limitations that will be unavoidably faced.

A descriptive research design was used to produce the study, which seeks to portray an accurate profile of person, events or situations which in this study was the impact of board diversity on ESG disclosure (Creswell & Creswell, 2017). A multi method approach was utilised to achieve this, i.e. collection of quantitative data by content analysis and the use of a questionnaire.

3.3 Population and sampling

3.3.1 Target Population

The study's intended demographic consisted of listed enterprises on the Nairobi Securities Exchange. Due to the broad variety of environmental, social, and governance factors that their activities imply, large Kenyan enterprises were selected. Listed companies are required the Nairobi Securities Exchange to disclose their ESG activities (NSE, Nairobi Securities Exchange, 2021). Therefore these companies are held accountable to not only report on their required financial standing but also non-financial standing in relation to ESG, to serve the stakeholders such as investors and society at large.

Thus the number of companies listed is 65 on the securities exchange however, the study shall only take into account 60 due to the following reasons; National Bank of Kenya trading suspended due to takeover by Kenya Commercial Bank, Deacons plc trading suspended due to appointment of Administrators by the Board of Directors, Mumias plc suspension of trading due to the appointment of Receiver by the Creditors, Athi River Mining who shared a request to de-list in the year 2020 and Nairobi Securities Exchange which is the listing body for the companies in Kenya (CMA, Annual Report and Financial Statements, 2020).

3.3.2 Sampling design

In order to acquire reliable data for the inquiry, simple random sampling was performed in this study. Simple random sampling is advised due to its simplicity of usage and accuracy in representing a wider population. A sample size of 10-30% of the population was determined to

be adequate for the study. Slovin's formula was used to generate a proper sample for the study. This is because the technique took into account the confidence levels and error margins thus making it more reliable. Regardless of the fact that information on the firms may be available, Slovin's formula assumes that nothing is known about the sample. In order to choose a sample of businesses from other NSE-listed companies for use in research to draw broad conclusions about all listed companies, the algorithm is applied in simple random sampling (Gregoire & Affleck, 2018). The sample size was determined using Slovin's formula which is as follows below:

nf = n÷(1+(n/N)……..(i)

Nf = intended sample size when population is less than 10,000

n = desired sample

N = sample size estimate

Using Slovin's formula, it yielded 1 company to 25 companies respectively whereby these numbers were considered to be a small figure which can be attributed to the number of listed companies in Kenya which is 60. Therefore this resulted in all companies to be included in the study to enhance the credibility and reliability of the study.

3.4 Data collection methods

3.4.1 Primary Data

The primary data was collected through the use of a questionnaire. Glynn et al. (2011) stated that a benefit of the use of questionnaires in research is that it allows for the systematic collection of information on a variety of social phenomena and behaviours. Moreover, Edlina, Ali et al. (2020) added that questionnaires are a cost effective and efficient means of data collection. This allowed the researcher to be able to acquire information on the stakeholder perceptions on the relationship between board diversity attributes and ESG disclosures in manner that they deem suitable for maximum efficiency and effectiveness of the research process.

The questionnaire was divided into 6 sections, i.e. Section 1 that sought the respondents company of professional occupation, the second section tackled their opinion on the level of board diversity attributes, the third section tackled the ESG disclosure in the annual report, the

fourth section sought to understand the relationship of board diversity and ESG and the final section was one that sought the open- ended opinion on stakeholder perception of the disclosures and board diversity. The final section gave an opportunity to the respondent to give additional comments on the topic surrounding the survey. The questionnaire catered to the study's objectives. It was to be filled by respondents in the managerial position in the company or a member of the sustainability department if the company had one.

Strathmore University gave the researcher an ethical review certificate which is attached below in the Appendices, which was utilised to acquire an approval from NACOSTI, who then issued a certificate authorising the collection of data from the listed companies who were the target population. Self-administered questionnaires were used to collect the data through the use of the drop and pick method, telephone interviews and emails.

3.4.2 Secondary Data

The data that was derived from secondary sources is the data on board diversity attributes and financial data for the control variables i.e. firm size, firm age and firm leverage. They were derived from readily available secondary sources for instance the annual reports of the companies listed on the NSE from the period 2018-2022 and the audited financial statements of the same period.

Due to a lack thereof of ESG disclosure scores of companies listed on the Nairobi Securities Exchange, the research relied on the ESG indicators provided by the NSE-ESG Manual of 2021. The researcher then proceeded, via content analysis which was the most appropriate method to collect the secondary data, to calculate their own ESG score based on the information disclosed in the financial reports. The ESG indicators are provided in the Appendices below.

3.5 Data analysis

3.5.1 Model Specification and Variable Definition

The study deployed the use of the panel regression analysis to evaluate the relationship between variables. Panel regression analysis is usually used, specifically to determine how much a dependent variable depends on one or more independent variables (Saunders, Lewis, & Thornhill, 2009). The data for this study had both the time series and cross-sectional elements (Brooks, Panel data, 2019) i.e. the time series data was from the period of 2018 to 2022 and the cross-sectional was the board diversity attributes during the same period of time. The

primary benefit of panel data was that it enabled the identification of specific parameters without the need for constrictive assumptions (Verbeek, 2008).

The study adopted the following model below to for the first objective which seeks to answer the research question as to what extent board diversity practices impact ESG disclosure in listed companies:

$$\boldsymbol{ESG\ Disclosure\_it} = \beta\_0 + \beta\_Age\_it + \beta\_Gender\_it + \beta\_Independence\_it + \beta\_CapabilitiesSkills\_it + \sum \beta\_Control\ Variables + u\_it$$

Where:

$\boldsymbol{\beta\_0}$ is the intercept term, representing the constant effect on ESG disclosure across all time periods and firms.

$\boldsymbol{u\_}it$ is the error term, representing the unobservable factors affecting ESG disclosure that are not accounted for in the model.

$\sum \beta\_Control\ Variables$ representing the control variables for firm age, firm size and firm leverage.

Moreover the Haussmann test was run in order to inform the researcher on the selection of the relevant panel regression model i.e. fixed effect model or random effect model (Cucari, De Falco, & Orlando, 2018).

The following formulas for the research variables were used:

Board age diversity = Natural Logarithm of Board members age average

Board women diversity = Number of women on board / Total members of the board

Board capabilities and skills = Dummy variable of 1 if content of capabilities and skills is disclosed, 0 if not

Board independence = Number of board of directors / Total board members

Firm leverage = Average total assets/ Average Total Equity

Firm age = Natural logarithm of age of the firm

Firm size = Total Assets of the firm

Regression coefficients were utilized to assess the effect of each independent variable. The t-test was adopted as the test statistic to compare the observed sample statistic and the hypothesized population parameter in unit of standard error.

3.5.2 Diagnostic Tests

3.5.2.1 Normality Tests

The error term is assumed to be distributed normally in linear regression analysis. The error captures the other factors which affect the variables in a study but are not generally contemplated in the model. This study utilized the Kolmogorov-Smirnov test and Shapiro-Wik test for normality, which was applied to assess the normality of the residual's distribution. The null hypothesis therefore was that the data in the residuals is normally distributed and the significance threshold of 0.05 was thus applied.

3.5.2.2 Heteroscedasticity Tests

Heteroscedasticity refers to a situation whereby the variability of the error term is not constant in a regression model across all levels of the independent variables. This goes against the assumption that the error term in the classical linear regression have a constant variance. This can lead to lack thereof of reliability of statistical inferences that would be drawn from the regression analysis. Thus, it is deemed important that it is diagnosed in order to address the heteroscedasticity. The study utilized the Breusch-Pagan/Cook-Wiesberg Test to test for the heteroscedasticity. The test followed the asymptomatic chi-square distribution under the null hypothesis of no heteroscedasticity. Computation was based on a coefficient of determination using a confidence level of 0.05.

3.5.2.3 Autocorrelation Tests

Autocorrelation is the problem that exists if the disturbance terms are not equal to zero, that is, $cov(u_i,u_j) = 0$ (Brooks, 2012; Wooldridge, 2015). This assumes that the residuals should not be correlated across time. The Woolridge test was used to test for autocorrelation. The test followed an asymptomatic chi-square distribution under the null hypothesis of no autocorrelation. The study applied a significance level of 0.05.

3.5.2.4 Multicollinearity Tests

Multicollinearity has been defined as the problem that arise when two or more independent variables are highly correlated (Brooks, 2019). Multicollinearity tests were performed on different variables in the study and their possible correlation. Since the test has a challenge of

inflating the standard error of regression co-efficient, the study used Variance Inflation Factors to determine the level of collinearity that could be tolerated without distorting the regression analysis. The study applied a threshold of less than 10 to imply that there is no multicollinearity.

3.5.2.5 Stationarity Tests

Stationarity refers to the property of a time series where its statistical properties remain constant over time. It was considered an important assumption in statistical models and analysis because the relationship between multiple variables and patterns over time tends to be more predictable and stable. The study looked at the data of companies listed on the NSE between the periods of 2018-2022. The study thus used the Augmented Dickley – Fuller (ADF) test which checked for the presence of unit root in the data. The null hypothesis was the existence of unit root in the data while and the alternative hypothesis was non-existence of unit root in the data. In the study, the significance threshold level of 0.05 was applied.

3.5.2.6 The Hausman Specification Test

The Hausman test was utilized to test whether the fixed effects model or random effects model would be appropriate for study. The difference between the two models is that, if within the regression model, the unnoticed individual effect was a representative of the fundamentals that are related to the independent variable. The Hausman test null hypothesis was that the random effects model was the preferred model while the alternative hypothesis was that the fixed effects model was preferred. In the study a significance threshold of 0.05 was applied.

3.6 Research quality

According to Saunders et al. (2009), the degree to which data collection and analysis techniques provided the same results on subsequent occasions is what constitutes good research. The research took into consideration only data from audited annual reports from the respective listed firms on the NSE in Kenya.

3.6.1 Validity

Validity, according to Saunders et al. (2009), determines if a relationship between two variables is causative in terms of conclusions based on actual outcomes. To ensure that the research study accurately measured its intended parameters and verified the precision of the outcomes, a validity assessment was carried out. This examination encompassed both content and construct validity, two well-established types of validity acknowledged in the existing literature (Heale

& Twycross, 2015). Content validity involves ascertaining whether the research instrument adequately covers the content related to the variables in question, while construct validity would assess whether the study can derive meaningful inferences from the provided test scores (Heale & Twycross, 2015).

To identify and address common biases, misinterpretations, and other potential errors that might have arisen during data collection, a pilot test was carried out on the instrument. The pilot test was conducted with a sample of respondents in the companies listed on the NSE and any variables that might be identified as lacking would be re-examined and rephrased in a way that was relevant to the respondents.

3.6.2 Reliability and objectivity of the research

According to Saunders et al. (2009), the degree to which research instruments consistently yield consistent results is known as research reliability. By making sure that data was collected precisely and completely to avoid engaging in subjective selection in what the researcher notes, objectivity would be preserved during the data collection phase. The Cronbach Alpha was utilised to test for the reliability of the study's questionnaire. It was also used to assess the reliability of the variables in the study that would be subjected to the questionnaire strategy. The evaluation criteria for the Cronbach Alpha test is that the values of internal consistency range from 0-1. Gliem & Gliem (2003), stated that an alpha value of 0.7 and above is acceptable in the Social Sciences category whereas (Sabag & Krisher (2017), assessed that an alpha of 0.5 and above is acceptable for behavioural studies. Cooper & Schindler (2019), stated that an alpha coefficient that ranges from 0.7 and 0.9 is acceptable. Therefore this study shall take into account both the intepretation according to (Cooper & Schindler, 2019) and (Gliem & Gliem, 2003) that a coefficient of 0.7 and above is reliable.

3.7 Ethical considerations

Due to the study conducted would be through the use of secondary data, the researcher should adhere to acquiring the data through reliable sources at all times and provide a track record showing the same to relevant parties. For the primary data collected through the use of the questionnaires the collection instrument will be structured in a manner whereby the respondents' names will not appear. The researcher did not use any forceful means to get participants to take part in the study.

CHAPTER FOUR

RESEARCH RESULTS AND FINDINGS

4.1 Introduction

The chapter summarized the study's findings and compared them to previous research. The data was analyzed using descriptive and inferential statistics. The results of the study are presented in the form of figures and tables, which are structured as per the objectives of the study.

4.2 Descriptive Statistics

Descriptive characteristics were carried out to determine the characteristics of the data used. Table 4.2 below summarizes the main characteristics of research variables. The dependent variable was the board diversity characteristics i.e. board women, board independence, board age and board capabilities and skills while dependent variable was the ESG disclosure that is measured by assigning a score. The control variables were firm age, firm size and firm leverage.

Table 3: Descriptive statistics

Variable		**Mean**	**Std.dev**	**Min**	**Max**			**Observations**
ESGscore	overall	0.571306	0.2578	0	0.971429	N	=	265
	between		0.246242	0	0.941177	n	=	53
	within		0.082124	0.283306	0.916761	T	=	5
Women on Board	overall	0.256163	0.140488	0	0.8	N	=	265
	between		0.126604	0	0.633333	n	=	53
	within		0.062857	0.064486	0.742163	T	=	5
Board Independence	overall	0.50625	0.192609	0	0.9	N	=	265
	between		0.180174	0.171429	0.834	n	=	53
	within		0.071607	0.120536	0.858814	T	=	5
Ln_Board Age	overall	4.050609	0.064872	3.841601	4.227126	N	=	265
	between		0.059392	3.960653	4.211932	n	=	53
	within		0.0271	3.928582	4.12626	T	=	5
Capabilities and Skills	overall	0.784906	0.411665	0	1	N	=	265

	between		0.386003	0	1	n	=	53
	within		0.150756	-0.01509	1.584906	T	=	5
Ln_Firm size	overall	3.985982	0.738475	0	5.030438	N	=	264
	between		0.748032	0.794514	5.017236	n	=	53
	within		0.175379	2.327523	4.577763	T-bar	=	4.98113
Firm Age	overall	9.548146	4.333804	0.051376	26.51809	N	=	265
	between		4.320056	0.894667	23.75397	n	=	53
	within		0.63383	3.801051	12.31226	T	=	5
Firm Leverage	overall	16237.3	264277.3	-36.1076	4302125	N	=	265
	between		118188.6	-4.76792	860428.8	n	=	53
	within		236823.9	-844188	3457933	T	=	5

Data output in Table 4.2 shows that the mean value of the ESG score was 57.13 % which can be considered a high than average i.e. a score that surpasses the half-way mark of 50%. This indicated that there was a relatively positive uptake of disclosure items within the annual reports of the companies listed on the NSE. In reference to the board diversity attributes, the mean of women on the board was for 25.61%, independent board members was 50%, the capabilities and skills of the board members was at least 78.49% and the board age logarithmic mean was 4.05 ≈ 57.61 years of age mean. For the control variables; firm leverage had an overall mean of 16237.3, firm size had an overall mean of 9.548146, and firm age (ln-transformed) had an overall mean of 4.050609.

4.2.1 Percentage of Responses

The table below shows the number and percentage of responses from the respective industry respondents and the total from the targeted population.

Table 4: Percentage of responses and Industry representation

Industry	Frequency	Percent
Agriculture	5	11.9
Banking	10	23.8
Commercial & Services	9	21.4
Construction & Allied	2	4.8
Energy and Petroleum	4	9.5
Insurance	5	11.9
Investment	1	2.4

Manufacturing	5	11.9
Telecomunications	1	2.4
Total	**42**	**100.0**

As per the table above, the target respondents was 60, i.e. one corporate manager per company, therefore 70% of the total responded to the questionnaire. The most responses were from the banking industry with 23.8% response and the least being the Investment and Telecommunication industry.

4.2.2 Reliability Analysis

Table 5: Reliability Statistics

Cronbach's Alpha	**Cronbach's Alpha Based on Standardized Items**	**No. of Items**
0.606	0.598	8

Cronbach's Alpha was used to assess the research's reliability, as shown above in Table 4.2.2. The research tool which was the questionnaire was reliable since the obtained Cronbach alpha coefficient was 0.606 for the original set of items and 0.598 for the standardized set of items, which both exceeded the commonly accepted threshold of 0.7. This suggested therefore that the research tool was reliable. Moreover, despite the slight variation between the original and standardized items sets, both coefficients indicated a moderate level of reliability.

4.3 Diagnostic Testing

Prior to the start of the investigation of the correlations and patterns between the research variables, the study used diagnostic tests on the data. The tests for stationarity, heteroscedasticity, autocorrelation, multicollinearity, and normality were carried out as indicated in the following subsections.

4.3.1 Test for Normality

The theory used in the application of normality is the central limit theory. This theory states that since the sample size is large the data will tend to approach normality hence one can assume that the data is normal, and this applies in the case of this particular study.

Table 6: Test for Normality

Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ESG score	0.080	264	0.000	0.963	264	0.000
B_women	0.078	264	0.001	0.967	264	0.000
Independence	0.105	264	0.000	0.970	264	0.000
Age	0.060	264	0.023	0.980	264	0.001
Cs	0.484	264	0.000	0.507	264	0.000
Firm_age	0.094	264	0.000	0.966	264	0.000
Firm_size	0.138	264	0.000	0.885	264	0.000
Firm_leverage	0.521	264	0.000	0.035	264	0.000
ln_firm_age	0.192	264	0.000	0.850	264	0.000
ln_B_size	0.145	264	0.000	0.902	264	0.000
ln_Age	0.047	264	.200*	0.985	264	0.009
*. This is a lower bound of the true significance.						
a. Lilliefors Significance Correction						

The normality of the variables was assessed using the Kolmogorov-Smirnov and Shapiro-Wilk tests. For each variable, the associated p-values from both tests were examined and a small p-value, typically below the level of 0.05 was considered as evidence against normality. The p-values for most of the variables including ESG score, women on board, board independence, board age, board capabilities and skills, firm age, firm leverage, firm size and the natural logarithm of firm age and natural logarithm of age were very close to 0 in both tests which led to the rejection of the null hypothesis of normality. However, it is worth noting that there was an exception to the logarithm of age whereby the p-value was 0.200 which is above the significance level of .05, but the Shapiro-Wilk test indicated a non-normality where the p-value was .009. This arose because the Shapiro-Wilk method holds a higher power when detecting a departure from normality especially in relatively smaller sample sizes for instance in this study itself, hence the discrepancy of it finding a non-normality whereas the Kolmogorov-Smirnov test did not do so.

4.3.2 Test for Heteroscedasticity

The Breusch-Pagan test was used to assess the homoscedasticity. The test regressed the residuals on the fitted values or predictors and checked whether they can explain any of the residual variance. The null hypothesis was that the residual variance is constant.

Table 7: Breusch and Pagan Test for Heteroscedasticity

Breusch–Pagan/Cook–Weisberg test for heteroskedasticity

Modified Wald test for groupwise heteroskedasticity
in fixed effect regression model

H0: sigma(i)^2 = sigma^2 for all i

chi2 (48) = 1.7e+06
Prob>chi2 = 0.0000

The findings showed that (chi2 (48) = 1.7e+06, $p < 0.05$), hence rejected the null hypothesis and concluded that the variance is not constant. Correction was done through transformation of variables by the use of logs.

4.3.3 Test for Autocorrelation

Autocorrelation is the problem that exists if the disturbance terms are not equal to zero, that is, $cov(u_i,u_j) = 0$ (Brooks, 2012; Wooldridge, 2015). Presence of autocorrelation could lead to incorrect standard errors (Brooks, 2012). The results from the Wooldridge's test of autocorrelation by Wooldridge (2002) are shown in Table 4.3.3 below:

Table 8: Wooldridge test for autocorrelation in panel data

Wooldridge test for autocorrelation in panel data

H0: no first order autocorrelation

F(1, 38) = 0.208
Prob > F = 0.6507

The null is no serial correlation. The calculated F-statistic, with a value of 0.208 and a corresponding p-value of 0.6507 suggested that there was not sufficient evidence to reject the null hypothesis. Therefore based on the results, there is insufficient evidence to claim the presence of first-order autocorrelation in the panel data. The finding was consistent with the notion that no serial correlation was detected.

4.3.4 Test for Multicollinearity

Multicollinearity has been defined as the problem that arise when two or more independent variables are highly correlated (Brooks, 2019). Tests were conducted using the Variance Inflation Factor (VIF). Prior studies have shown that VIF that is less than 10 leads to the implication that there is no multicollinearity.

Table 9: Variance Inflation Factor (VIF) Test for Multicollinearity

Variable	**VIF**	**1/VIF**
Women on Board	1.32	0.758334
Board Independence	1.75	0.572155
Ln_ Board Age	1.29	0.776702
Board Capabilities and skills	1.88	0.531814
Ln_Firm_age	1.28	0.778549
Firm size	2.46	0.405715
Firm leverage	1.06	0.942025
Banking	2.73	0.366955
Commercial	2.59	0.386058
Construction	1.7	0.586933
Energy	1.81	0.553337
Insurance	2.37	0.421186
Investment	1.86	0.536481
Manufacturing	2.32	0.430639
Telecommunications	1.38	0.725868
year		
2019	1.64	0.611606
2020	1.63	0.614971
2021	1.62	0.617051
Mean	VIF	1.83

According to the findings in Table 4.3.4 above the VIF of the independent variables ranged from 1.06 and 2.73. The VIF values showed that there was not multi-collinearity since the values were below 10 (Brooks, Panel data, 2019).

4.3.5 Stationarity Tests

Stationarity of a series has an implication that the mean, variance and covariance of the variable are constant over time, i.e. they are time invariant. In order to check whether the variables were

stationary, a unit test was done at 5% significance level. The null hypothesis was Ho = existence of unit root while H1 = the non-existence of unit root on the data. The results are as follows:

Table 10: Unit Root Test for Stationarity

Variable	Statistic	Value	P-value
ESG score	Inverse chi-squared(96) P	231.9022	0.0000
	Inverse normal Z	-1.1495	0.1252
	Inverse logit t(214) L*	-5.0072	0.0000
	Modified inv. chi-squared Pm	9.8079	0.0000
Women on Board	Inverse chi-squared(88) P	225.4416	0.0000
	Inverse normal Z	-2.1169	0.0171
	Inverse logit t(169) L*	-6.575	0.0000
	Modified inv. chi-squared Pm	10.3601	0.0000
Board Independence	Inverse chi-squared(88) P	317.8659	0.0000
	Inverse normal Z	-5.3327	0.0000
	Inverse logit t(179) L*	-11.5363	0.0000
	Modified inv. chi-squared Pm	17.3268	0.0000
Board Age	Inverse chi-squared(88) P	225.6588	0.0000
	Inverse normal Z	-4.315	0.0000
	Inverse logit t(224) L*	-6.2439	0.0000
	Modified inv. chi-squared Pm	10.3764	0.0000
Firm size	Inverse chi-squared(88) P	325.8732	0.0000
	Inverse normal Z	-1.8313	0.0335
	Inverse logit t(224) L*	-7.2277	0.0000
	Modified inv. chi-squared Pm	17.9304	0.0000
Firm age	Inverse chi-squared(88) P	3460.1907	0.0000
	Inverse normal Z	-56.2978	0.0000
	Inverse logit t(224) L*	-137.9608	0.0000
	Modified inv. chi-squared Pm	242.7896	0.0000
Firm leverage			
Inverse chi-squared(88) P		297.6280	0.0000

Inverse normal	Z	-4.5249	0.0000
Inverse logit t(224)	L*	-9.3276	0.0000
Modified inv. chi-squared	Pm	15.8013	0.0000

It can be noted that from the variables above, all were stationary since the p-value =0.000 which is less than 0.05.

4.4 Correlation analysis

Spearman's rank correlation coefficient is a nonparametric statistic that measures the strength of the relationship between two variables. Table 4.4.1 shows the correlation matrix. The results showed that women on board, board independence, board capabilities & skills, firm size, firm leverage, banking industry, commercial industry, and construction industry have a significant correlation with ESG disclosure (ESG score). Moreover all the significant variables had a positive correlation, however, the commercial industry and construction showed a negative correlation.

The findings showed that the correlation coefficients between the commercial industry and ESG disclosure was negative and significant *(r (265) = -0.435, p < 0.01).* This implied that the relationship between the commercial industry and ESG disclosure was weak and inversely related. The findings also showed that the correlation coefficients between the construction industry and ESG disclosure was also negative and significant *(r (265) = -0.298, p < 0.01)* thus the relationship is also weak and inversely related. Therefore, both the commercial and construction industries exhibited negative correlations with ESG disclosure, implying a tendency for lower ESG disclosure measures.

Table 11: Spearman Rho Correlation

			ESG score
Spearman's rho	ESG score	Correlation Coefficient	1.000
		Sig. (2-tailed)	
		N	265
	B_women	Correlation Coefficient	.170**
		Sig. (2-tailed)	0.005
		N	265
	Independence	Correlation Coefficient	.272**
		Sig. (2-tailed)	0.000
		N	265
	Age	Correlation Coefficient	0.102
		Sig. (2-tailed)	0.099
		N	265
	Cs	Correlation Coefficient	.370**
		Sig. (2-tailed)	0.000
		N	265
	B_size	Correlation Coefficient	.140*
		Sig. (2-tailed)	0.022
		N	265
	Firm_age	Correlation Coefficient	0.054
		Sig. (2-tailed)	0.381
		N	265
	Firm_size	Correlation Coefficient	.489**
		Sig. (2-tailed)	0.000
		N	265
	Firm_leverage	Correlation Coefficient	.264**
		Sig. (2-tailed)	0.000
		N	265

	ln_firm_age	Correlation Coefficient	0.061
		Sig. (2-tailed)	0.326
		N	264
	ln_Age	Correlation Coefficient	0.102
		Sig. (2-tailed)	0.099
		N	265
	Agriculture	Correlation Coefficient	0.018
		Sig. (2-tailed)	0.765
		N	265
	Banking	Correlation Coefficient	.584**
		Sig. (2-tailed)	0.000
		N	265
	Commercial	Correlation Coefficient	-.435**
		Sig. (2-tailed)	0.000
		N	265
	Energy	Correlation Coefficient	-0.063
		Sig. (2-tailed)	0.308
		N	265
	Insurance	Correlation Coefficient	-0.096
		Sig. (2-tailed)	0.118
		N	265
	Investment	Correlation Coefficient	-0.026
		Sig. (2-tailed)	0.670
		N	265
	Manufacturing	Correlation Coefficient	0.106
		Sig. (2-tailed)	0.086
		N	265
	Telecomunications	Correlation Coefficient	0.118
		Sig. (2-tailed)	0.055

		N	265
	Construction	Correlation Coefficient	-.298**
		Sig. (2-tailed)	0.000
		N	265

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

*. Correlation is significant at the 0.05 level (2-tailed).

4.5 Model Selection

4.5.1 Fixed Effect Model vs Random Effect Model: Hausman Test

A Hausman test was utilized to determine the best model between the fixed effects model and random effects model. The null hypothesis was that the preferred model was the random effects model. The outcome is presented as follows:

Table 12: Hausman Test Effects Model

Coefficients	(b) fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) Std. error
Women on Board	-0.1316029	-0.1327033	0.0011003	0.0312748
Board Independence	-0.1373062	-0.1368709	-0.0004352	0.0290081
ln_ Board Age	0.1570303	0.0849873	0.0720429	0.0806858
Board Capabilities and Skills	0.114854	0.1202071	-0.0053531	0.0142711
ln_Firm age	0.0473703	0.0232328	0.0241375	0.0231822
Firm size	0.0067714	0.0131685	-0.0063972	0.0067279
Firm leverage	2.95E-09	1.41E-09	1.54E-09	3.19E-09
year				
2019	-0.0097191	-0.0087067	-0.0010124	0.0020925
2020	0.0174203	0.0189235	-0.0015032	0.0024882
2021	0.0513724	0.0539199	-0.0025475	0.0033192
2022	0.0888079	0.0922405	-0.0034326	0.0032649

B = Consistent under H0 and Ha; obtained from xtreg.

B= Inconsistent under Ha, efficient under H0; obtained from xtreg

Test of H0: Difference in coefficients not systematic

Chi statistic

```
    chi2(9) = (b-B)'[(V b -V_B)^(-1)](b-B)
          =  4
 Prob > chi2 = 0.9475
```

Based on the chi-statistic and the corresponding p-value given above, the null hypothesis of the Hausman test failed to be rejected, indicating that a random effect model is better than the fixed effect model.

4.5.2 Pooled vs Fixed Effect

The study estimated a Chow test to determine the significance of fixed effects present in the data set. The results are as shown below:

Table 13: F Test Pooled vs Fixed Effect

Chow tests	
F test that all u_i=0: F(47, 145) = 7.20	Prob > F = 0.0000

Based on the pool vs fixed effects on the F statistic and the p-value provided above, the null hypothesis was that all individual specific effects are equal to 0 is rejected at a statistically significant level. The low p-value indicated that there is some of the individual effects which were significantly different from 0, therefore it was implied that a fixed effects model was preferred to be used instead of pooled OLS model which accounts for individual effects.

4.5.3 Time Fixed Effects

A time-fixed effect test was carried out to determine whether assumption of fixed time effect was necessary. The null hypothesis was that the time effect in all the years is equal to 0. The results from the time fixed effects F- tests are shown in the table below:

Table 14: Time Fixed Effect Test

Fixed time effect

```
. Testparm i.Year
```

```
( 1)  2019.Year = 0
( 2)  2020.Year = 0
( 3)  2021.Year = 0
( 4)  2022.Year = 0

      F(  4,   148) =    1.30
           Prob > F =    0.2725
```

From the F-statistic and the corresponding p-value, the null hypothesis of no-time fixed effects is rejected. Thus, the presence of time fixed effects was relevant for the analysis of the data set.

4.5.4 Pooled vs Random Effects: The Breusch-Pagan Lagrange Multiplier (LM) Test

The estimated variance of u was 0.004979, and a standard deviation of 0.0705617. The test statistic chi-bar is 27.93 with a p-value of 0.0000 provided strong evidence to reject the null hypothesis that the variance of the random effects was 0, indicating that there was a presence of substantial heterogeneity among individual-specific effects across companies. The results are shown below of the Breusch and Pagan LM multiplier test.

Breusch and Pagan Lagrangian multiplier test for random effects

```
ESGscore [Company,t] = Xb + u[Company] + e[Company,t]

Estimated results:
             |       Var     SD = sqrt(Var)
    ---------+-----------------------------
    ESGscore |    .059161       .2432302
           e |    .011007        .104914
           u |    .004979       .0705617

Test: Var(u) = 0
                    chibar2(01) =    27.93
                 Prob > chibar2 =   0.0000
```

Based on the chi-statistic and the corresponding p-value as stated above, a random effects model was implied to be more appropriate that the pooled OLS model for capturing the underlying structure of the data.

4.6 Multiple Regression Models

The Random Effect Model was used to examine the relationship between the independent variables and the dependent variables. The board diversity attributes i.e. women on board, board independence, board age and board capabilities & skills, whereas the dependent variable was the ESG disclosures which was measured using the ESG score of the companies between the years 2018-2022.

The regression equations are as follows:

Dependent Variable = ESG Score

Model 1: ESG Score = $\beta_o + B_{11} * B\_Women + B_{12} * B\_Independence + B_{13} * B\_Age + B_{14} *$ B_Capabilities & Skills

Model 2: ESG Score = $\beta_o + B_{11} * B\_Women + B_{12} * B\_Independence + B_{13} * B\_Age + B_{14} *$ B_Capabilities & Skills + $B_{21}*$ Firm Age + $B_{22}*$ Firm Size + $B_{23} *$ Firm Leverage

Model 3: ESG Score = $\beta_o + B_{11} * B\_Women + B_{12} * B\_Independence + B_{13} * B\_Age + B_{14} *$ B_Capabilities & Skills + $B_{21}*$ Firm Age + $B_{22}*$ Firm Size + $B_{23} *$ Firm Leverage + B * Industry

Model 4: ESG Score = $\beta_o + B_{11} * B\_Women + B_{12} * B\_Independence + B_{13} * B\_Age + B_{14} *$ B_Capabilities & Skills + $B_{21}*$ Firm Age + $B_{22}*$ Firm Size + $B_{23} *$ Firm Leverage+ B* Industry + B* Years

The results of the model are shown below:

Table 15: Random Effects Results

Independent Variables	***Dependent variable: ESG Score***			
	Model 1	Model 2	Model 3	Model 4
Women on Board	0.009	-0.025	-0.056	-.133*
	(0.083)	(0.084)	(0.082)	(0.076)
Board Independence	-0.004	-0.031	-0.089	-.137**
	(0.071)	(0.071)	(0.070)	(0.064)
ln_Board age	0.195	0.198	0.107	0.085
	(0.19)	(0.188)	(0.181)	(0.166)
Board Capabilities & Skills	.156***	.121***	.121***	.12***
	(0.033)	(0.034)	(0.034)	(0.031)
ln_Firm age		0.027	.041*	0.023
		(0.026)	(0.024)	(0.023)
Firm size		.019***	0.009	.013**
		(0.006)	(0.006)	(0.006)

Firm leverage	0	0	0	0
	0	0	0	0
Banking			.212***	.2**
			(0.082)	(0.082)
Commercial			-.224**	-.227***
			(0.087)	(0.087)
Construction			-.281***	-.285***
			(0.104)	(0.104)
Energy			-0.1	-0.105
			(0.104)	(0.104)
Insurance			-0.119	-0.12
			(0.095)	(0.094)
Investment			0.037	0.057
			(0.12)	(0.12)
Manufacturing			0.018	0.032
			(0.09)	(0.09)
Telecomunications			0.155	0.12
			(0.18)	(0.18)
2018bn.year				
2019.year				-0.009
				(0.016)
2020.year				0.019
				(0.016)
2021.year				.054***
				(0.016)
2022.year				.092***
				(0.016)
_cons	-0.343	-0.593	-0.119	0.017
	(0.77)	(0.771)	(0.747)	(0.686)
Observations	265	264	264	264
RMSE	0.09	0.09	0.089	0.08
Within R^2	0.067	0.074	0.09	0.277
p	0.00	0.00	0.00	0.00
IVs	Yes	Yes	Yes	Yes
Control Variables	No	Yes	Yes	Yes
Sectors	No	No	Yes	Yes
Time	No	No	No	Yes

Standard errors are in parentheses
****** p<.01, ** p<.05, * p<.1***

The Table above presents the results of a regression analysis examining the relationship between various independent variables and the dependent variable, which is the ESG (Environmental, Social, and Governance) score. Notably, the constant term (Cons) in Model 4 is 0.017, indicating a slight positive impact on the ESG score. The Within R2 for Model 4 is

0.277, suggesting that approximately 27.7% of the variability in the ESG score is explained by the included variables. Furthermore, the table reports that there are 264 observations used in each model, providing a robust dataset for analysis. Additionally, the standard errors, indicated in parentheses throughout the table, highlight the precision of the coefficient estimates. Overall, the table provides valuable insights into the factors influencing ESG scores and the statistical significance of the models' estimates.

4.6.1 Impact of Board Diversity on ESG Disclosure

4.6.1.1 Impact of Board Women on ESG Disclosure

According to the findings in Table 15, the presence of women on board was found to be significant in only Model 4: (β = -.133, p<.1) with a standard error of (0.076), in the presence of control variables and interaction terms. This negative coefficient suggests that for every additional woman serving on the board, the ESG score decreases by approximately 0.133 units. The statistical significance of this coefficient at the 10% level implies a meaningful relationship between board gender diversity and ESG disclosure.

4.6.1.2 Impact of Board Independence on ESG Disclosure

According to the findings in Table 15, the independent board members was found to be significant in Model 4: (β = -.137, p<.05), with a standard error of (0.064) in the presence of all control variables and interaction terms. This negative coefficient suggests that higher levels of board independence are associated with a decrease in the ESG score by approximately 0.137 units. The statistical significance of this coefficient at the 5% level indicates a robust relationship between board independence and ESG disclosure.

4.6.1.3 Impact of Board Capabilities and Skills on ESG Disclosure

According to the findings in Table 15, the board members capabilities and skills was found to be significant in Model 1, the coefficient for "Board Capabilities & Skills" is 0.156***, with a standard error of (0.033), suggesting that higher levels of board expertise are associated with an increase in the ESG score by approximately 0.156 units. This relationship remains robust and statistically significant in subsequent models, with coefficients of 0.121*** (standard error = (0.034)) in Model 2, 0.121*** (standard error = (0.034)) in Model 3, and 0.12*** (standard error = (0.031)) in Model 4. In the presence of control variables and interaction terms, the board members capabilities and skills had a positive association with the ESG disclosure score. Therefore this meant that with an increase in a unit of the board members capabilities and skills

with all factors held constant there would be an increase on ESG disclosure score in each respective model.

4.6.2 Impact of Control Variables on the Relationship between Board Diversity and ESG Disclosure

4.6.2.1 Impact of Firm size

From the Table 15 above on the findings: across Models 2 and 4, the findings consistently highlight the positive relationship between firm size and ESG (Environmental, Social, and Governance) disclosure. In Model 2, the coefficient for "Firm Size" is 0.009 (standard error = (0.006)), indicating that larger firms tend to have higher ESG scores by approximately 0.009 units. Similarly, in Model 4, the coefficient for "Firm Size" increases slightly to 0.017 (standard error = (0.006)), suggesting a stronger positive association between firm size and ESG disclosure..

4.6.2.2 Impact of Firm age

According to the findings in Table 4.6 firm age control variable was found to be significant in Model 3: (β = .041, p< .1) with a standard error of (0.24), where there was the interaction of the industry control variable too. Hence in this model, it can be noted that there was a positive impact when controlling for firm age on the relationship between board diversity and ESG disclosure.

4.6.2.3 Impact of the Banking, Commercial and Construction Industry

In relation to the industry control variable the following industries were found to be significant in both Model 3 and Model 4 i.e. Banking industry (Model 3(β = .212, p<.01) with a standard error of (0.082) and Model 4(β = .2, p<.05)) with a standard error of (0.082) , Commercial industry (Model 3(β = -.224, p<.05) with a standard error of (0.087) and Model 4(β = -.227, p<.01)) with a standard error of (0.087) and the Construction industry (Model 3(β = -.281, p<.01) with a standard error of (0.104) and Model 4(β=-285, p<.01)) with a standard error of (0.104). With all interaction terms held constant there was a positive impact of board diversity and ESG disclosure when Banking industry is a control variable, however in relation to the commercial and construction industry there was a negative association in assessing the relationship between board diversity and ESG disclosure.

4.6.2.4 Impact of Years

According to the findings, the years 2021 and 2022 was found to be significant in Model 4 : year 2021($\beta = 0.54$, $p < .01$) with a standard error of (0.016) and the year 2022 ($\beta = 0.92$, $p < .01$) with a standard error of (0.016). Therefore it can be concluded that the years 2021 and year 2022 had an impact on the relationship between board diversity and ESG disclosure score.

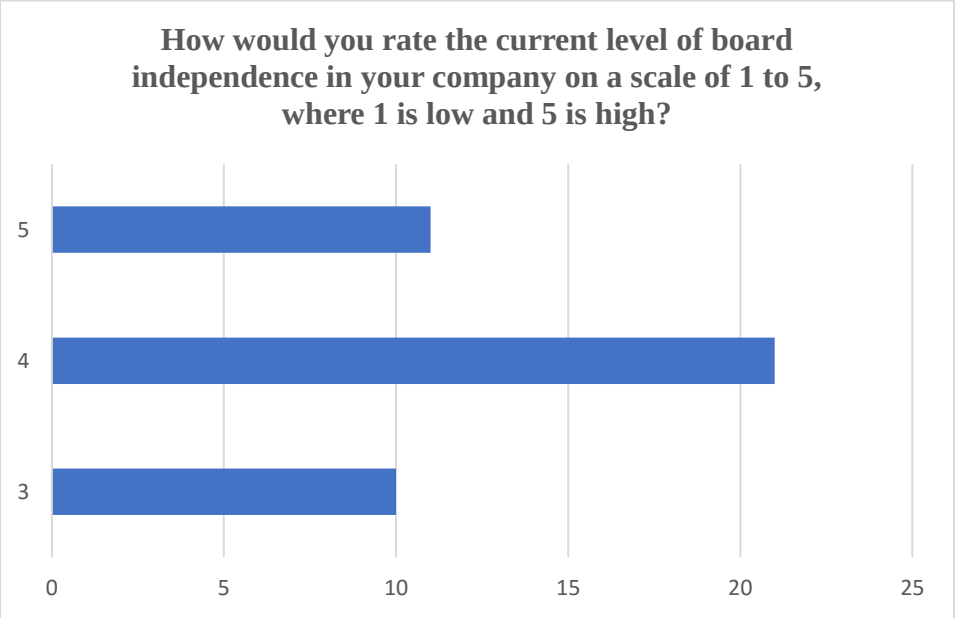
4.7 Questionnaire Responses and Analysis

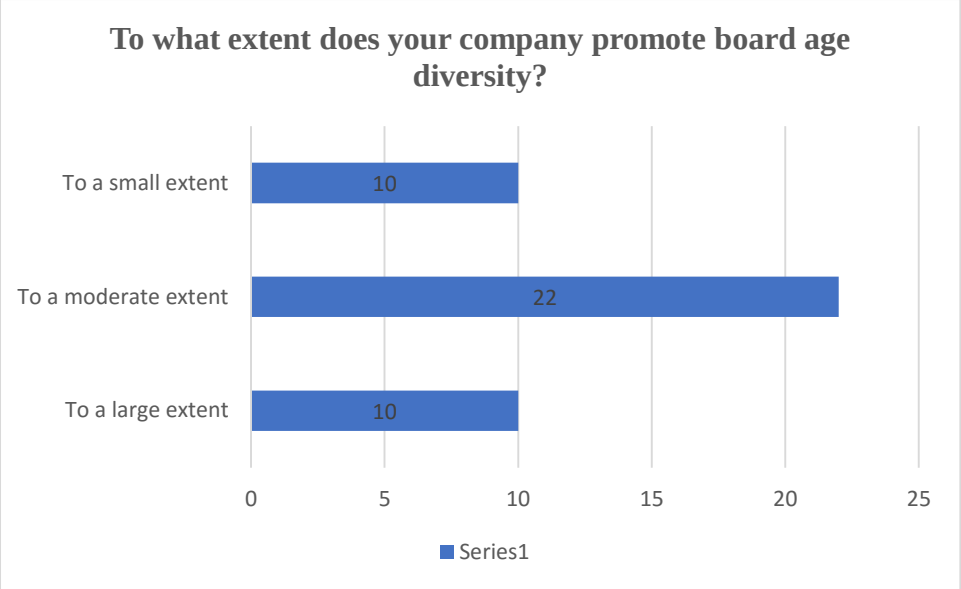
The third objective of this study was to assess the perception of stakeholders on the relationship between board diversity attributes and ESG disclosure of listed firms in Kenya. Based on the demand from various stakeholders on the organisations to report on their ESG activities, information was provided concerning their opinion on the importance of board diversity attributes on ESG disclosure and their perception of company ESG activities

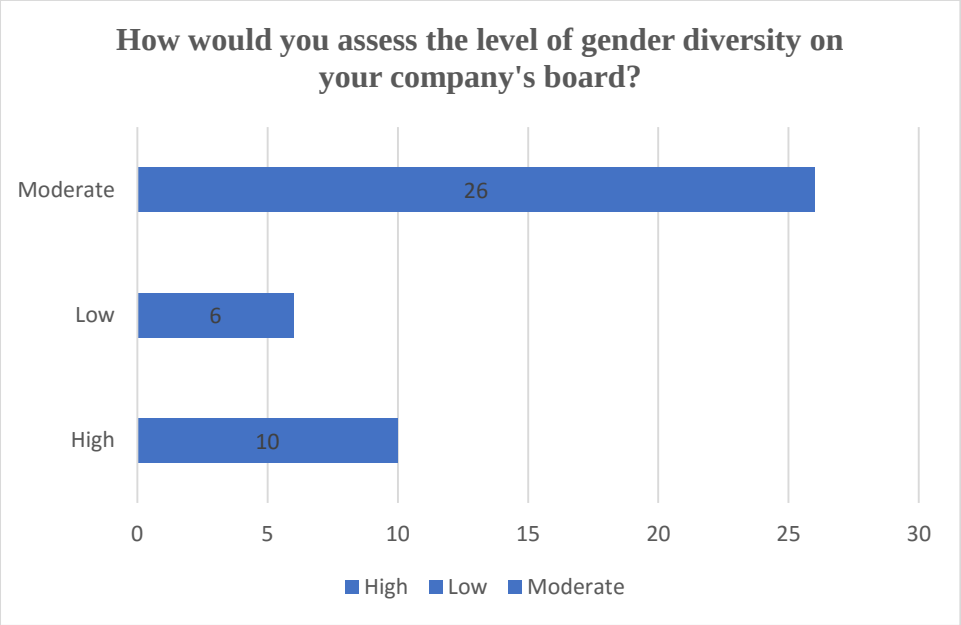
4.7.1 Evaluation of Board Diversity Practices

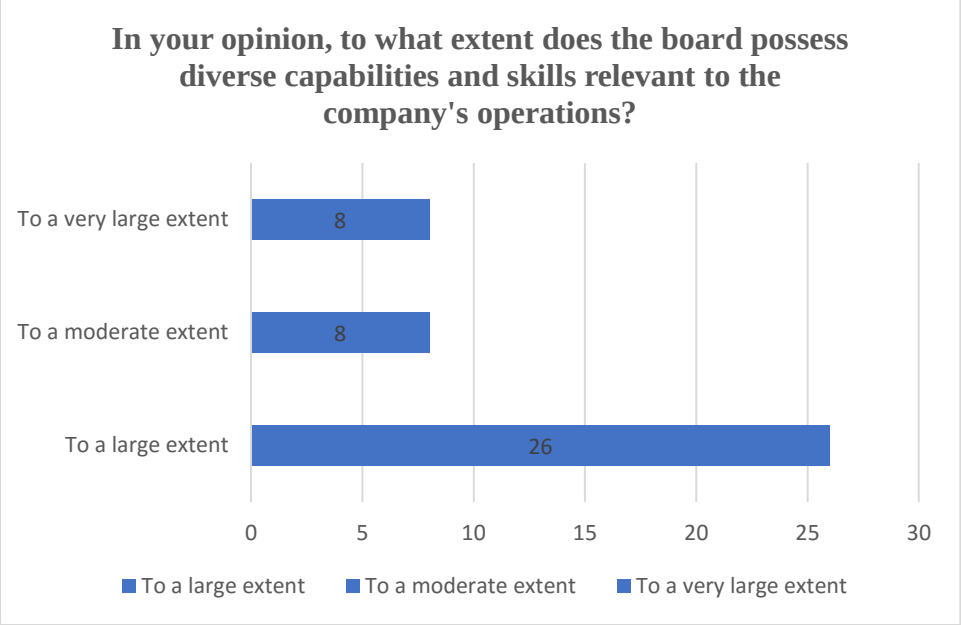
Table 16: Evaluation of Board diversity practices

The findings of the evaluation of board diversity practices are presented below:




To what extent does your company promote board age diversity?
To a small extent
10
To a moderate extent
22
To a large extent
10
0
5
10
15
20
25
Series1

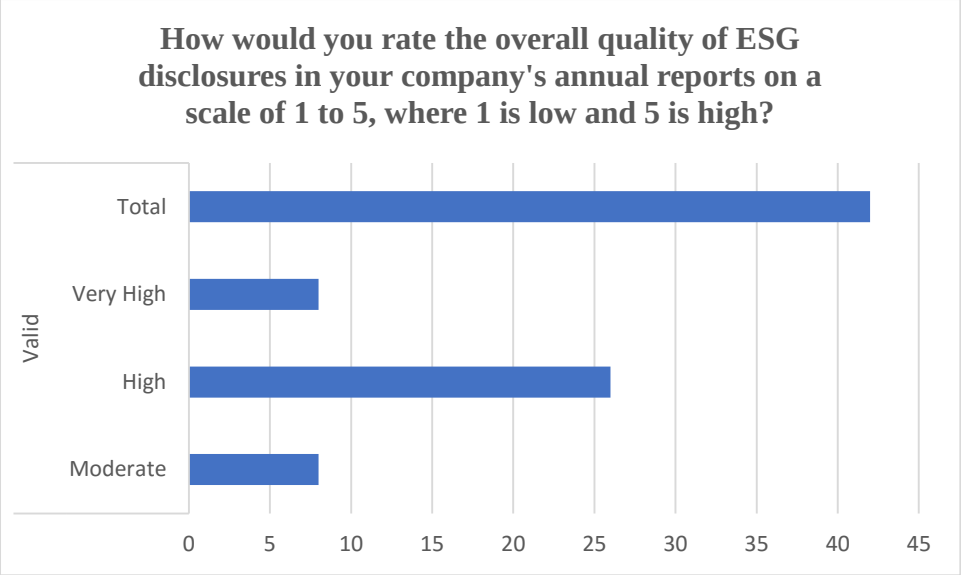

How would you assess the level of gender diversity on your company's board?
Moderate
26
Low
6
High
10
0
5
10
15
20
25
30
High
Low
Moderate

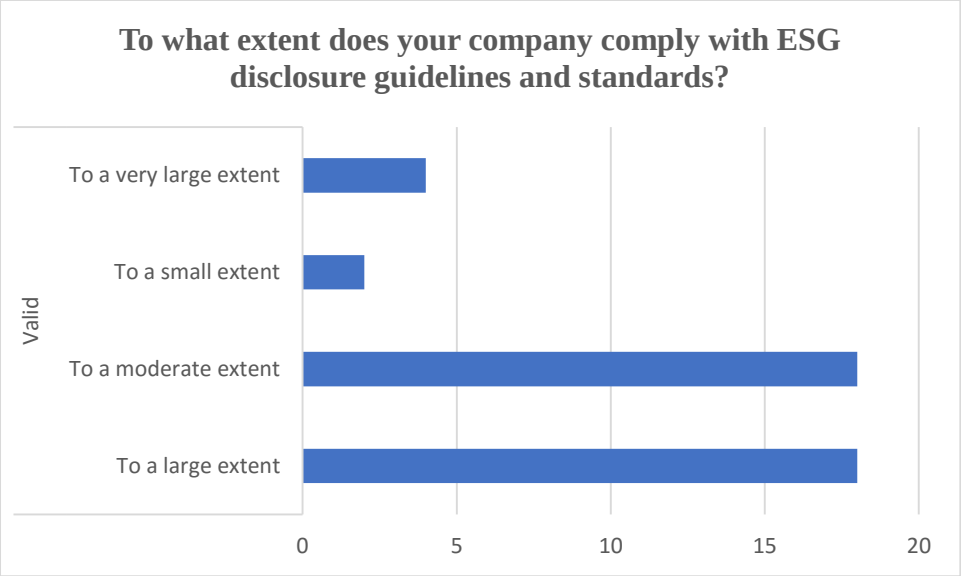


The survey findings provided valuable insights to the perceived characteristics of boards within the respective companies. In relation to board independence, 21 and 11 of the total respondents rated their board independence as either high or very high, respectively. This indicated their prevailing perception on a strong level of independence of board members within the company. In terms of board-age diversity, 22 and 10 of the respondents answered that the company promotes between the moderate or large extent respectively. In reference to the presence of women on board, 26 of the respondents viewed their diversity as moderate whereas 10 considered it to be high. The survey also highlighted that 26 of the respondents selected that the members to a large extent possess the relevant capabilities and skills of their roles.

4.7.2 ESG Disclosures in Annual Reports

Table 17: ESG Disclosure in Annual Reports

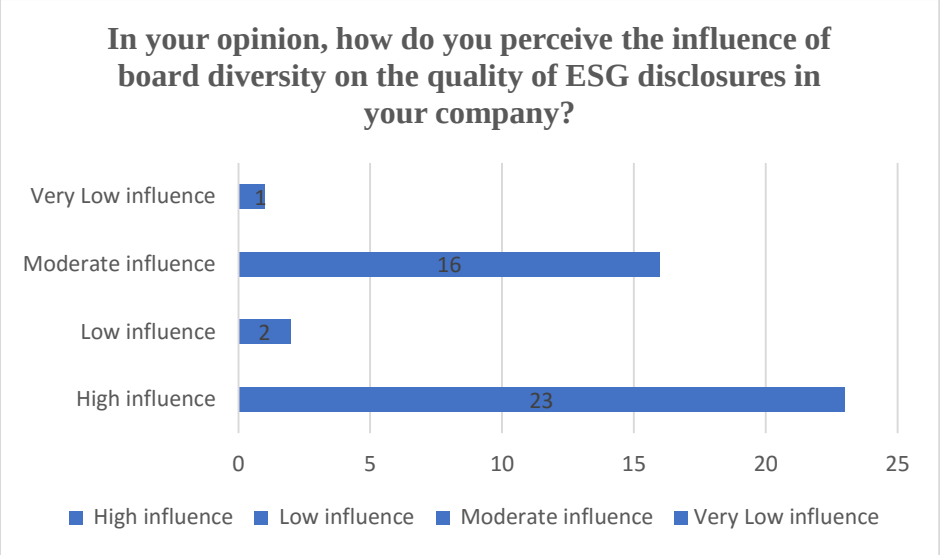


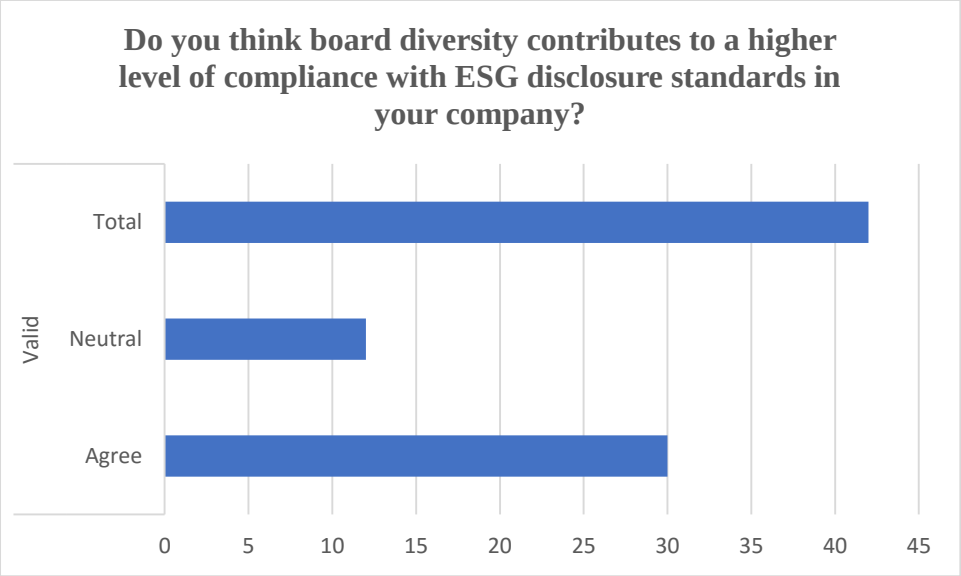


According to the findings above, 26 of the respondents noted that the quality of their respective company's ESG disclosure was high and the extent within which the firm complies with ESG guidelines and standards was 36 for both the level of large extent and moderate extent.

4.7.3 Influence of Board Diversity on ESG Disclosure

Table 18: Board diversity and ESG disclosure

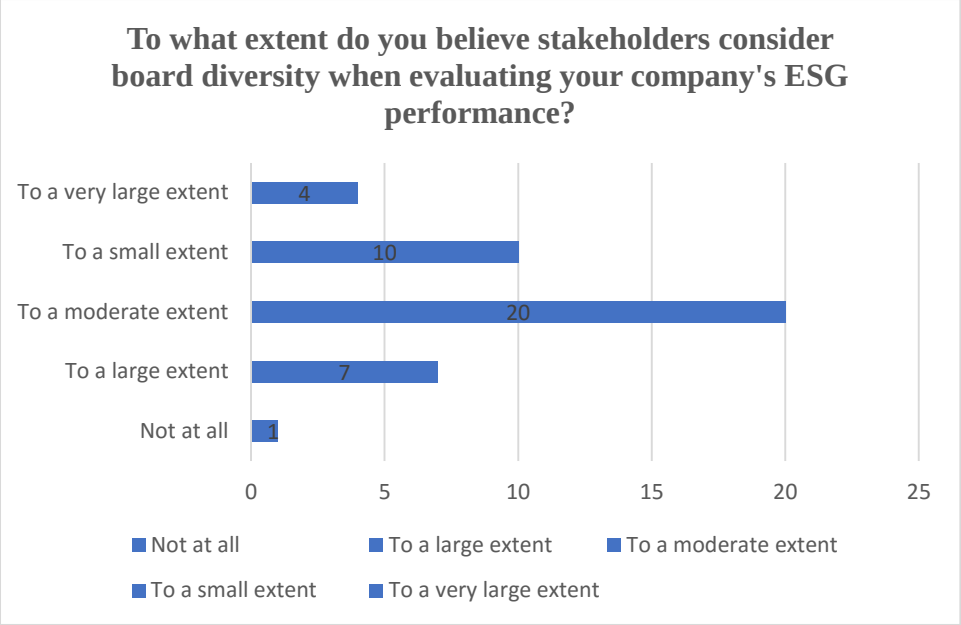




According to the findings above on the influence of board diversity and ESG disclosure, the participants of the study at least 23 of them answered that board diversity has a high influence on ESG disclosure. Whereas 30 agreed that board diversity contributes to the compliance of ESG standards in a firm.

4.7.4 Stakeholder perception and opinions

Table 19: Stakeholder perception



20 of the participants of the study believed that stakeholders only have a moderate interest in considering board diversity when evaluating a firm's ESG performance.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATION

5.1 Introduction

This chapter summarized the study's key results and conclusions, which aimed to give answers to the aforementioned study questions in Chapter One. In reference to the research gaps found, it provided recommendations for further research as well as expressed limitations of the research.

5.2 Summary of Findings

The study sought to determine the impact of board diversity on ESG disclosure of companies listed on the Nairobi Securities Exchange. The variables that were used to determine board diversity were board age diversity, board capabilities & skills, board independence and board gender diversity. The ESG disclosure sector-specific indicators were divided into 4 categories as per the NSE-ESG manual, i.e. general indicators, environmental indicators, social indicators and economic indicators. The findings were in relation to each of the independent variables i.e. the board diversity attributes.

5.2.1 Board diversity practices and ESG Disclosure among listed companies in Kenya.

The first objective of the study was to evaluate the implementation of board diversity attributes and their impact on ESG disclosures for NSE listed companies. This objective was in reference to the results of the selected board diversity variables and their relationship with ESG. The results indicated that women on board have a significant negative relationship with ESG disclosure. This can be attributed to the few numbers of women occupying the board in comparison to their male counterparts. According to the descriptive statistical research, the mean of women occupying the board was 25.61% which is relatively low in comparison. The analysis suggested that a higher occupation of women on board would result in a decrease of ESG disclosure. The findings of the study contradicted the findings of Suttipun, (2021), Qureshi et al. (2019) and Bravo & Reguera-Alvarado (2018), who found that the presence of women on board had a positive significant influence on ESG disclosure. The negative result was in line with the study by Fahad & Rahman, (2019) who found a negative or inverse relationship between the presence of women on the board and ESG disclosure. Board independence also was noted to have a negative significant relationship with ESG disclosures.

According to the descriptive statistical research, the mean of independent board members was 50.62%, which is also a relatively low figure despite it being past the 50% mark. This was contradictory to the study by Kamaludin et al. (2022) but is in agreement with the findings by Fahad & Rahman, (2019) who also found that board independence had an inverse relationship with ESG disclosure. On the contrary to the negative results, board capabilities & skills displayed a positive significant relationship with ESG disclosure. This was in line with the studies by Khan et al. (2019) and Cucari et al. (2018) that concurred the positive contribution of board members experience, knowledge and educational background which were seen as a contributor to the quality of ESG disclosures within a firm.

5.2.2 Compliance of ESG disclosure rules and regulations by listed companies in Kenya.

According to the descriptive statistical analysis, it was found that the average ESG disclosure score for firms over the 5 years was 57.13% which passed the 50% mark by 7.13%. In addition to that it was noted that there was a significant positive relationship between the years 2021 and 2022 and ESG disclosure. Despite the ESG disclosure average having passed the half-way mark, it is important to note that this is still a low percentage in comparison to the reporting standards of countries in Europe or even USA.

This resulted in an agreement to the study by Kamaludin et al. (2022) who also noted that in Bursa Malaysia, there was a uptake of disclosure by only 10% of the companies listed on their securities exchange. However, when taking note of the years in the analysis, it should also be taken into account the significant years that is 2021 and 2022. Around this period i.e. in the year 2021, the NSE released their own ESG disclosure manual to facilitate streamlining of the reports of listed companies and also encouraged their disclosure by making it mandatory. Suttipun, (2021) who carried out their respective study in the country of Thailand, took note of the same initiative by creating an organization within the Thailand Stock Exchange known as ThaiPat that provided ESG guidelines which were to and this helped see an increase in disclosure within their listed companies. In support of the NSE-ESG manual in Kenya, there was the Mwongozo Code of Corporate Governance and Capital Markets Authority that have promoted the need for disclosure by the listed companies (NSE, Nairobi Securities Exchange, (2021); CMA, Annual Report and Intergrated Report, 2023).

According to the analysis, it was also noted that the significant positive relationship between 3 industries and ESG disclosures. The industries were banking sector, commercial sector and construction sector. In relation to the banking industry, the significant relationship can be explained by being required by various regulatory authority to report on their ESG disclosure in comparison to other industries. The regulatory authorities consist of the Kenya Bankers Association who released a Sustainable Finance Initiative (Sustainable Finance Initiative, 2023), the Central Bank of Kenya who have the Guidance on Climate Related Risk Management (CBA, 2021) and the Financial Stability Board who have the Taskforce for Climate Related Financial Disclosures (FSB, 2023).

5.2.3 Stakeholder perception on ESG disclosure by listed firms in Kenya.

The study's third objective was to assess the perception of stakeholders on the relationship between board diversity attributes and ESG disclosure of listed firms in Kenya. This objective was achieved through the use of a questionnaire which sought to assess the perceptions of stakeholders. The participants were requested to rate how much they agreed with some assertions. According to the findings, there seems to be a form of disconnect between the perception of the stakeholders perception and the facts of the data at hand as analyzed in chapter 4 of this study. One of the contrast, was the high percentage of respondents who believed that there was a moderate 61.9%consideration of board gender diversity within the firm and 23.8% responded that it was high. However, over the five years based on this study's timeline, the mean of presence of women on board was 25.61% and in addition their relationship to ESG was an inverse significant relationship. In addition to that, there is the, what can be considered valid belief that the quality of ESG disclosures of the firms are high whereas the mean reported in the descriptive statistical analysis, it was noted that the disclosure average was 57.13 % in comparison to the responses that stated 61.9% which represented high quality disclosures.

Moreover, in the open ended questions that participants had the option to disclose more information on their opinion of board diversity and ESG disclosure is that, most participants stated that stakeholders, especially investors and for some customers, actually took note of the company's ESG activities. Moreover, they also agreed that the disclosure details they utilized were from the GRI, TFCD, NSE-ESG manual and what they considered to be important disclosures were mainly the social and governance with few stating the environmental aspect of disclosures.

This study therefore saw that the stakeholders of the company despite being aware of the importance of board diversity and ESG disclosure and its benefits to the firm, there was a disconnect in the perceptions and the reality of the real status of a company's ESG disclosure

5.3 Conclusion

5.3.1 Impact of Board Diversity on ESG disclosure

In summary, the research examined how board diversity characteristics affect the disclosure of environmental, social, and governance (ESG) information in companies listed on the NSE. The results showed that having more women on boards had a significant negative impact on ESG disclosure, which may be because women are underrepresented compared to men. Similarly, board independence was found to have a negative relationship with ESG disclosures, contrary to previous studies. However, the study did find a positive connection between board capabilities and skills and ESG disclosure, consistent with existing literature. These findings highlight the complexity of the relationship between board composition and ESG disclosure and suggest that more research is needed. They also emphasize the importance of having diverse and skilled boards in improving ESG reporting within companies.

5.3.2 Rules and Regulations on disclosure.

In conclusion, the study found that the average ESG disclosure score for NSE listed companies over five years was 57.13%, indicating progress but still falling short of global reporting standards. The significant positive relationship between the years 2021 and 2022 and ESG disclosure suggests the impact of initiatives like the NSE's ESG disclosure manual and regulatory efforts promoting transparency. Furthermore, specific industries like banking, commercial, and construction sectors demonstrated notable advancements in ESG disclosure, likely influenced by regulatory requirements and initiatives promoting sustainable finance and climate-related risk management. These findings underscore the importance of regulatory frameworks and industry-specific initiatives in driving ESG disclosure practices among listed companies.

5.3.3 Stakeholder perception on ESG disclosure

The study revealed a notable disparity between stakeholders' perceptions and the actual status of board diversity attributes and ESG disclosure among listed firms in Kenya. While stakeholders generally acknowledged the significance of these factors and believed in the quality of ESG disclosures, the data analysis indicated otherwise. Despite the recognition of

ESG importance and utilization of frameworks like GRI and TFCD, there exists a disconnect, highlighting the need for better alignment between stakeholders' perceptions and empirical findings to enhance transparency and understanding of ESG practices within companies

5.4 Study Implications

5.4.1 Policy Consequences

The Nairobi Securities Exchange can use the findings of this study to assess the effectiveness of their ESG manual on the listed firm's disclosures. This research also contributes to the assessment on the effectiveness of the compulsory mandate on disclosure and it serves to inform current trends in the market. This should also serve as a directive on development of not just more policies but practical ways in which the regulatory institutions can lend more of a hand to the listed firms in training and education of its members on quality ESG disclosures.

5.4.2 Implications for Practice

In practice, the companies included in the study have maintained or managed to disclose their ESG activities over the years but they are yet to reach the level of the countries located in Europe, the Americas and even Asia. The board members should emphasize on the importance on maintaining a diverse board with more knowledgeable individuals in matters of sustainability, inclusive of their educational background as noted in the study. It should also be the firm's responsibility to ensure that stakeholders are aware of the current status of the organization and how they too can participate in improving the status of the company as a whole.

5.5 The Limitation of the study and Recommendation for Further Research

One of the limitations of the study was that the NSE-ESG guidelines for disclosure excluded some companies from the disclosure requirements without any explanation leaving the researcher to exclude companies that would have added to the information acquired. A recommendation for future research is to utilize a more comprehensive and inclusive ESG disclosure score sheet such as from the GRI, this will make the research data more comparable globally speaking. Another limitation was that the study only focused on the companies listed on the NSE which are only 60 in number. A recommendation for future research would be that researchers could also target looking at sector specific SME's to get a more accurate depiction of businesses in Kenya unlike focusing on only 60.

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APPENDICES

Questionnaire

Questionnaire on Board Diversity and ESG Disclosure in NSE Listed Companies in Kenya

Section 1: Respondent Information

Company Name:

Section 2: Evaluation of Board Diversity Practices

How would you rate the current level of board independence in your company on a scale of 1 to 5, where 1 is low and 5 is high?

- 1 (Low)
- 2 (Slightly Low)
- 3 (Moderate)
- 4 (High)
- 5 (Very High)

To what extent does your company promote board age diversity?

- Not at all
- To a small extent
- To a moderate extent
- To a large extent
- To a very large extent

How would you assess the level of gender diversity on your company's board?

Very low

Low

Moderate

High

Very High

In your opinion, to what extent does the board possess diverse capabilities and skills relevant to the company's operations?

Not at all

To a small extent

To a moderate extent

To a large extent

To a very large extent

Section 3: ESG Disclosures in Annual Reports

How would you rate the overall quality of ESG disclosures in your company's annual reports on a scale of 1 to 5, where 1 is low and 5 is high?

- 1 (Low)
- 2
- 3
- 4
- 5 (High)

To what extent does your company comply with ESG disclosure guidelines and standards?

- Not at all
- To a small extent
- To a moderate extent

- To a large extent

- To a very large extent

What specific ESG indicators does your company prioritize in its disclosures? (Please provide examples)

_____

Section 4: Influence of Board Diversity on ESG Disclosure

In your opinion, how do you perceive the influence of board diversity on the quality of ESG disclosures in your company?

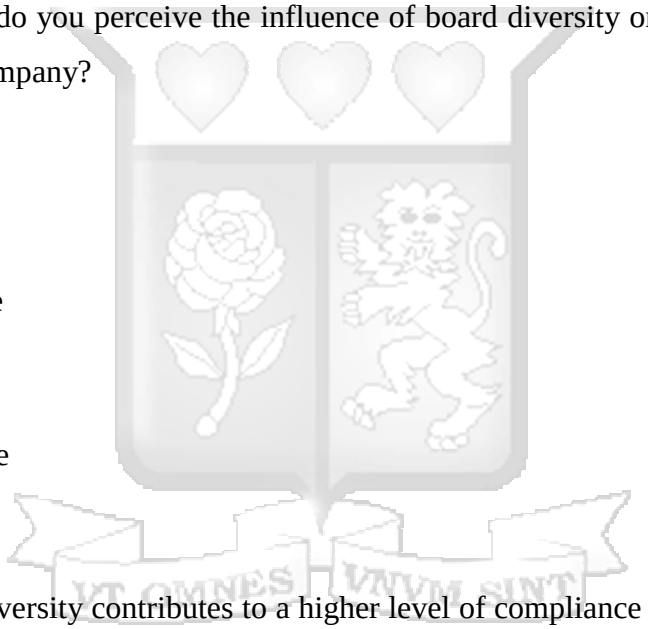
- Very low influence

- Low influence

- Moderate influence

- High influence

- Very high influence



Do you think board diversity contributes to a higher level of compliance with ESG disclosure standards in your company?

- Strongly disagree

- Disagree

- Neutral

- Agree

- Strongly agree

Section 5: Stakeholder Perception

How would you describe the perception of stakeholders (investors, customers, employees, etc.) regarding the relationship between board diversity attributes and ESG disclosure in your company?

_____

To what extent do you believe stakeholders consider board diversity when evaluating your company's ESG performance?

- Not at all
- To a small extent
- To a moderate extent
- To a large extent
- To a very large extent

Section 6: Additional Comments

Are there any additional comments or insights you would like to provide regarding the impact of board diversity on ESG disclosure in your company?

_____

Thank you for participating in this survey. Your insights are valuable for our research on the impact of board diversity on ESG disclosure in NSE listed companies in Kenya.

Nairobi Securities Exchange - ESG Manual Checklist for Content Analysis (Sector Specific)

TELECOMMUNICATIONS SECTOR

GENERAL	ECONOMIC	SOCIAL	ENVIRONMENTAL
Governance	Economic performance	Human rights	Environmental compliance
Strategy	Market presence	Labour and Working conditions	Supplier environmental assessment
Ethics and integrity	Indirect economic impacts	Occupational health and safety	Energy consumption
Stakeholder engagement	Government subsidies	Training and education	Biodiversity
Political accountability	Local employment	Customer health and safety management	Emissions
Network quality	Taxes	Product access	Toxic substances
Intellectual property rights		Management access to content	Water and effluents
Sourcing strategy and policies		Product design	Waste management
Supply chain screening		Anti-trust and monopoly practices	Electronic waste management
Climate related financial disclosures		Electromagnetic radiation	Land management and site rehabilitation
Shared value		Cyber security	
Sustainable Development Goals			

INSURANCE SECTOR

GENERAL	ECONOMIC	SOCIAL	ENVIRONMENTAL
Governance	Economic performance	Financial products and services information to customers	Environmental compliance

Strategy	Market presence	Consumer protection	Materials sourcing and use
Ethics and Integrity	Indirect economic impacts	Financial inclusion, accessibility and financial education	Emissions
Stakeholder engagement	Community investments	Political funding	Paper and waste IT products management
Business lines, products and services	Socially Responsible Investments	Cyber security	Portfolio environmental performance
	Local economic development		
	Taxes		

COMMERCIAL AND SERVICES SECTOR

GENERAL	**ECONOMIC**	**SOCIAL**	**ENVIRONMENTAL**
Governance	Economic performance	Human rights	Environmental compliance
Strategy	Market presence	Labour and working conditions	Emissions
Ethics and integrity	Indirect economic impacts	Occupational health and safety	Energy consumption
Stakeholder engagement	Government subsidies	Training and education	Renewable and/or alternative energy sources
Business Models	Local employment	Services' quality and accuracy	Product packaging and distribution
Risk management and internal controls	Taxes	Customer services	Water management
Regulatory compliance		Talent management	Waste management

Environmental and social risk management		Data privacy	
Supply chain performance		Political funding	
Shared value-sustainable development goals		Indigenous people rights	

ENERGY AND PETROLEUM SECTOR

GENERAL	**ECONOMIC**	**SOCIAL**	**ENVIRONMENTAL**
Governance	Economic performance	Human rights	Environmental compliance
Strategy	Market presence	Labour and working conditions	Energy consumption
Ethics and integrity	Indirect economic impacts	Occupational health and safety	Materials sourcing and use
Stakeholder engagement	Carbon emission trading	Training and education	Energy production
Business context	Local content	Community health and safety	Infrastructure
Sourcing strategy and policies	Government subsidies	Impacts on local communities	Water consumption and efficiency
Supplier screening	Taxes	Local community engagement	Biodiversity
Customer portfolio		Access to electricity	Emissions
Product portfolio		Corruption	Fugitive emissions
Emergency preparedness		Demand side management	Land rehabilitation
Outsourcing strategy		Land use rights	Waste management

Climate related financial disclosures			
Shared value-sustainable development goals			

CONSTRUCTION AND ALLIED SECTOR

GENERAL	**ECONOMIC**	**SOCIAL**	**ENVIRONMENTAL**
Corporate Governance	Economic performance	Human rights	Environmental compliance
Business strategy	Market presence	Labour and working conditions	Emissions
Resource use efficiency	Indirect economic impacts	Occupational health and safety	Water and effluents
Sourcing strategy and policies	Government subsidies	Training and education	Waste management
Supplier screening	Local employment	Community health and safety	Biodiversity
Shared value-sustainable development goals	Socio-economic benefits	Child labour	Materials sourcing and use
	Taxes	Land use rights	Recycling and re-use of by-product
		Migrants workers	Life cycle assessment
		Product design	Energy consumption
		Access to timber	Water management

			Land management and site rehabilitation

AGRICULTURE SECTOR

GENERAL	ECONOMIC	SOCIAL	ENVIRONMENTAL
Corporate governance	Economic performance	Human rights	Environmental compliance
Business strategy	Market presence	Labour and working conditions	Materials sourcing
Political accountability	Indirect economic impacts	Occupational health and safety	Supplier environmental assessment
Agricultural machinery use	Government subsidies	Training and education	Energy consumption
Land tenure	Local employment	Child labour	Emissions
Resource use efficiency	Socio-economic benefits	Consumer product safety	Water and effluents
Sourcing strategy and policies	Taxes	Agricultural genetic engineering	Waste management
Supplier screening		Food security	Biodiversity
Shared value-sustainable development goals			Soil management
			Deforestation
			Seed Quality

MANUFACTURING SECTOR

GENERAL	ECONOMIC	SOCIAL	ENVIRONMENTAL
Governance	Economic performance	Human rights	Environmental compliance

Strategy	Market presence	Labour and working conditions	Materials sourcing
Ethics and integrity	Indirect economic impacts	Occupational health and safety	Supplier environmental assessment
Stakeholder management	Government subsidies	Training and education	Energy consumption
Business context	Local employment	Human rights	Renewable and/or alternative energy sources
Political accountability	Taxes	Water use rights	Product packaging and distribution
Resource use efficiency		Consumer health and safety	Emissions to air
Sourcing strategy and policies		Health and safety impacts of products and services	Waste and effluents
Supplier screening		Consumer protection	Waste management
Customer portfolio		Product labelling	
Product portfolio		Lobbying	
Shared value-sustainable development goals			

INVESTMENT SERVICES SECTOR

GENERAL	ECONOMIC	SOCIAL	ENVIRONMENTAL
Governance	Economic performance	Human rights	Environmental compliance
Strategy	Market presence	Labour and working conditions	Environmental monitoring

Ethics and integrity	Indirect economic impacts	Training and education	
Stakeholder engagement	Socially responsible investments	Services quality and accuracy	
Business models	Taxes	Financial products and services information customers	
Risk management and internal controls		Capacity building	
Environmental and social risk management		Data privacy	
Climate related financial disclosures		Social performance monitoring	
Shared value-sustainable development goals			

INVESTMENT SECTOR

GENERAL	**ECONOMIC**	**SOCIAL**	**ENVIRONMENTAL**
Governance	Economic performance	Human rights	Environmental compliance
Strategy	Market presence	Labour working conditions	Portfolio environmental performance
Ethics and integrity	Indirect economic impacts	Training and education	
Stakeholder engagement	Socially responsible investments	Capacity building	
Business models	Taxes	Services quality and accuracy	

Risk management and internal controls		Financial products and services information to customers	
Environmental and social risk management		Data privacy	
Climate related financial disclosures		Social performance monitoring	
Shared value-sustainable development goals		Political funding	

BANKING SECTOR

GENERAL	**ECONOMIC**	**SOCIAL**	**ENVIRONMENTAL**
Governance	Economic performance	Human rights	Environmental compliance
Strategy	Financial returns vs economic viability	Labour and working conditions	Materials sourcing and use
Business ethics and values	Market presence	Occupational health and safety	Emissions (carbon footprint)
Stakeholder engagement	Indirect economic impacts	Training and education	Resource scarcity and choice
Business lines, products and services	Community investments	Financial products and services information to customers	Energy consumption
Business models	Socially responsible investment and local development	Financial consumer protection	Waste management
Risk management and internal controls	Taxes	Growth inclusivity and innovation	Electronic waste management

Management and mitigating associated risks	Political funding	Environmental impacts of investments, products and services
Climate related financial disclosures	Cyber security	
Shared value-sustainable development goals		

List of Companies on the Nairobi Securities Exchange

1. Eaagads Ltd Ord
2. Kapchorua Tea Co. Ltd
3. Kakuzi
4. Limuru Tea Co. Ltd
5. Rea Vipingo Plantations Ltd
6. Sasini Ltd Ord
7. Williamson Tea Kenya Ltd
8. Car and General (K) Ltd
9. Absa Bank Kenya PLC
10. Stanbic Holdings Plc.
11. I&M Holdings Ltd
12. Diamond Trust Bank Kenya Ltd
13. HF Group Ltd
14. KCB Group Ltd
15. National Bank of Kenya Ltd
16. NCBA Group PLC
17. Standard Chartered Bank Ltd
18. Equity Group Holdings
19. The Co-operative Bank of Kenya Ltd

20. BK Group PLC
21. Express Ltd
22. Sameer Africa PLC
23. Kenya Airways Ltd
24. Nation Media Group
25. Standard Group Ltd
26. TPS Eastern Africa (Serena) Ltd
27. Scangroup Ltd
28. Uchumi Supermarket Ltd
29. Longhorn Publishers Ltd
30. Nairobi Business Ventures Ltd
31. Bamburi Cement PLC
32. Crown Paints Kenya PLC.
33. E.A.Cables PLC
34. E.A.Portland Cement Ltd
35. Total Kenya Ltd
36. KenGen Ltd
37. Kenya Power & Lighting Co Ltd
38. Umeme Ltd
39. Jubilee Holdings Ltd
40. Sanlam Kenya PLC
41. Kenya Re-Insurance Corporation Ltd
42. Liberty Kenya Holdings Ltd
43. Britam Holdings Ltd
44. CIC Insurance Group Ltd
45. Olympia Capital Holdings ltd
46. Centum Investment Co Ltd
47. Trans-Century Ltd
48. Home Afrika Ltd
49. Kurwitu Ventures
50. Nairobi Securities Exchange Ltd
51. B.O.C Kenya Ltd

52. British American Tobacco Kenya Ltd
53. Carbacid Investments Ltd
54. East African Breweries Ltd
55. Mumias Sugar Co. Ltd
56. Unga Group Ltd
57. Eveready East Africa Ltd
58. Kenya Orchards Ltd
59. Flame Tree Group Holdings Ltd
60. Safaricom PLC
61. Stanlib Fahari I-REIT
62. Laptrust Imara I-REIT
63. New Gold Issuer (RP) Ltd

VT OMNES
VNVM SINT

Ethical Clearance- SU-ISERC 1887/23

Strathmore UNIVERSITY

23rd October 2023

Ms Saka Nicole Andeche,
nicole.saka@strathmore.edu

Dear Ms Saka,

RE: Impact of Board Diversity on Environmental, Social, Governance Disclosure in Listed Companies in Kenya

This is to inform you that SU-ISERC has reviewed and **approved** your above **SU-masters** research proposal. Your application reference number is **SU-ISERC1887/23.** The approval period is from **23rd October 2023 to 22nd October 2024.**

This approval is subject to compliance with the following requirements:

i. Only approved documents including (informed consents, study instruments, MTA) will be used.
ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-ISERC.
iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-ISERC within 72 hours of notification.
iv. Any changes anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-ISERC within 72 hours.
v. Clearance for the export of biological specimens must be obtained from relevant institutions.
vi. Submission of a request for renewal of approval at least 60 days prior to the expiry of the approval period. Attach a comprehensive progress report to support the renewal.
vii. Submission of an executive summary report within 90 days of completion of the study to SU-ISERC.

Before commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) https://research-portal.nacosti.go.ke/ and obtain other clearances needed.

Yours sincerely,

Mr Ambrose Rachier,
Chairperson; SU-ISERC

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Ref No: **489147**

Date of Issue: **03/November/2023**

RESEARCH LICENSE

This is to Certify that Miss.. Nicole Andeche Saka of Strathmore University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: IMPACT OF BOARD DIVERSITY ON ENVIRONMENTAL, SOCIAL, GOVERNANCE DISCLOSURE IN LISTED COMPANIES IN KENYA. for the period ending : 03/November/2024.

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