2024

The Influence of firm and governance characteristics and the moderating effect of Capital Markets Authority Code (2015) on environmental, social and governance disclosures among listed companies in Kenya.

Mnyogha, Duncan
Strathmore Business School
Strathmore University

The Influence of Firm and Governance Characteristics and the Moderating Effect of Capital Markets Authority Code (2015) on Environmental, Social and Governance Disclosures among Listed Companies in Kenya

Mnyogha Duncan

058216

A Thesis Submitted in Fulfillment for the Degree of Master of Commerce in Strathmore University

2024

DECLARATION

I, Duncan Mnyogha, confirms that this is my original work. I hereby present this work for grading to meet the requirements for the award of Master of Commerce degree at Strathmore University, Kenya. This thesis has not been issued or published or approved by this or any other learning institution for the award of any degree. The citation of other people's work is duly acknowledged and referenced according to the American Psychological Association 7th edition. I understand the adverse consequences of plagiarism or misrepresentation of other people's work as my own as a serious academic violation with severe penalties. Thus, I take full responsibility for originality and authenticity of this piece of work. The work represents my ideas, analysis and findings. I have upheld the ethical guidelines and academic standards prescribed for students at the university.

Signature:

Date: 25th May 2024

Approval

Supervisor's name: Dr. David Mathuva

Strathmore University Business School

Faculty: Strathmore University Business School

Signature and Date:

29th May 2024

ABSTRACT

The study examined the influence of firm and governance characteristics and the moderating effect of Capital Markets Authority Code (2015) on environmental, social and governance disclosures among listed companies in Kenya. The firm characteristics investigated are the leverage and profitability while the governance characteristics examined were board size, board independence and board gender. The study targeted 62 firms listed on the Nairobi Securities Exchange (NSE) from the year 2013 to 2021. Content analysis was used to measure environmental, social and governance disclosures (ESGD). Ontological research philosophy was used due to availability of secondary data. As well, the cause-effect among the study variables was underpinned by the following theories: legitimacy theory, agency theory, and institutional theory. Panel regression analysis was conducted to test the objectives. The results indicated that leverage, profitability, board size, board independence and board gender positively influence ESGD. In addition, firm size was found to have a positive controlling effect on ESGD. Regarding the moderating effect, CMA code (2015) moderates the effect of leverage, profitability, board size, board independence and board gender on ESGD as shown by improved r-square. The findings underscore the importance of leverage, profitability, board size, board independence and board gender in enhancing ESGD. These findings are useful to researchers, investors, policymakers and regulators in understanding what influences environmental, social and governance disclosures.

Keywords- ESGD, Firm characteristics, Governance characteristics, Agency Theory, Institutional Theory, Legitimacy Theory, the CMA code (2015)

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS AND ACRONYMS

ANOVA	Analysis of Variance
BG	Board Gender
BI	Board Independence
BS	Board Size
CMA	Capital Markets Authority Code (2015)
ESGD	Environmental, Social and Governance Disclosures
LEV	Leverage
NACOSTI	National Commission for Science Technology and Innovation
NSE	Nairobi Securities Exchange
ROA	Return on Asset

DEFINITION OF TERMS

Board gender refers to male and female members constituting the board of governance for public companies (Chouaibi &Affes, 2021).

Board independence refers to lack of conflict of interest and external influences to allow for unbiased decision-making and governance of a company (Injeni et al., 2021).

Board size refers to the number of directors that constitutes the makes the board of a particular public company (Balogh et al., 2022).

Governance refers to the institutional architecture and procedures that oversees an organization (Cadbury, 2000).

Leverage refers to the use of debt capital in a firm's capital structure. Leverage is estimated by debt capital divided by equity capital (Mooneeapen, 2022).

Profitability is the ability of a corporation to earn profits from its activities (Maama, 2021).

DEDICATION

This thesis is dedicated to God, my beloved wife Joyce Jemutai Mnyogha, and our wonderful children Jesse Kipchumba Mnyogha and Jemimah Jepkoech Mnyogha, who inspire all my endeavors. I also wish to extend my dedication to my mother Sarah Jepkemboi Too and father David Mwachoa Mnyogha, and my siblings Audrey, Raymond, Margaret and Daniel. I also appreciate Strathmore University for the Scholarship opportunity to undertake my master's studies at the distinguished university. It is through the endless love and support that has seen me through my graduate studies. I appreciate all of you.

ACKNOWLEDGEMENTS

Gracious be to God Almighty, the maker of heaven and earth. I acknowledge God's presence in my life and throughout my studies. I further extend my sincere gratitude to Dr. David Mathuva, an exceptional supervisor in this seemingly difficult journey. Your constant direction and motivation made the journey sailable despite the hardships encountered. Lastly, I wish to acknowledge my family for all that it took them-sacrifice, prayers and support in all ways possible to see me through my studies.

CHAPTER ONE

INTRODUCTION

The introduction chapter gives an overview on the examination of environmental, social, and governance disclosures and determinants. The chapter starts by introducing the study and its purpose, which was to examine the determinants of environmental, social, and governance disclosures. The chapter then proceeds to present the background of the study. The background highlights determinants of environmental, social and governance disclosures. Thereafter, problem statement is critically reviewed, then research objectives and research questions are formulated to guide the study. The scope of the study is outlined to define the boundaries and extent of the research. Finally, the chapter ends by discussing the significance of the study.

1.1 Background of the Study

The reporting environment is dynamic and constantly changes to address stakeholders' concern. Haymawan et al. (2022) attests that the corporate reporting function evolves with changing stakeholders' needs. Velte and Stawinoga (2017) observe that there is a general shift from traditional financial reporting dispensation to comprehensive annual reports with additional non-financial information for the stakeholders. The corporate reporting further improved with publication of sustainability reports (Bidari & Djajadikerat, 2020). The progress lauded by disclosures studies scholars such as Istianingsih et al. (2020). This development in corporate reporting dates back to 1970s where environmental and social reports were published (Ioannou & Serafeim, 2019). Lately, sustainability reporting frameworks have become widely adopted by companies. Zhang et al. (2020) appreciates Global Reporting Initiative (GRI) efforts in setting the authoritative guidelines for the use of sustainability reporting framework.

While the progressive corporate reporting environment is beneficial to stakeholders, it may be abused. Ioannou and Serafeim (2019 argue that management may use sustainability reporting to impress stakeholders through false claims about what they do. The sustainability reporting appears unsustainable due to inability to potentially detect witnessed global financial crises of companies, size notwithstanding. The reported crises make scholars to doubt on the significance and usefulness of sustainability reporting (de Villiers & Sharma, 2020).

Corporate governance plays a critical and significant function in corporate reporting. Trireksani and Djajadikerta (2016) concur that, to a large extent, corporate governance directly influences the quality and depth of reported information. Al-Najjar and Abed (2014) suggests that the collapse and financial crises of big companies like Enron, casts aspersions on corporate governance as a contributing factor to the failures. In addition, the Capital Markets Authority (CMA) as a public watchdog is in doubt due to past corporate collapses under their watch. Vitolla et al. (2019) posits that collapse of such firms has a direct effect in the loss of public confidence in the role of the capital markets. However, we believe that through properly laid out corporate governance mechanism guided with certain standards will ensure truthful corporate reporting leading to sustainable businesses.

This study seeks to examine environmental, social, and governance disclosures and determinants with a focus on Kenya's listed companies. The study will also look at how the CMA code (2015) moderates ESGD and determinants.

1.1.1 Firm Characteristics

A firm's factors include features such as profitability, asset structure, and liquidity. Previous research sought to investigate the link between firm characteristics and firms' ESGD. The prior studies on these variables cuts across different geographical settings, varied economic and market development contexts. The studies, however have yielded inconsistent findings on the influence of profitability and leverage variables on ESGD.

El Khoury et al. (2021) studied 38 listed banks in MENA region from 2011 to 2019. We appreciate the unique role banks perform in shaping disclosures. Their findings indicated a negative association between profitability and corruption with ESGD among the studied banks. This finding implies that the more the profitability, the less the disclosures reported contrary to the general expectation that banks may disclose more ESGD due to possible increase in ESG activities due to higher profitability. On the other hand, leverage had insignificant effect on ESGD, while the size of the bank indicated a positive association. Whereas the size of the bank yielded expected causality, leverage appears inconsequential on the level of ESGD. In another study, Balogh et al. (2022) focused on factors influencing ESGD among companies in the Czech Republic. Their research revealed that revenues and profitability had a positive effect, whereas governance

characteristics showed no significant influence on ESGD. From their findings, we observe inconsistent finding on profitability between Czech companies and banks in MENA.

Mooneeapen et al. (2022) examined the influence of governance at the country level on ESG disclosure. The study analyzed data from S&P Global 1200 Index covering a total of 27 different countries from 2015 to 2019. The study found that that countries with lower democracies and political stability provided higher ESGD. Additionally, regulatory quality was associated with better ESGD. Finally, profitability played a moderating effect among the studied variables. Mooneeapen et al. (2022) shows the relevance of profitability on ESGD unlike El Khoury et al. (2021). In another study, Maama (2021) examined institutional environment effect on ESGD among banks in the West Africa region. The study showed that gross domestic product (GDP) is insignificantly associated with ESGD. Furthermore, the research found that Corruption Perception Index (CPI), firms' size, value, and age was positively associated with ESGD. Lastly, profitability and leverage were negatively associated with ESGD.

These studies present mixed findings regarding the determinants of ESGD. Consequently, further research is necessary to explore and establish the association between contradictory variables such as leverage and profitability and their influence on ESGD.

1.1.2 Governance Characteristics

Internal corporate governance is a critical factor influencing policy choices for a company. The board characteristics may therefore shape the ESGD in public companies. Prior disclosure studies have examined board characteristics and their effect on disclosures. The inconclusive findings on the causality presents an opportunity to further investigate the local listed public companies to find out how the variables influence ESGD.

Board gender and ESGD has been studied. For instance, Arayssi et al. (2016) investigated the relationship between gender constituting the FTSE 350 Index company boards and sustainability disclosures between the period 2007 and 2012. The findings demonstrated that companies with gender diverse boards discloses higher social disclosures. This finding suggests that boards that are gender sensitive and compliant in adequate representations enhances social disclosures. As such, companies with diversified (gender) boards are likely be sustainable due to compliance with social benefits to the people in the company and the environment they operate in. In the contrary, Manita et al. (2018) undertook a comparable study between 2010 and 2015 with a sample of

companies drawn from S&P's 500 Index whose findings don't agree with Arayssi et al. (2016) findings . Manita et al. (2018) found no statistically significant relationship between the gender diversified boards and sustainability disclosures.

Another governance variable commonly studied is the board independence. For example, Arayssi et al. (2020) did a study in Gulf countries to investigate the relationship between corporate governance variables and ESGD. Specifically, the governance variables examined were board independence and board gender. The findings of the study showed that both board independence and board gender positively influenced ESGD. This study highlighted the significance of including women in the boards due to their sensitivity to ESGD. Thus, companies ought to strike a balance between board gender and board independence for enhanced ESGD. In the same vein, Gurol and Lagasio (2021) investigated the association between structure of the board and sustainability disclosures in banks sampled from the EUROSTOXX 600. Their findings demonstrated a positive association between board size, board independence, board gender, profitability, and ESGD.

The audit committees' role in influencing ESGD is equally crucial. Arif et al. (2021) investigated influence of audit committees' activity on ESGD across Australian energy sector corporations. Their findings revealed a link between audit committee activism, independence, and ESGD. Likewise, certain social and ethical practice within a firm might generate a culture that influences ESGD. Chouaibi and Affes (2021) investigated the effect of social and ethical activities on ESGD using international ESG data from 2005 to 2017. The study found that companies are shifting interest towards corporate social responsibility and ethical business practices. Furthermore, organizations with greater social and ethical values had higher levels of ESGD.

Disclosure studies have also been done locally. Mathuva et al. (2017) examined the association between governance and social and environmental disclosures among credit unions in Kenya. The study found a positive association between governance variables and the social and environmental disclosures. Another study by Injeni et al. (2021) investigated the determinants of sustainability disclosures and integrated reporting for companies listed in Kenya from 2010 to 2018. The study found that gender diversified boards and the audit committee independence positively influenced integrated disclosures.

There are inconsistencies in the findings among the reviewed disclosure literature above. While the existing literature agrees on the impact of corporate governance on ESGD, the direction of the association varies. For example, Arayssi et al. (2016, 2020), Injeni et al. (2021), and Gurol and Lagasio (2021) findings posit that board gender positively influences ESGD by firms. On the other hand, Manita et al. (2018) found no association. However, when considering corporate governance as a whole, Mathuva et al. (2017) asserted its positive contribution to ESGD.

1.1.3 Capital Markets Authority Code (2015)

The Capital Markets Authority Code (2015) is a regulatory framework established by the Capital Markets Authority in Kenya to oversee and enhance governance of the capital markets. The code sets guidelines and standards for adherence by the capital market participants including companies, investors and intermediaries (Republic of Kenya, 2015). In addition, the code stipulates disclosure requirements, market conduct and investor protection. The authority enforces compliance of the code. In regards with environmental, social and governance disclosure, the code encourages disclosures such as environmental policies and practices, management of environmental risks, labor practices, community engagement, human rights, effective board oversight, transparent decision making, and ethical business practices (Capital Markets Authority, 2015).

When a regulation is introduced governing disclosures, firms generally increase their level of disclosures compared to the pre-regulation period (Mbithi et al., 2023). According to Mbithi et al. (2023), this mainly occurs due to legally enforced initiatives that mandate certain disclosures. For example, Mathuva and Chong (2018) investigated the impact of regulatory measures from 2008 to 2010 on compliance with obligatory disclosures among Kenya's credit unions. The study found that there is a positive relationship between governance and mandatory disclosures. In a similar manner, the study examined the moderating effect of the CMA code (2015) on the firm and governance characteristics on environmental, social and governance disclosures among the listed companies in Kenya.

1.1.4 Listed Firms in Kenya

The global trend in corporate reporting is undergoing a shift towards a more comprehensive approach that incorporates not only financial information but also non-financial information. Stakeholders are concerned with information beyond financials for decision making purposes. Furthermore, the integration of ESGD into organizational strategy, operations, and performance

management not only brings value to stakeholders but also enhances organizational resilience (Nairobi Securities Exchange, 2021). Furthermore, the interests and concerns of stakeholders regarding listed firms cannot be ignored. In Kenya, listed companies are expected to provide sustainability reports accompanying their annual reports regarding their activities and the impact of those activities. Legislation, current International Financial Reporting Standards (IFRSs), and regulatory guidelines all influence the particular structure and type of information that enterprises must report. Recently, CMA in Kenya made a milestone by issuing CMA code (2015) for issuers of public securities in the bourse. This significant step marked a hallmark of change in how listed companies are governed. In addition, the NSE proceeded to design a manual guiding listed companies on ESGD. As a result, the purpose of this research is to analyze the moderating effect of CMA code (2015) on ESGD determinants. In the past, lack of standardized ESGD framework was cited as a major obstacle in reporting ESGD. Furthermore, with the exception of South Africa, ESGD throughout Africa largely remains voluntary.

Similarly, resources are critical enablers for ESGD. Maama and Appiah (2019) concurs that ESGD requires additional resources such as economic resources, human resources, capital resources (Maama & Appiah, 2019). Indeed, organizations endowed with sufficient resources may find it easier to adopt ESGD. As a result, corporations are inclined to avoid paying these additional expenditures especially where a corporation does not get a direct quantifiable benefit. ESGD also exposes a company's activities to scrutiny, potentially resulting into hesitation to publish such information. Nevertheless, companies in developing countries are gradually embracing ESGD (Mensah et al., 2017).

1.2 Problem Statement

Extant literature has examined ESGD determinants but with inconclusive findings. Some of the reasons for the mixed findings could be due to different country settings (contextual), methodology used and industry. Empirical literatures shows that the commonly studied variables include firm and governance characteristics. For example, El Khoury et al. (2021) found no link between leverage and ESGD, while Maama (2021) found a negative association. Also, there is mixed finding on the correlation between profitability and ESGD. For instance, Mathuva et al. (2017), Gurol and Lagasio (2021), and Balogh et al. (2022) found a positive correlation. Conversely,

Maama (2021), El Khoury et al. (2021), and Bullay and Al Mari (2022) found a negative relationship.

Among the governance characteristics, for example, Gurol and Lagasio (2021) found the that board size was positively associated whereas Amran et al. (2014) and Kilic et al. (2015) found no relationship. Furthermore, Rodrigues et al. (2017) found a positive correlation between board size and ESGD, but this relationship held true only up to a certain threshold. Another corporate governance, board independence, for instance, although Sundarasen et al. (2016) and Rodrigues et al. (2017) established a negative correlation, Arayssi et al. (2020) and Arif et al. (2021) observed a positive correlation with ESGD. Moreover, board gender findings, for instance, Arayssi et al. (2016), Garcia-Sanchez et al. (2020), Arayssi et al. (2020), and Gurol & Lagasio (2021) showed a positive correlation between ESGD and board gender. In the contrary, Gunarathne and Senaratne (2020) and Manita et al. (2018) found no correlation between board gender and ESGD.

The inconsistencies in prior study findings could be attributed to measurement of ESGD. The study extends the ESGD discourse by examining the ESGD determinants on an adapted ESGD index. Next, the moderating effect of CMA code (2015) on determinants of ESGD was examined. Lastly, the study is responding to the concerns by the regulatory authorities on the failure by the listed companies to comply with ESGD (Nairobi Securities Exchange, 2021).

1.3 Research Objectives

The research objectives for the current study are broken down into the general objective and the specific objectives as stated in the next section.

1.3.1 General Objective

This study examined influence of firm and governance characteristics and the moderating effect of Capital Markets Authority code (2015) on environmental, social, and governance disclosures by listed firms in Kenya.

1.3.2 Specific Objectives

The specific objectives for this study are:

I. To investigate the effect of firm characteristics on environmental, social, and governance disclosures by listed companies in Kenya.

II. To examine the effect of governance characteristics on environmental, social, and governance disclosures by listed companies in Kenya.

III. To establish the moderating effect of the Capital Markets Authority code (2015) on environmental, social, and governance disclosure determinants by listed companies in Kenya.

1.4 Research Questions

The research questions for this study are formulated as follows:

I. What is the effect of firm characteristics on environmental, social, and governance disclosures by listed companies in Kenya?

II. What is the effect of governance characteristics on environmental, social, and governance disclosures by listed companies in Kenya?

III. What is the moderating effect of the Capital Markets Authority code (2015) on environmental, social, and governance disclosure determinants by listed companies in Kenya?

1.5 Scope of the Study

The study examined ESGD determinants among listed firms in Kenya. The study targeted 62 firms with a final sample of 48 firms. The study period was from 2013 to 2021. The study determinants are broadly classified into firm characteristics (leverage and profitability) and governance characteristics (board size, board independence and board gender). In addition, the moderating effect of CMA code (2015) on the predictor variables was examined. Lastly, ESGD index was adapted from CMA code (2015) and NSE ESG voluntary disclosures.

1.6 Significance of the study

The study is deemed significant to:

1.6.1 Researchers and Scholars

The study will contribute to the existing empirical literature on ESGD. The examination of the ESGD and its determinants in a developing country provides a basis for comparison among prior findings from other jurisdictions. The study findings suggest areas where improvements in ESGD regulation are needed. Lastly, the findings contribute to the ESGD empirical literature by investigating the moderating effect of the CMA code (2015) on ESGD determinants.

1.6.2 Regulators and Policymakers

Through the examination of ESGD among listed firms in Kenya, regulators and policymakers gain a broad understanding about ESGD and determinants which may influence policy directives and regulations. The study's analysis of the heterogeneity in ESGD among listed firms will be valuable to regulators in enhancing monitoring disclosure compliance by listed firms. The findings provide evidence-based insights to develop informed mechanisms aimed at enhancing ESGD. Additionally, the study sheds light on ESGD determinants by NSE firms, helping regulators and policymakers understand drivers for ESGD.

1.7 Chapter Summary

Chapter one presents the introduction to ESGD and its determinants. The chapter started off by introducing the study purpose, with an emphasis on the examination of ESGD determinants and the moderating effect of CMA code (2015). The problem statement critically reviews and highlights inconclusive findings from prior studies that could be attributed to contextual factors. Thereafter, clear research objectives and questions are formulated to guide the study. Specifically, the study objectives aim to examine the effect of firm characteristics (leverage and profitability), governance characteristics (board size, board independence and board gender) and the moderating effect of CMA code (2015) on ESGD among listed firms in Kenya. The study focused on 48 listed firms in Kenya over a nine-year period from 2013 to 2021. The potential beneficiaries from the study findings include:- researchers, scholars, regulators and policymakers. The next chapter presents the literature review.

CHAPTER TWO

LITERATURE REVIEW

The chapter on literature review is organized into various sections. The theoretical review section looks at possible theories that may be used to understand the study variables. The theoretical perspectives considered are legitimacy theory, agency theory, and institutional theory. The empirical literature review proceeds to examine previous similar studies. The conceptual framework section diagrammatically presents the study variables. Finally, a summary of the literature findings from the literature and research gaps the current study seeks to examine.

2.1 Theoretical Review

The existing literature has examined the determinants of ESGD using various theories. While some studies have used a single theory, some have used multiple theories to explore different perspectives on ESGD (Michelon & Rodrigue, 2015). The theories commonly used in this area are stakeholder, legitimacy, institutional and agency theories. The general conclusion by most of these theories about ESGD converges at the need to address stakeholders' concerns (Figueroa et al., 2018). Despite the general congruence, the current study acknowledges that there may be other unknown causes behind ESGD. Haji and Anifowose (2016) portends that there might be conflicting motives for ESGD. The current study used legitimacy, agency, and institutional theories to underpin the study.

2.1.1 Legitimacy Theory

Legitimacy theory, initially developed by Dowling and Pfeiffer in 1975, posits that firms should align their value systems with societal values where they operate in. This alignment is crucial for accessing resources, gaining societal approval, and ensuring long-term sustainability (Guthrie & Parker, 1989). Managers employ various techniques to legitimize their firms' actions, selecting the audience to satisfy and determining appropriate communication strategies (Ashforth & Gibbs, 1990; Suchman, 1995). Therefore, responsive management that considers societal needs is essential for achieving social legitimacy (Luethge & Han, 2012). Understanding legitimacy theory helps firms shape their strategies with a broader stakeholder perspective in mind.

In empirical studies on disclosures, the legitimacy theory has been used extensively (Mbithi et al., 2023). According to Lindblom (1994), organizations become legitimate when their values coincide

with the values the society upholds (Ullmann, 1985). Legitimacy theory, agreeably, is used to explain goal alignment (Magness, 2006). According to Lightstone and Driscoll (2008), disclosures that are both required and optional may result in legitimization. However, this theory has drawn criticism. According to Dowling and Pfeiffer (1975) and Suchman (1995), the social compact is untrustworthy in law and has no legal force, which lets companies that act immorally get away with it. Additionally, participation by organizations in social and environmental causes could be viewed as a waste of resources by shareholders if it is not required (Friedman, 1970).

Legitimacy theory was used to explain the dependent variable (ESGD) and establish the rationale behind ESGD practices among listed firms. The theory helped in examining whether listed firms extend legitimacy through ESGD. Legitimacy theory also informed the selection of firm size as a control variable, due to relationship that may exist between firm size and ESGD as suggested by Gutierrez-Nieto et al. (2008). Larger organizations tend to engage in more activities, garner greater public attention, and have more socially concerned shareholders compared to smaller organizations.

2.1.2 Agency Theory

Agency theory, which was initially proposed by Jensen and Meckling in 1976, centers on the notion that agency relationships arise when individual (principals), hire another person (agent) to work/act on their behalf by delegated authority (Jensen & Meckling, 1976). Sometimes, the agents may act contrary to the interests of the principals causing agency problems. Urquiza et al., (2010) contend that information asymmetry between the principals and agents further compound the agency problem. Corporate governance provides for checks and balance to curb agency problems. The management may use disclosures mechanisms to address potential conflict of interest as observed by Watson et al. (2002). ESGD by management can bridge any information gaps that may exist between managers and other concerned stakeholders.

The theory faces criticisms among scholars. The theory is criticized for non-alignment with other theories such as the stakeholder theory. For example, Donaldson and Davis (1991) observe that the theory emphasizes the need for an independent board to safeguard stakeholders' interest contrary to stewardship theory advocating for shared incumbency in the roles of the chairman of the board and the Chief Executive Officer. Another criticism is the inability to determine agents' motives since motivations are subject to personal perceptions, yet the theory emphasizes for

distinctive separation of interests (Donaldson & Davis, 1991). To achieve this, managerial accountability is responsible for checking the conflict of interests contrary to principals' interests (Hyndman & McKillop, 2004). The study used agency theory to explain the effect of governance characteristics on ESGD since the board acts as an agent.

2.1.3 Institutional Theory

The theory was developed by John Meyer and Brian Rowan (1977). According to Scott (2004), institutional theory helps to understand the role of authority in influencing organizational behavior (Camodeca et al., 2019). The theory suggests that external environment influences the actions of an organization. For instance, institutional pressures may shape adherence to ESGD (Kühn et al., 2018; Deegan, 2019) to comply with an institutionalized practice. Likewise, Meyer and Rowan (1977) observe that organizational structures are isomorphic in nature. According to DiMaggio and Powell (1983), isomorphic forces may be classified as normative, coercive and mimetic. The study will use institutional theory to explain the effect of firm characteristics (leverage and profitability), and the moderating effect of CMA code (2015) on ESGD.

2.2 Empirical Literature Review

This section provides an empirical examination and develops the hypothesis for the study objectives.

2.2.1 Firm Characteristics

The firm characteristics examined in this study are profitability and leverage and their association on ESGD. The firm characteristics are discussed as follows.

El Khoury et al. (2021) examined factors influencing ESGD in banks from Middle East and North Africa region. The data covered 38 banks spanning the years 2011 through to 2019. The findings showed that profitability was negatively correlated to the ESGD. The size of a bank was positively correlated with ESGD. The study found no correlation between financial leverage and ESGD. In another study, Balogh et al. (2022) studied the determinants of ESGD by looking at relatively large companies in Czech Republic. The study found that sales (revenues), human resource size, and profitability were positively correlated with ESGD. The study also tested for each individual components comprising ESG. However, there was no correlation between corporate governance and ESGD. Mooneeapen et al. (2022) undertook a study to examine the influence of governance

on ESGD using Standard & Poor's Global 1200 Index spanning 2015 to 2019. The study found that profitability moderates the association between governance characteristics and ESGD.

Maama (2021) examined the effect of institutional environment on ESGD in West African banks. The study found that there is no correlation between Gross Domestic Product and ESGD while Corruption Perception Index is positively correlated with ESGD. Firms' size, is positively correlated while profitability and financial leverage is negatively correlated with ESGD. Finally, institutional environment influences ESGD. Herold and Lee (2017) argue that companies that perform below their peers provide more ESGD. They argue that such companies do so to justify foregoing current profits so as to achieve sustainable corporate and society goals. Highly leveraged firms may minimize costs on corporate social responsibility initiatives to meet debt obligations and reduce credit risk exposure. However, they may also seek to attract social sensitive investors seeking to invest in firms with good labor and human rights practices (Herold & Lee, 2017).

The studies above present mixed findings on the correlation between firm characteristics and ESGD. For instance, Nollet et al. (2016) found a positive association between profitability and ESGD, whereas El Khoury et al. (2021) found a negative correlation. Similarly, Maama (2021) found a negative correlation, while El Khoury et al. (2021) found no correlation between financial leverage and ESGD.

2.2.2 Governance Characteristics

Previous scholarly studies have examined the correlation between corporate governance attributes and ESGD. The corporate governance variables with mixed findings include board size, board independence, and diversity of the board.

According to John and Senbet (1998), they suggest that board size is positively correlated with ESGD due to enhanced capability to monitor operations of an organization. The capabilities that come with a large board include diverse skillset, expertise and increased availability. Conversely, Ntim et al. (2013) reiterates that agency theory perspective favors small board size. This argument is supported by Jensen and Meckling (1976) with his view that large boards are not easy to coordinate thereby negatively impacting on quantity and quality of ESGD. Frias-Aceituno et al. (2013) disagrees with this position positing that a large board brings on the table diverse attributes which may positively influence better corporate reporting and hence ESGD. In support of the

mixed findings, recent literature supports the argument. For instance, Gurol and Lagasio (2021) found board size was positively correlated with ESGD while Amran et al. (2014) found that there was no correlation. Rodrigues et al. (2017) observed that board size is positively correlated with ESGD within certain limits.

In the same vein, CMA (2015) recommends for balanced board size for effective oversight on corporate reporting but without specifying a particular number of board members. In addition, empirical literature shows that there exists an association between board independence and ESGD. The significance of board independence is emphasized with the CMA code (2015) requiring boards to have at least one-third of the board to comprise non-executive directors (NEDs) to check on dominance, if any, by the executive directors (CMA, 2015). Jensen and Meckling (1976) contends that non-executive directors instill board independence in decision making processes thereby providing for checks and balances in safeguarding stakeholders' interests. The non-executive directors monitor executive directors' behavior in their reporting responsibility. The studies by Arayssi et al. (2020) and Arif et al. (2021) found that board independence is positively correlated with ESGD, while Sundarasen et al. (2016) and Rodrigues et al. (2017) found that they are negatively correlated.

Extant literature has investigated influence of gendered boards on ESGD. Arayssi et al. (2016) examined the influence gendered boards on sustainability reporting among The Financial Times Stock Exchange 350 Index companies between the period 2007 and 2012. The findings of the study showed that gendered boards are positively correlated with sustainability reporting. Conversely, Manita et al. (2018) investigated the correlation between gendered board and ESGD with sampled firms from Standard & Poor's 500 Index between 2010 and 2015. The study found no correlation between gendered boards and ESGD.

Arayssi et al. (2020) later conducted a similar study to examine influence of board composition on ESGD in the Gulf region. The study found that gendered board was positively correlated with sustainability reporting. Interestingly, gendered boards showed effectiveness in balancing financial targets with social responsibilities for the companies. Gurol and Lagasio (2021) examined the influence of board structure on sustainability reporting with a sample drawn from 35 banks in Europe listed by Euro Stoxx 600 Index. The study findings showed a positive correlation between board size, gender diversity, board independence and ESGD.

Azizul and Aminul (2011) indicate that feminized boards promote social activities that are philanthropic. Such philanthropic activities are reported thereby resulting into increased quantity and quality of ESGD (Azizul & Aminul, 2011; Arayssi et al., 2016, 2020). These arguments are in tandem with views by Singh et al. (2008) that women are sensitive to ethical issues and environmental matters. Zhang et al. (2013) extends their sensitivity and describe women as possessing a personality that reduces conflicts with the concerned stakeholders. In line with these arguments, it is expected that companies with more female directors provides a higher quantity and quality of ESGD (Bear et al., 2010). Hyun et al. (2016) and Lin et al. (2016) observed that women are friendlier, and well equipped with better social and collaborative skills unlike their male counterparts enabling them to work well in social environments. Locally, Injeni et al. (2021) investigated factors that influence sustainability and integrated reporting by NSE companies in the period 2010 to 2018. The study found that companies are increasingly adopting integrated reporting and sustainability reporting. Further, board gender diversity, independence of the audit committee, block ownership and presence of foreign ownership are positively correlated with sustainability and integrated reporting. In addition, regulatory pressure and awards organized by regulatory and professional bodies encourages better corporate reporting. Contrary to Injeni et al. (2021) finding on board gender diversity, Manita et al. (2018) found no correlation between board gender and ESGD among Standard & Poor's 500 Index firms studied between 2010 and 2015.

Arif et al. (2021) examined the influence of activism by the audit committee and their independence on ESGD by Australian firms in the energy sector. The study found that audit committee activism and independence is positively correlated with quality and quantity of ESGD due to higher compliance with Global Reporting Initiative Standards. Although the CMA code (2015) does not explicitly define diversity goals for listed businesses, the republic of Kenya's constitution reiterates a third gender rule in public boards (Government of Kenya, 2010).

2.2.3 The Capital Markets Authority Code (2015)

Injeni et al. (2021) observes that post-regulation provides comprehensive disclosures compared to pre-regulation periods by Nairobi Securities Exchange companies. The change in enhanced reporting is attributed to the regulations enforcing reporting standards for firms. This finding is in line with institutional theory where DiMaggio and Powell (1983) expound that firms seek to conform to the peers' disclosures frameworks. Mooneeapen et al. (2022) examined the influence

of country's governance environment on ESGD by S&P Global 1200 index sampled companies between 2015 and 2019. The findings revealed that countries with better regulatory quality tend to exhibit higher corporate governance performance.

Mathuva et al (2017) investigated the influence of regulatory pressure on the association between governance and social and environmental disclosures by credit unions in Kenya. The study findings supported legitimacy and institutional theories perspectives. The findings showed that there existed positive correlation between governance and social and environmental disclosures by credit unions. In addition, the governance score significantly increased as when regulations were introduced. In another study, Mathuva and Chong (2018) examined effects of regulatory reforms on mandatory disclosures compliance by credit unions in Kenya between 2008 and 2010. The study findings supported institutional theory views in predicting compliance with mandatory disclosures. The findings also showed that credit unions under scrutiny exhibited lower compliance levels with mandatory disclosures post-regulation period.

The CMA made strides in 2015 when it adopted and subsequently implemented a code of corporate governance for issuers of securities to the general public (Republic of Kenya, 2015). Injeni et al. (2021) concurs that the move yielded increased compliance by enhancing the quality and quantity of sustainability and integrated reporting. Consequently, we can deduce that in Kenya, the CMA code (2015), as a form of regulatory pressure, can drive firms to comply with disclosures requirements.

2.2.4 Control Variable

Firms with greater resources enjoy cost advantages resulting from economies of scale, which leads to lower costs associated with disclosing information. Consequently, well-resourced firms are likely to have higher quantity and quality of ESGD. Consistent with previous research (Menassa, 2010; Kent & Zunker, 2013; Mathuva et al., 2017; Marrone & Oliva, 2019; Nicolo et al., 2021; Injeni et al., 2021), the current study will examine the controlling effect of firm size on ESGD.

2.3 Literature Summary

The examination of the ESGD determinants has seen a notable increase in empirical literature. Theoretical perspectives drawn from institutional, legitimacy and agency theories were used to underpin the study. The study explores the three theories and their application in explaining ESGD and determinants by firms. The study was premised on constructs that form a conceptual

framework. These constructs were derived from a thorough review of pertinent ESGD empirical literature that aligns with the study's objectives. However, further investigation is required to delve into ESGD by firms within specific sectors, cultural contexts, and countries. The applicability of disclosures theories has been observed across various country settings and sectors of the economy, indicating their replicability. Consequently, additional empirical studies are necessary to validate and enhance the theoretical perspectives, thereby providing stronger justifications for ESGD by firms. Such research endeavors are instrumental in formulating a robust ESGD guidelines that cater to the unique cultural and country-specific requirements.

The table below summarizes the reviewed literature.

Author	Country (Period)	Theory	Sample	Findings
Arayssi (2016)	FTSE 350 Index, 2007-2012	Agency, Stakeholder, Institutional	FTSE 350 Index data	Board gender is significant and positively associated with ESGD
Mathuva et al. (2017)	Kenya, 2008-2013	Legitimacy	212 credit unions	Governance, size and profitability are significantly associated with ESGD. Regulation improves disclosures
Manita et al. (2018)	USA, 2010-2015	Stakeholder	379 firms drawn from S&P 500	The association between board gender and ESGD is statistically insignificant.
Mathuva and Chong (2018)	Kenya, 2008-2013		212 credit unions	Accredited credit unions compliance on mandatory disclosures is high. A positive relationship between size, governance, and disclosures compliance was established.
Arayssi (2020)	Gulf countries, 2008-2017	Agency, Legitimacy	184 firm year observations.	Board independence and female board participation is positively associated with ESGD.
Arif et al. (2021)	Australia, 2009-2018	Agency, Legitimacy	24 energy sector firms	Board independence was positively associated with ESGD.
Gurol and Lagasio (2021)	Europe	Agency theory, Resource	35 listed banks	ESGD is positively linked to profitability, board size, women ratio, and

		dependence theory		independent directors' ratio.
El Khoury et al. (2021)	MENA region, 2011-2019	Legitimacy, Agency, Slack resource, Institutional	38 listed banks.	ESG scores are negatively affected by performance and positively affected by size.
Maama (2021)	West Africa	Institutional	67 banks in 5 countries in West Africa.	Firm size has positive and significant relationships with ESGD while profitability and leverage have negative relationships with ESGD.
Injeni et al. (2021)	Kenya, 2010-2018	Agency, Stakeholder, Institutional	53 listed companies on the NSE.	Disclosures are influenced by board diversity, ownership, regulatory pressure, and ICPAK efforts.
Balogh (2022)	Czech, 2018	Agency, Legitimacy, Signaling, Political Cost, Stakeholder	100 largest Czech companies.	Profitability positively influenced ESGD. There is insignificant relationship between governance and ESGD.
Mooneeapen (2022)	S&P Global 1200 Index, 2015-2019	Legitimacy, Stakeholder, Institutional	27 countries.	Profitability moderates' country-level governance effects.

Table 2.1 Summary of the Literature

2.4 Research Gaps

According to Githaiga and Kosgei (2023), disclosures studies have attracted significant attention among scholars. The reviewed literature show that the developed world has focused on disclosures studies. Likewise, disclosures studies have been carried out among developing countries albeit outpaced by the developed countries. The reviewed empirical literature shows inconsistencies in findings where same variables were examined. This study focused on a developing country context in the East African region, Kenya. The extant literature highlights firm characteristics and governance characteristics as critical components that may drive ESGD. In addition, the study examined the moderating effect of CMA code (2015) to establish its role in enhancing ESGD. The study establishes these variables to be of significant interest as posited by previous studies on ESGD such as Gurol and Lagasio (20210, Arif et al. (2021), Manita et al. (2018), El Khoury et al. (2021), Maama (2021), and Injeni et al. (2021).

In addition, this study used a unique approach to examining the existing gaps. First, ESGD index comprising 30 mandatory disclosures items adapted from NSE ESGD index and CMA code (2015) was adapted. Secondly, the moderating effect of CMA code (2015) was examined to establish its effect on ESGD. In addition, the study controlled for firm size. Lastly, unlike many previous ESGD studies with relatively shorter periods, this study used 9 years firm observations from 2013 to 2021 for all the listed firms within that period.

2.5 Conceptual Framework

Sekaran and Bougie (2016) describes a conceptual framework as representation of interconnections between the study variables. The conceptual framework proceeds to illustrate logical relationship on the cause-effect among the identified variables under study (Kothari, 2009). The moderating variable significantly affects the association between the dependent and independent variables (Dawson, 2013). The effect of moderating variable alters the strength and/or the direction of the interrelationship between the dependent and independent variable. ESGD makes the dependent variable for the study. In particular, the variable will be examined by developing an index. The ESGD index will present scores that would be used to compare actual items disclosed to the maximum possible items in the index. The independent variables in the study will try to explain heterogeneity of ESGD observed across periods among the firms. Specifically, the independent variables are: firm characteristics and corporate governance. The firm characteristic encompasses profitability and financial leverage while corporate governance encompasses board size, board independence, and gender diversity in board. The third variable is a moderating variable identified as CMA code (2015). Lastly, the study identified firm size as a control variable for the study. Figure 2.1 below presents the relationships envisioned among the study variables.

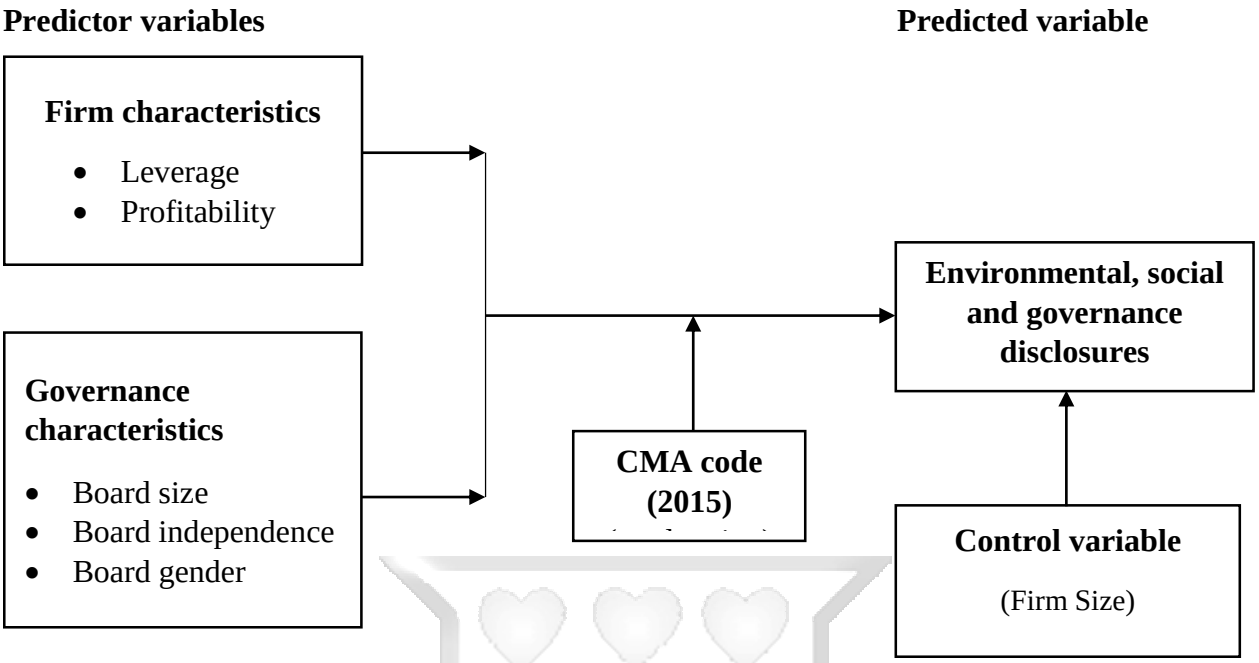

Figure 2.1 Conceptual Framework

2.5.1 Operationalization of the Variables

This section will provide details on how the variables under the current study will be measured with their respective supporting literature and theory. The variables are classified as follows: ESGD, firm characteristics, governance characteristics, moderating factor, and control variables. Table 2.2 provides an overview of how the key variables in the study are operationalized.

Table 2.2 Operationalization of Variables

Variable	Abbreviation	Measurement	Supporting Literature	Supporting theory
Independent				
Leverage	LEV	Debt to Equity	Mooneeapen (2022)	Institutional
Profitability	ROA	Net income to Total Assets	Maama (2021)	Institutional
Board Size	BS	Number of board members	Balogh et al. (2022)	Agency
Board Independence	BI	Proportion of independent non-executive directors in the board	Mbithi et al. (2023)	Agency
Board Gender	BG	Proportion of women in the board	Balogh et al. (2022)	Agency
Moderating				
CMA code (2015)	CMA	1 if the CMA code (2015) was	Mbithi et al. (2023)	Institutional

		operational and 0 if not		
Control				
Firm size	FS	Natural logarithm of the total assets	Mathuva et al. (2017)	Legitimacy
Dependent				
ESG disclosure	ESGD	Content analysis using an ESG index (appendix 2)	NSE (2021) & CMA (2015)	Legitimacy

2.6 Chapter Summary

The chapter presents the relevant literature review for the study. The following theoretical perspectives are discussed: legitimacy theory, agency theory and institutional theory. Prior disclosure studies commonly used these theories to understand disclosures motives whilst acknowledging potential conflicting motives among stakeholders. Legitimacy theory posits that firms align their values with societal norms to gain approval and resources. Agency theory focuses on the relationship between principals and agents, emphasizing the role of governance in addressing conflicts of interest. Lastly, institutional theory highlights the influence of external factors on organizational behaviour, such as regulatory pressures. The ESGD empirical literature highlights varied associations regarding the correlation between firm characteristics (profitability and leverage), governance characteristics (board size, board independence and board gender), and ESGD.

CHAPTER THREE

RESEARCH METHODOLOGY

The research methodology chapter outlines the techniques used by the researcher. The chapter contains the following: research philosophy, research design, population and sampling, data collection method, data analysis, research quality and ethical issues in research**.** According to Kothari (2009), it is important to adopt an appropriate research methodology that effectively explains procedures in a particular study. The suitability of the selected research design and research philosophy is discussed. In addition, the data collection methods and data analysis are elaborated.

3.1 Research Philosophy

The study was anchored on ontological research philosophy perspective. Baikie (1993) explains that ontology entails study or science of being. The study explored the nature of reality through observation and measurement. Bryman and Bell (2011) categorize ontology into either objectivism/positivism or subjectivism. Objectivism applies scientific methods in studying social reality (Bryman & Bell, 2011). Moreover, positivism gives objectivity since the researcher only interprets data outcomes (Saunders, Lewis & Thornhill, 2009). On the other hand, subjectivism uses individual entity experience because it holds that knowledge is subjective and relative. Since data was available to achieve the study objectives, positivism research philosophy was used.

3.2 Research Design

A research design is used to coherently and logically explain a research phenomenon (Saunders et al. 2009). The study adopted descriptive research design. The design was considered appropriate because the study involved an examination of the determinants which explains the environmental, social and governance disclosures by listed companies in Kenya. In addition, the design enabled the researcher to get information regarding ESGD and explain its relationship with the studied variables. Mbithi et al. (2023) and Mathuva et al. (2017) used descriptive research design in their study on disclosure by companies listed on the NSE. In this study, an analysis was conducted on the association that existed between ESGD and possible determinants: profitability, leverage, board size, board independence and board gender.

3.3 Population and Sampling

A study population refers to the totality of the targeted individuals, events or objects with common characteristics (Saunders et al., 2009). In a census, all units are studied (Kothari, 2009). The study targeted the entire population of the NSE firms listed from the year 2013 to year 2021. Appendix IV provides names of NSE companies as of 31st December 2021. The sample was made up of 48 listed firms within the study period (2013-2019). The breakdown of the total firms (Table 3.1) was used to establish the total number of firms that were studied.

Table 3.1 Nairobi Securities Exchange (NSE) Listed Firms Breakdown

Listed firms in the sample

	No. of firms	*Firm years (2013-2021)*
Panel A: Sample selection		
Total listed firms	62	558
Less: Delisted firms	(5)	(45)
Less: Suspended firms	(5)	(45)
Less: Missing reports	(4)	(36)
Final sample	48	432
Panel B: Sectoral representation		
Sector	**No. of firms**	
Agricultural sector	6	
Automobiles and Accessories sector	1	
Banking sector	10	
Commercial and services sector	13	
Construction sector	5	
Energy and petroleum sector	4	
Insurance firms' sector	6	
Investment sector	5	
Investment services	1	
Manufacturing and Allied sector	8	
Telecommunication sector	1	
Real Estate Investment Trust	1	
Exchange Traded Funds sector	1	
Total	62	

3.4 Data Collection Method

The audited annual reports were used to extract secondary data for this study. An excel spreadsheet was created with all variables of interest put in columns. Separate tabs were used to score the ESGD index with the 30 identified items examined from the audited annual reports. A disclosures index refers to detailed list of specific items expected to be disclosed (Hassan, 2012). The use of

disclosures index was originally introduced by Cerf (1963), and has ever since become popular among researchers. The disclosures index may comprise of mandatory and voluntary disclosed items (Kribat et al., 2013). The ESGD index developed extracted information from the CMA code (2015) and the NSE guidelines on ESGD. The disclosures index may extract information from various statements (annual reports, interim reports and sustainability reports) among other reliable sources (Kribat et al., 2013). The ESGD index was thoroughly reviewed and validated by research support assistant.

3.5 Data Analysis

Sekaran and Bougie (2016) proposed a sequential process for handling collected data, starting with editing and coding. The study used Stata version 17 software for the statistical analysis. Secondary data was cleaned, coded, classified and sorted before it was analyzed. Thereafter, the study used descriptive statistics to conduct a univariate analysis for data summary and description. Further descriptive statistics such as central tendencies were used to provide data insights. Kothari (2009) suggests usefulness of panel data regression analysis. Since the annual reports provides panel data, panel data regression model was considered ideal in analyzing the data. The ESGD index scores were regressed against the study independent variables. The significance of the study variables was established using inferential statistics such as p-values and analysis of variance (ANOVA) from the regressed summary output. Hsiao (1985) posit that panel data provides efficiency in the estimates and eliminates biases that may arise from individual effects.

Regression model used in testing the first and the second study objective is presented below:

$$ESGD = \beta_0 + \beta_1 LEV + \beta_2 ROA + \beta_3 BS + \beta_4 BI + \beta_5 BG + \beta_6 FS + \mu_t$$

Where ESGD = Environmental, Social, and Governance Disclosures, LEV is leverage, ROA is profitability, BS represents the board size, BI represents board independence, and BG represents board gender. β_0 represents the intercept, β_1, β_2, β_3, β_4 and β_5, and β_6 are the corresponding coefficients for each respective independent variable and the control variable.

The third study objective on the moderating effect of the CMA code (2015) on the ESGD determinants was conducted. The analysis was similar to Kim et al. (2001), where the regression model was adjusted to include both the independent variable and the moderating variable. The

regression model used with the moderating variable, when the CMA code (2015) was considered is as follows:

$$ESGD = \beta 0 + \beta_1 LEV*CMA + \beta_2 ROA*CMA + \beta_3 BS*CMA + \beta_4 BI*CMA + \beta_5 BG*CMA + \beta_6 FS + \mu_t$$

Where; ESGD = Environmental, Social, and Governance Disclosures, with each independent variable represented by LEV, ROA, BS, BI, BG and FS respectively. Here, the CMA code (2015) is a dichotomous variable, taking the value of 1 when the CMA code (2015) was applicable and value of 0 when not applicable. The adjusted coefficient of determination (R^2) changes was used to accept or reject the moderating effect of the CMA code (2015).

The regression models were tested to assess their goodness of fit. The significance of the independent variables was established by looking at the p-values with significance level set at 0.10, 0.05 and 0.01. The null hypothesis is rejected when the p-value is equal to or less than the p-value otherwise it is accepted. Additionally, the study checked for multicollinearity between the predictor variables to avoid misleading outcomes, unreliable estimates, and inaccurate R^2 values similar to Winship and Western (2016). York (2012) observes that multicollinearity exists where correlation between variables exceeds 0.75. In conclusion, the following tests will be performed: Goodness of fit, correlation, linearity, homoscedasticity, normality, autocorrelation, and Hausman test.

3.6 Research Quality

Research validity evaluates the effectiveness of data collection instruments to support generalizability (Saunders et al., 2009). Research validity was critical to this study. As such, internal validity was performed to ensure the variables satisfied this condition. The next concern was the research reliability. Saunders et al. (2009) describes research reliability as an assessment for consistency in the research findings if a similar methodology was used. The study's research reliability was enhanced by the data collected from audited reports. This means that other researchers may access the same data and replicate the study.

3.7 Ethical Issues in Research

Confidentiality is paramount and an ethical concern for research studies. The research ensured anonymity of the data collected from the audited annual reports. This was achieved by assigning

unique codes for company identification during the data analysis stage. Unethical behavior was avoided throughout the handling and interpretation of the data. Also, relevant research authorization clearance certificates were obtained from Strathmore University (Appendix I) and the National Commission for Science, Technology and Innovation (Appendix II) to ensure compliance. In addition, external sources were appropriately acknowledged by citations using American Psychological Association (APA) 7th edition . Finally, plagiarism was observed for academic integrity by checking the scores using Turnitin software.

3.8 Chapter Summary

This chapter provides details on the research methodology used in the study. The study was anchored on ontological research philosophy (positivism approach), focusing on the science of existence. The research design adopted for the study is descriptive and correlational to explain the determinants of ESGD by listed firms in Kenya. The study targeted an entire population of listed firms in Kenya from 2012 to 2021. Since the all firms were considered within the study period, sampling was unnecessary. The data was collected from the published audited annual reports. In addition, panel data regression analysis was used to establish the association between the study variables, with the significance of variables determined through inferential statistics such as the p-values. The chapter details how the research validity and reliability are ensured through internal validity checks and consistency in data collection methods. The study reliability was enhanced by utilizing data from audited reports, facilitating potential replication by other researchers. The confidentiality is maintained by anonymizing data collected from the audited annual reports. Finally, the Ethical clearance certificate was obtained from Strathmore University and the research permit obtained from the National Commission for Science, Technology and Innovation.

CHAPTER FOUR

PRESENTATION AND INTERPRETATTION OF FINDINGS

4.1 Introduction

The study examined the determinants of ESGD by NSE listed companies. This chapter shows the study results and discussions from the analyzed annual audited reports data for the respective NSE listed companies. The data was obtained from the CMA website as well as respective companies' websites and the African Financials Website. The study findings are presented in the following subheadings: sample representation, descriptive statistics and analysis, inferential statistics, regression analysis and ends with chapter summary. The study scope entailed NSE listed companies for the period before (from 2013 to 2014) and after (from 2015 to 2021) the issuance of the CMA code in 2015.

4.2 Sample Representation

The data collection did not achieve the expected census for the listed companies. This is because, 8 companies were either suspended or delisted while 5 companies were listed during the study period. Thus, secondary data was collected from 48 listed companies for each of the nine-years yielding a response rate of 79%. The response rate was considered sufficient for further analysis and publication of the study findings.

Figure 4.1 Graphical Presentation of Sectors with their Percentage Representation

Category	Total	Percentage
Agricultural	6	9.70%
Automobiles and accessories	1	1.60%
Banks	10	16.10%
Commercial and services	13	21.00%
Construction sector	5	8.10%
Energy and petroleum	4	6.50%
Insurance firms	6	9.70%
Investment companies	5	8.10%
Investment Services firms	1	1.60%
Manufacturing and Allied	8	12.90%
Telecommunication firms	1	1.60%
Real Estate Investment Trust	1	1.60%
Exchange Traded Funds	1	1.60%
Total	**62**	**100%**

The study targeted all firms registered as of December 31st 2021 with industry breakdown as shown in Figure 4.1 above. Hence, sampling was not needed. Figure 4.1 shows the breakdown of the listed firms. The findings in Figure 4.1 above show that financial services –banks (16.1%, N = 10) and insurance firms (9.7%, N = 6) accounted for a quarter (25.8%) of the NSE listed firms. Similarly, the commercial and services sector alone comprised nearly a fifth of the NSE listed firms (21%, N = 13). Lastly, manufacturing and allied (12.9%, N=8), and agricultural (9.7%, N=6) jointly accounted for a fifth of the NSE listed firms (22.6%, N=14). This illustrates that these 5 sectors are the dominant players, accounting for the majority (69.4%, N=43) of the NSE listed firms.

4.3 Descriptive Statistics and Analysis

In this section, a discussion of the descriptive statistics for dependent, independent, moderating and control variables is presented.

4.3.1 Descriptive Statistics on ESGD

Table 4.1 presents a breakdown of the dependent variable categorized into: Environmental, Social, Governance and ESGD. According to the findings, ESGD accounted for 81.9% of the disclosures by the listed NSE firms. According to the findings, governance disclosures is the highest at an average of 89.6% closely followed by social disclosures at 87.5% and lastly environmental disclosures at 59.3%. While the finding implies that the selected variables largely explain the determinants of ESGD, it is a concern that environmental disclosures are still lagging far behind compared to social and governance disclosures. In addition, this finding shows that social and governance disclosures receive greater level of disclosures. This finding suggests that NSE listed firms should devote attention towards improving environmental disclosures to support addressing environmental concerns.

Table 4.1 Summary Descriptive Statistics on ESGD

Disclosure Category	Mean	Std. dev.	Min	Max	N
Environmental	0.5926	0.1478	0.2500	0.7500	432
Social	0.8750	0.1419	0.4286	1.0000	432
Governance	0.8957	0.1181	0.5263	1.0000	432
ESGD	0.8192	0.1004	0.5333	0.9333	432
St. Dev.-Standard deviation					

4.3.2 Descriptive Statistics on Independent, Moderating, and Control variables

The descriptive analysis was conducted on all the independent, moderating, and control variables. The results are summarized in table 4.2 below.

Table 4.2 Summary of Descriptive Statistics for Independent, Moderating and Control Variable

Variable	N	Mean	Std. Dev.	Min.	Max.
LEV	432	0.475	1.944	-17.189	22.677
ROA	432	0.026	0.120	-1.221	0.367
BS	432	9.009	3.443	3.000	25.000
BI	432	0.486	0.225	0.080	1.000
BG	432	0.214	0.144	0.000	0.600
CMA	432	0.778	0.416	0.000	1.000
FS	432	7.486	0.962	5.027	9.657

Std. Dev=Standard deviation

According to the findings, the findings reported an average debt-equity (LEV) of 47.5% over the period 2013-2021. This illustrated that listed firms in Kenya have a near balanced proportion of debt-equity capital to finance their activities. In regards to profitability (ROA) listed firms in Kenya reported an average return on asset of 2.6% over the period 2013-2021. This illustrated that listed firms in Kenya generated relatively lower returns relative to the amount of assets used. According to the board size findings, listed firms in Kenya reported an average board size (BS) of 9 members over the period 2013-2021. This illustrated that listed firms in Kenya have relatively huge board sizes. The findings also showed that listed firms in Kenya reported an average board independence (BI) of 48.6% over the period 2013-2021. This illustrated that the composition of executive and non-executive board members for listed firms in Kenya is almost balanced. Lastly, the findings on the average board gender (BG) for the listed firms in Kenya was 21.4% over the period 2013-2021. This shows that about a fifth of board gender comprised of females as opposed to a third gender rule stipulated by CMA code (2015). This illustrated that listed firms in Kenya are still predominantly made up of male gender. According to the findings, the moderating effect of CMA code (2015) on ESGD for the listed firms in Kenya reported an average of 77.8% over the period 2013-2021. This illustrates that CMA code (2015) covered most of the analyzed period.

4.4 Inferential Statistics

In this section, the diagnostic tests performed prior to multiple regression analyses are presented. In addition, the regression analysis for the research objectives is also presented.

4.4.1 Linearity Test

Linearity test was used to establish whether the relationship between the dependent variable and the independent variables is linear or non-linear. Gujarati and Porter (2011) posit that a linear relationship between the dependent variable and independent variables allows the use of multiple linear regressions. A non-linear relationship underestimates the coefficient of the regression results. The linearity of data suggests that, with each incremental change in an independent variable, the values of the dependent variable align in a straight line. Linearity was also checked for each independent variable using deviation from linearity tests. The deviation from linearity for the independent variables was greater than the significance level of 0.05. Thus, there was no violation of linearity for multiple regressions to be performed.

4.4.2 Homoscedasticity Test

Homoscedasticity test checks whether there is equal spread or equal variance in the residual variance of the period under observation (Gujarati & Porter, 2011). A good regression model should exhibit a constant variance in its residuals. The study tested for homoscedasticity using Test Glejser. According to Gujarati and Porter (2011), the null hypothesis of no homoscedasticity is rejected if the p-value is greater than 0.05. Based on the output coefficients for Test Glejser, the level of significance for the independent variables was greater than 0.05. This shows that the residuals from the regression model are homoscedastic thus a good fit. Further, Breusch-Pagan-Godfrey (Chi) test was conducted. The Chi test had a p-value of 0.000 which was significant at 0.05.

4.4.3 Normality Test

Normality tests were performed using skewness and kurtosis. Symmetric distribution has a value of zero (Gujarati & Porter, 2011). The findings of this test show the skewness of ESGD, environmental, social, and governance was -0.765, -0.332, -0.895, and -1.132 respectively. This indicated that the data is negatively skewed thus the data is fairly symmetrical. With regards to kurtosis, the null hypothesis of non-normality is rejected if the value is 3 (Gujarati & Porter, 2011). In addition, George and Mallery (2010) adds that kurtosis values ranging between -2 and +2 are enough proof for a normal distribution. The findings of this test show the coefficients of kurtosis with regard to ESGD, environmental disclosure, social disclosure, and governance disclosure was -0.110, -0.686, 0.208, and 0.803 respectively. This suggests that the variables are normally

distributed. Table 4.3 below gives a summary of the mean, standard deviations, minimum and maximum values for environmental disclosure, social disclosure, governance disclosure and ESGD.

Table 4.3 Skewness and Kurtosis for the ESGD

	Skewness		Kurtosis	
Variable	**Statistic**	**Std. Error**	**Statistic**	**Std. Error**
Environmental disclosure	-0.332	0.117	-0.686	0.234
Social disclosure	-0.895	0.117	0.208	0.234
Governance disclosure	-1.132	0.117	0.803	0.234
ESGD	-0.765	0.117	-0.11	0.234

The findings of kurtosis and skewness illustrated that ESGD exhibited a normal distribution curve thus allowed for parametric analysis. Further, the unit root test was used to test for stationarity. According to Gujarati and Porter (2011), the use of ordinary least squares relies on the stochastic process being stationary since its non-stationarity can produce invalid estimates. All the unit root results indicated the absence of a unit root ($p < 0.05$). Since the p-value was significant at the 0.05 level, the series for ESGD was stationary.

4.4.4 Autocorrelation Test

The Durbin-Watson statistic checks for autocorrelation or serial correlation whose existence results to incorrect standard errors. Similar studies such as Waleed (2014) used this test to check for autocorrelation. The null hypothesis for autocorrelation test is no autocorrelation in the residuals. The alternative hypothesis is that the residuals are autocorrelated. The null hypothesis cannot be rejected if the Durbin-Watson statistic is equal or close to 2 (Gujarati & Porter, 2011). The Durbin-Watson statistic was 0.289. This implied that there was no autocorrelation.

4.4.5 Multicollinearity Test

The independent variables in a multiple regression may experience autocorrelation overtime (Mills, 2014). The multicollinearity was checked by use of Variance Inflation Factors (VIFs) and tolerance levels. A tolerance close to 1 means that there is little multicollinearity, whereas a value close to 0 is an indicator for multicollinearity problem (Curto & Pinto, 2007; Schieren & Carr, 1982). The VIF indicates how much the variance of the coefficient estimate is being inflated by multicollinearity. The largest VIF among the independent variables was used to check for the

severity of the multicollinearity problem. According to Hair, Ringle, and Sarstedt (2013), when the VIF is greater than 5 (tolerance < 0.20), then the regression coefficients are poorly estimated. Table 4.4 below reports the findings of the multicollinearity test using VIFs and level of tolerance values. The findings in Table 4.4 revealed that the VIFs for the independent variables ranged between 2.078 and 1.079. According to the findings, the tolerance values for the independent variables ranged between 0.547 and 0.926. Therefore, both the VIFs and tolerance values showed that multicollinearity was not adverse when interpreting the findings of the multivariate analysis.

Table 4.4 Results of the Multicollinearity Check Using Tolerance and VIFs

Variable	Tolerance (1/VIF)	Variance Inflation Factor (VIF)
LEV	0.547	1.829
ROA	0.748	1.337
BS	0.732	1.367
BI	0.864	1.157
BG	0.926	1.079
CMA	0.848	1.180
FS	0.738	1.356

Similarly, correlation matrix test was also considered to check the direction and extent of linearity as well as multicollinearity on the independent variables. According to Gujarati and Porter (2011), multicollinearity exists if the correlation coefficient is greater than 0.800. It was observed that the highest correlation coefficient was 0.495 which was less than 0.800 implying that the independent variables do not have multicollinearity problem (Table 4.5 below).

4.4.6 Correlation Statistics

Correlation test measures linear statistical relationship between two variables. The study used spearman's correlation 'ρ' (rho) to establish correlation (strength and direction) between ESGD determinants and ESGD by NSE listed firms. Gujarati and Porter (2011) recommend the use of spearman's correlation coefficient in checking variables with continuous, discrete and ordinal characteristics. The results for the test are presented in table 4.5 below.

Table 4.5 Spearman's rho Correlation

Variable		ESGD	LEV	ROA	BS	BI	BG	CMA	FS
ESGD	Correlation	1.000	0.041	.138**	.249**	-.149**	.396**	0.021	.281**
	Sig. (2-tailed)		0.391	0.004	0.000	0.002	0.000	0.661	0.000

LEV	Correlation	0.041	1.000	-0.076	.099*	-.127**	0.010	0.028	.272**
	Sig. (2-tailed)	0.391		0.117	0.040	0.008	0.840	0.561	0.000
ROA	Correlation	.138**	-0.076	1.000	.272**	-0.067	0.023	-.185**	-0.014
	Sig. (2-tailed)	0.004	0.117		0.000	0.165	0.638	0.000	0.773
BS	Correlation	.249**	.099*	.272**	1.000	-.283**	.277**	0.017	.495**
	Sig. (2-tailed)	0.000	0.040	0.000		0.000	0.000	0.720	0.000
BI	Correlation	-.149**	-.127**	-0.067	-.283**	1.000	0.002	-0.022	-.212**
	Sig. (2-tailed)	0.002	0.008	0.165	0.000		0.972	0.654	0.000
BG	Correlation	.396**	0.010	0.023	.277**	0.002	1.000	0.044	.226**
	Sig. (2-tailed)	0.000	0.840	0.638	0.000	0.972		0.360	0.000
CMA	Correlation	0.021	0.028	-.185**	0.017	-0.022	0.044	1.000	0.058
	Sig. (2-tailed)	0.661	0.561	0.000	0.720	0.654	0.360		0.232
FS	Correlation	.281**	.272**	-0.014	.495**	-.212**	.226**	0.058	1.000
	Sig. (2-tailed)	0.000	0.000	0.773	0.000	0.000	0.000	0.232	
N	432	432	432	432	432	432	432	432	432

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

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

According to the findings in Table 4.5, the maximum coefficient was between board size and firm size (0.495), which was still below 0.8. This ruled out multicollinearity problem among the independent variables.

4.4.7 Hausman Test

The Hausman test is conducted to examine endogeneity in a panel data. It helps in choosing an appropriate model for consistent results. The model selection is either a fixed effects model or random effect (Gujarati & Porter, 2011). The null hypothesis for Hausman test is that fixed effects model is the appropriate model, while the alternative hypothesis is that random effect is the appropriate model. Table 4.6 below presents the results for the Hausman test. Since the p-value of the Hausman test is less than 5%, we do not reject the null hypothesis and therefore the random effect is the appropriate model. NB: If Prob > chi2 is < 0.05 use fixed effect model, otherwise use random effect model. The study used fixed effect model with the results shown in Table 4.6 below.

Table 4.6 Fixed Effect Regression Output for Objective 1 and 2 in Model 2

Dependent Variable	ESGD	
Independent variables	Model 1	Model 2
LEV	0.0014***	0.0011***
	(0.0030)	(0.0030)
ROA	0.0448**	0.0383**
	(0.0414)	(0.0419)
BS	0.0045***	0.0052***
	(0.0014)	(0.0015)
BI	0.0192**	0.0221**
	(0.0207)	(0.0208)
BG	0.2092**	0.2171**
	(0.0307)	(0.0313)
FS		0.0072***
Constant	0.7342**	0.7812**
	(0.0195)	(0.0392)
Observations	432	432
R-squared	0.2077	0.2113
Adjusted R-squared	0.195	0.194
F	15.88	12.56
RMSE	0.0901	0.0902
Control variables	No	Yes
Interaction terms	No	No

Parentheses; *** p<0.01, ** p<0.05, * p<0.1

Table 4.6 shows the results of the association between (dependent variable) ESGD, independent variables (leverage, profitability, board size, board independence and board gender) and control variables (firm size). The explanatory power of R squared indicated that 21.1% of change in ESGD is explained by the change in the independent variables and the control variable. Regarding the independent variable, the coefficient of leverage (LEV) is positive and statistically significant at 1% level (β=0.0011, $p<0.01$). This implies that, 1 unit change in leverage increases ESGD by 0.0011. Thus, leverage influence the ESGD among the sampled firms in Kenya. Secondly, the coefficient of profitability (ROA) is positive and statistically significant at 5% level (β=0.0383, $p<0.05$). This implies that, 1 unit change in profitability increases ESGD by 0.0383. Thus, profitability influences the ESGD among the sampled firms in Kenya.

Thirdly, the coefficient of board size (BS) is positive and statistically significant at 1% level (β=0.0052, $p<0.01$). This implies that, 1 unit change in board size increases ESGD by 0.0052. Thus, board size influences the ESGD among the sampled firms in Kenya. Fourthly, the coefficient of

board independence (BI) is positive and statistically significant at 5% level (β=0.0221, p<0.05). This implies that, 1 unit change in board size increases ESGD by 0.0221. Thus, board independence influences the ESGD among the sampled firms in Kenya. Fifthly , the coefficient of board gender (BG) is positive and statistically significant at 5% level (β=0.2171, p<0.05). This implies that, 1 unit change in board size increases ESGD by 0.2171. Thus, board gender influences the ESGD among the sampled firms in Kenya. Lastly , the coefficient of the control variable, in particular firm size (FS) is positive and statistically significant at 1% level (β=0.0072, p<0.01). This implies that, 1 unit change in board size increases ESGD by 0.0072. Thus, firm size influences the ESGD among the sampled firms in Kenya.

4.5 Fixed Effect Regression Output with the Moderating Variable for Objective 3

A moderator variable, CMA code (2015) was introduced to the regression model to determine the change in the adjusted R^2 (i.e., from 2015 to 2021) and when CMA code (2015) were not in place (i.e., from 2013 to 2014). The regression analysis was done for each predictor variable and the predicted variable to establish the individual moderating effect of each ESGD determinant. Aldwin (1994), Holmbeck (1997) and Kim et al. (2001) posited that if the change in the coefficient of determination (R^2) for the interaction variable is positive and significant, then it is said to have a moderating effect, and thus, the moderation hypothesis is supported. The null hypothesis of no moderation was tested by regressing each interaction variable with ESGD. Regression analysis was performed to determine the effect of CMA Code (2015) on the relationship between the independent variables and ESGD. Table 4.7 presents the results of the moderation effect on the predictor variables.

Table 4.7 Fixed Effect Regression Output for Objective 1 and 2 in Model 4

Dependent Variable	ESGD			
Independent variables	Model 1	Model 2	Model 3	Model 4
LEV	0.0014***	0.0011***	0.0012***	-0.0115***
	(0.0030)	(0.0030)	(0.0030)	(0.0077)
ROA	0.0448**	0.0383**	0.0394**	0.1659
	(0.0414)	(0.0419)	(0.0420)	(0.1163)
BS	0.0045***	0.0052***	0.0052***	0.0066***
	(0.0014)	(0.0015)	(0.0015)	(0.0033)
BI	0.0192**	0.0221**	0.0221**	0.0525**
	(0.0207)	(0.0208)	(0.0208)	(0.0439)
BG	0.2092**	0.2171**	0.2168**	0.2941*
	(0.0307)	(0.0313)	(0.0313)	(0.0700)
FS		0.0072***	0.0073***	-0.0321**

		(0.0053)	(0.0053)	(0.0147)
CMA			0.0061**	0.0112**
			(0.0113)	(0.0122)
LEV*CMA				0.0186**
				(0.0169)
ROA*CMA				0.0278**
				(0.0150)
BS*CMA				0.0045**
				(0.0129)
BI*CMA				-0.0194**
				(0.0112)
BG*CMA				0.0127**
				(0.0113)
FS*CMA				0.0251**
				(0.0152)
Constant	0.7342**	0.7812**	0.7779**	0.8736*
	(0.0195)	(0.0392)	(0.0398)	(0.0975)
Observations	432	432	432	432
R-squared	0.2077	0.2113	0.2118	0.2364
Adjusted R-squared	0.195	0.194	0.193	0.203
F	15.88	12.56	11.31	7.105
RMSE	0.0901	0.0902	0.0902	0.0897
Control variables	No	Yes	Yes	Yes
Interaction terms	No	No	No	Yes

Parentheses; *** p<0.01, ** p<0.05, * p<0.1

The study predicted that the CMA code (2015) moderates the firm specific and governance characteristics. Table 4.7 above indicates the finding of the fourth model. The R squared of the regression model is 23.6%. In comparison with the main regression model (direct relationship) in Table 4.6, which was 21.1%, this implies that R squared improved from 21.1% to 23.6%. Thus, CMA code (2015) moderates the relationship between firm characteristics (leverage and profitability), governance characteristics (board size, board independence and board gender) and ESGD. Regarding the interaction between CMA code (2015) and leverage (LEV*CMA) has positive and significant effect on ESGD at 5%. This indicates that, CMA code (2015) has a moderating effect on leverage and ESGD. However, the coefficient of leverage strengthened after moderation. This suggests that, the influence of leverage on ESGD improved after implementation of CMA code (2015).

Secondly, the interaction between CMA code (2015) and profitability (ROA*CMA) has positive and significant effect on ESGD at 5%. This indicates that, CMA code (2015) has a moderating

effect on profitability and ESGD. However, the coefficient of profitability improved after moderation. This suggests that, the influence of profitability on ESGD strengthened after implementation of CMA code (2015). Thirdly, the interaction between CMA code (2015) and board size (BS*CMA) has positive and significant effect on ESGD at 5%. This indicates that, CMA code (2015) has a slight moderating effect on board size and ESGD at the same confidence level. Fourthly, the interaction between CMA code (2015) and board independence (BI*CMA) has negative and significant effect on ESGD at 5%. This indicates that, CMA code (2015) has a moderating effect on board independence and ESGD. However, the coefficient of board independence weakened after moderation. This suggests that, the influence of board independence on ESGD declined after implementation of CMA code (2015). Lastly, the interaction between CMA code (2015) and board gender (BG*CMA) has positive and significant effect on ESGD at 5%. This indicates that, CMA code (2015) has moderating effect on board gender and ESGD. However, the coefficient of board gender weakened after moderation.

4.6 Chapter Summary

The chapter presents the presentations of the research findings. The data collection process yielded a response rate of 79%, with 48 listed companies providing data for each of the nine years analyzed. The breakdown of the firms across sectors is detailed, with financial services, commercial services, manufacturing, and agriculture being the dominant sectors. Environmental disclosures lag behind social and governance disclosures, indicating a need for improvement in environmental disclosures. A positive association was established between the independent variables (board size, board independence, board gender, profitability and leverage) with environmental, social, and governance disclosures. The moderating effect of the CMA code (2015) was established as positive. This is because, there was an improvement on the adjusted R-squared. The next chapter presents the conclusions and recommendations for the study.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter provides a summary on the findings from the study and outlines the conclusions thereof. The summary of findings is presented in the order of the research objectives specified in chapter one. Finally, the chapter provides recommendations and possible areas of further research based on the study findings.

5.2 Discussion of the Findings

The first objective tested the effect of firm characteristics (leverage and profitability) on ESGD by listed companies in Kenya. Specifically, it was observed that leverage (LEV) is positive and statistically significant at 1% level. This observation contradicts the findings of Maama (2021) study which observed that leverage is negatively associated with ESGD. Furthermore, profitability (ROA) is positive and statistically significant at 5% level . This observation agrees with Balogh (2022) finding that profitability is positively associated with ESGD. However, Maama (2021) makes a dissimilar finding that profitability is negatively associated with ESGD.

The second objective tested the effect of governance characteristics (board size, board independence and board gender) on ESGD by listed companies in Kenya. The findings showed that board size (BS) is positive and statistically significant at 1% level. This observation is similar to Gurol and Lagasio (2021) and El Khoury et al. (2021). Conversely, this finding disagrees with Amran et al. (2014) who observed no correlation between board size and ESGD. Next, the study found out that board independence (BI) is positive and statistically significant at 5% level. The observation agrees with Arayssi (2020), Arif et al. (2021) and Gurol and Lagasio (2021). Next, the findings showed that board gender (BG) is positive and statistically significant at 5% level. This finding refutes the finding by Manita et al. (2018) who observed that the relationship was insignificant. However, the finding supported a similar finding by Arayssi (2016). Next, firm size (FS) was observed to have a positive and statistically significant controlling effect at 1% level.

Lastly, the third objective tested the moderating effect of CMA code (2015) on the ESGD determinants. The study observed that the R-squared (r^2) of the regression model with moderating effect was 23.6%. On the other hand, when moderation was not considered, the R-squared was

21.1%. Thus, the improved R-squared when moderation is considered (from 21.1% to 23.6%) suggests that CMA code (2015) moderates the association between firm specific, governance and ESGD. Regarding the interaction between leverage and CMA code (2015), LEV*CMA is positive and statistically significant at 5% implying that the effect of leverage on ESGD improved after CMA code (2015) was implemented.

Secondly, interaction between profitability and CMA code (2015) (ROA*CMA) is positive and statistically significant at 5% implying that the effect of profitability on ESGD improved after CMA code (2015) was implemented. Thirdly, the interaction between board size and CMA code (2015) (BS*CMA) is positive and statistically significant at 5% indicating that the effect of board size on ESGD strengthened after CMA code (2015) was implemented. Fourthly, the interaction between CMA code (2015) and board independence (BI*CMA) has negative and significant effect on ESGD at 5%. This suggests that, the influence of board independence on ESGD declined after implementation of CMA code (2015). Lastly, the interaction between CMA code (2015) and board gender (BG*CMA) has positive and significant effect on ESGD at 5% implying that board gender improved after moderation.

5.3 Conclusions

The study reviewed extant literature and disclosures theories and established association between ESGD and five predictor variables. Specifically, the predictor variables under investigation were leverage, profitability, board size, board independence and board gender. The study found that ESGD by NSE firms is positively influenced by leverage (debt-to-equity), profitability (return on assets), board size (number of board members), board independence (proportion of non-executive directors in the board), and board gender (proportion of female board members in the board). Further, the study showed there was a moderating effect of CMA code (2015) on the association between ESGD determinants and ESGD. Generally, the ESGD disclosures improved after the implementation of CMA code (2015).

5.4 Recommendations

The study suggests several recommendations. First, the NSE listed firms should provide higher quantity and quality of ESGD to its stakeholders. Specific focus should be emphasized on the quality. Second, the study found a relatively higher ESGD by listed companies in Kenya. However, the environmental disclosures were relatively lower compared to social and governance

disclosures. Despite the introduction of CMA code (2015), one of the reasons attributable to lower environmental disclosures is lack of specific guidelines for environmental disclosures by companies. The study found that the audited annual reports provided scanty environmental disclosures probably due to the nature of disclosures required. While the current environmental disclosures are recognized, the concerned regulators should create sensitization for the listed firms to comply with ESGD. The study recommends fast tracking the development of a regulatory framework on environmental disclosures tailored for listed companies to improve their environmental disclosures. The environmental disclosures can be integrated with financial disclosures in companies' annual reports for comprehensive analysis.

Lastly, the findings on the firm characteristics (leverage and profitability) and governance characteristics (board size, board independence and board gender) showed the need for firms focus on these variables to realize improved ESGD. For example, listed companies should aim at improving their bottom line (profits) for improved ESGD. In addition, the governance characteristics should be observed due to their positive influence on ESGD. The moderating effect of CMA code (2015) improved ESGD. It's recommended that specific regulations on ESG are advocated to strengthen ESGD. Thus, the government and relevant agencies should ensure its effective implementation to enhance the disclosures.

5.5 Contribution to Knowledge

The study makes some contributions to knowledge. The study analyzed all the NSE listed companies in a developing economy context. The study also contributes to literature by highlighting the contribution of specific governance and firm characteristics on ESGD unlike most studies which examined influence of composite governance and firm characteristics. This helps in avoiding generalizing the composite influence on ESGD by examining the specific factors. The study also examined the moderating effect of CMA code (2015) on ESGD by NSE listed firms. The study found that regulatory frameworks strengthen ESGD discourse. Thus, the study establishes the need for the Capital Markets Authority in Kenya to improve on the existing ESGD guideline by making ESGD mandatory. Specifically, an enforceable environmental disclosures guideline is necessary to address the lag on environmental disclosures. Enforcing environmental disclosures will make ESGD more comprehensive.

5.6 Limitations and Suggestions for Further Research

The study majorly relied on NSE listed companies audited annual reports as single source of environmental, social and governance disclosures. Other studies may examine other ESGD avenues such as social media (e.g., Meta (Facebook) and X (Twitter)), traditional media (e.g., television, radio and print media) and company website, internet and other forms of company publications. The study designed an environmental, social and governance index in determining ESGD by NSE companies. However, such indexes have limitations. Further studies may consider other index scoring techniques such as word counts or graphics to establish ESGD. Lastly, other studies may use a weighted ESGD index and corroborate the findings with primary data.

5.7 Chapter Summary

The chapter presents the conclusions and recommendations for the study. The study identified significant and positive associations between leverage, profitability, board size, board independence and board gender on ESDG. Noteworthy, the environmental disclosures were the least disclosed items in the audited annual reports. The moderating effect of CMA code (2015) was established to have a positive effect on ESGD. The study recommends for enhanced ESGD, particularly environmental disclosures. Development of specific guidelines and regulatory framework for the disclosures is advocated for. The study findings underscore the significance of regulatory frameworks in shaping ESGD. Suggestions for further research include exploring alternative sources of ESGD, different index scoring and use of primary data to corroborate study findings.

REFERENCES

Al-Najjar, B. & Abed, S. (2014). “The association between disclosures of forward-looking information and Corporate Governance mechanisms: evidence from the UK before the financial crisis period”. *Managerial Auditing Journal*, Vol. 29 No. 7, pp. 578-595.

Amran, A., Lee, S.P. & Devi, S.S., (2014). “The influence of governance structure and strategic corporate social responsibility toward sustainability reporting quality”. *Business Strategy and the Environment*, Vol. 23 No. 4, pp. 217-235.

Arayssi, M., Dah, M. & Jizi, M., (2016). "Women on boards, sustainability reporting and firm performance”. *Sustainability Accounting, Management and Policy Journal*, Vol. 7 No. 3, pp. 376-401.

Arayssi, M., Jizi, M. & Tabaja, H.H. (2020). "The impact of board composition on the level of ESG Disclosures in GCC countries". *Sustainability Accounting, Management and Policy Journal*, Vol. 11 No. 1, pp. 137-161.

Arif, M., Sajjad, A., Farooq, S., Abrar, M. & Joyo, A.S. (2021). "The impact of audit committee attributes on the quality and quantity of environmental, social and governance (ESG) disclosures". *Corporate Governance*, Vol. 21 No. 3, pp. 497-514.

Ashforth, B.E., & Gibbs, B.W. (1990). “The double-edge of organizational legitimation”. Organization *Science*, pp. 177–194.

Balogh, I., Srivastava, M. & Tyll, L. (2022). "Towards comprehensive corporate sustainability reporting: an empirical study of factors influencing ESG Disclosures of large Czech companies". *Society and Business Review*, Vol. 17 No. 4, pp. 541-573.

Barth, M. E., Cahan, S. F., Chen, L., & Venter, E. R. (2017). The economic consequences associated with integrated report quality: capital market and real effects. Accounting, Organizations and Society, 62, 43-64.

Bédard, J. & Gendron, Y. (2010). “Strengthening the financial reporting system: can audit committees deliver?”. *International Journal of Auditing*, Vol. 14 No. 2, pp. 174-210.

Bernardi, C., & Stark, A.W. (2018). Environmental, social and governance disclosures, integrated reporting, and the accuracy of analyst forecasts. *The British Accounting Review*, 50(1), 16-31.

Bidari, G. & Djajadikerta, H.G. (2020). “Factors influencing corporate social responsibility disclosures in Nepalese banks”. *Asian Journal of Accounting Research*, Vol. 5 No.2, pp. 209-222.

Bryman, A., & Bell, E. (2011). Business Research Methods (3rd Ed.). New York: Oxford University Press.

Cabeza-García, L., Fernández-Gago, R., & Nieto, M. (2018). Do board gender diversity and director typology impact CSR reporting? *European Management Review*, 15(4), 559-575.

Cadbury, S.A. (2000). The Corporate Governance agenda. Corp. Gov. Int. Rev. 2000, 18, 7–15.

Camodeca, R., Almici, A. and Sagliaschi, U. (2019). “Strategic information disclosures, integrated reporting and the role of intellectual capital”. *Journal of Intellectual Capital*, Vol. 20 No. 1, pp. 125-143.

Capital Markets Authority (CMA) (2015). CMA Handbook, CMA, Nairobi.

Cerf, A. R. (1963). Corporate Reporting and Investment Decisions. *The Journal of Business*, 36(4), 465-467.

Chaidali, P. P., & Jones, M. J. (2017). Its matter of trust: Exploring the perceptions of Integrated Reporting preparers. *Critical Perspectives on Accounting*, Vol. 48, pp. 1- 20.

Chouaibi, S. and Affes, H. (2021). "The effect of social and ethical practices on environmental disclosures: evidence from an international ESG data". *Corporate Governance*, Vol. 21 No. 7, pp. 1293-1317.

Cooray, T., Gunarathne, A. D. N., & Senaratne, S. (2020). Does Corporate Governance Affect the Quality of Integrated Reporting? *Sustainability*, 12(10), 42-62.

Curto, J. D., & Pinto, J. C. (2007). New Multicollinearity Indicators in Linear Regression Models. *International Statistical Review / Revue Internationale de Statistique*, *75*(1), 114–121.

Deegan, C.M. (2019). “Legitimacy theory.” *Accounting, Auditing and Accountability Journal*, Vol. 32 No. 8, pp. 2307-2329.

de Villiers, C., Hsiao, P.-C. K., & Maroun, W. (2017). Developing a conceptual model of influences around integrated reporting, new insights and directions for future research. *Meditari Accountancy Research*, 25(4), 450-460.

de Villiers, C. and Sharma, U. (2020). “A critical reflection on the future of financial, intellectual capital, sustainability and integrated reporting”. *Critical Perspectives on Accounting*, Vol. 70 No. 1, pp. 1-13.

DiMaggio, P. J. & Powell, W. W. (1990). “Introduction to the new institutionalism”, The New Institutionalism in Organizational Analysis. Chicago, IL: University of Chicago Press.

Donaldson, L., & Davis, J. H. (1991). Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns. *Australian Journal of Management*, 16(1), 49-65.

Dowling, J., & Pfeffer, J. (1975). Organizational legitimacy: Social values and organizational behavior. *Pacific Sociological Review*, 18, 122–136.

El Khoury, R., Nasrallah, N. & Alareeni, B. (2023). "The determinants of ESG in the banking sector of MENA region: a trend or necessity?” *Competitiveness Review*, Vol. 33 No. 1, pp. 7-29.

Friedman, M. (1970). Social Responsibility of Business. The New York Times Magazine.

Garcia-Sanchez, I.M., Martínez-Ferrero, J., & García-Meca, E. (2017). Gender diversity, financial expertise and its effects on accounting quality. *Management Decision*, 55(2), 347-382.

García-Sánchez, I. M., & Noguera-Gámez, L. (2017). Integrated reporting and stakeholder engagement: The effect on information asymmetry. *Corporate Social Responsibility and Environmental Management*, 24(5), 395-413.

Githaiga, P.N. and Kosgei, J.K. (2023). "Board characteristics and sustainability reporting: a case of listed firms in East Africa". *Corporate Governance*, Vol. 23 No. 1, pp. 3-17.

Gujarati, D.N. and Porter, D.C. (2011). Essentials of Econometrics, 5th ed., McGraw-Hill, New York.

Guthrie, J., & Parker, L. (1989). Corporate social reporting, a rebuttal of legitimacy theory. *Accounting and Business Research*, 19(76), 343–352.

Gutierrez-Nieto, B., Fuertes-Callen, Y., & Serrano-Cinca, C. (2008). Internet reporting in microfinance institutions. *Online Information Review*, 32(3), 415- 436.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long range planning*, *46*(1-2), 1-12.

Haji, A.A. & Anifowose, N. (2016). "Audit committee and integrated reporting practice: does internal assurance matter?". *Managerial Auditing Journal*, Vol. 31 No. 8/9, pp. 915-948.

Han, S., Kang, T. & Yoo, Y.K. (2012). "Governance role of auditors and legal environment: evidence from corporate disclosures transparency". *European Accounting Review*, Vol. 21 No. 1, pp. 29-50.

Harymawan, I., Nasih, M., Agustia, D., Putra, F.K.G. & Djajadikerta, H.G. (2022). "Investment efficiency and environmental, social, and governance reporting: perspective from corporate integration management". *Corporate Social Responsibility and Environmental Management.*

Hassan, M. K. (2012). A disclosures index to measure the extent of corporate governance reporting by UAE listed corporations. *Journal of Financial Reporting and Accounting*, 10(1), 4 - 33.

Hsiao, P.-C. K., & Kelly, M. (2018). Investment considerations and impressions of integrated reporting: Evidence from Taiwan. *Sustainability Accounting, Management and Policy Journal*, 9(1), 2-28.

Hyndman, N., & McKillop, D. (2004). Accountability, Accounting and Credit Unions: A Study from the UK. *Review of International Cooperation*, 97(1), 30-37.

Injeni, G., Mangena, M., Mathuva, D. & Mudida, R. (2022). "Agency and institutional-related factors and the heterogeneity of sustainability and integrated report information disclosures in Kenya". *Journal of Financial Reporting and Accounting*, Vol. 20 No. 5, pp. 809-840.

Ioannou, I. & Serafeim, G. (2019). "The consequences of mandatory corporate sustainability reporting", The Oxford Handbook of Corporate Social Responsibility: Psychological and Organizational Perspectives. Oxford University Press, Oxford.

Istianingsih, I., Trireksani, T. & Manurung, D.T.H. (2020). "The impact of corporate social responsibility disclosures on the future earnings response coefficient (ASEAN banking analysis)". *Sustainability*, Vol. 12, p. 9671.

Jackson, G. & Apostolakou, A. (2010). "Corporate social responsibility in Western Europe: an institutional mirror or substitute?". *Journal of Business Ethics*, Vol. 94 No. 3, pp. 371-394.

Jensen, J.C. & Berg, N. (2012). "Determinants of traditional sustainability reporting versus integrated reporting: An institutionalism approach". *Business Strategy and the Environment*, Vol. 21 No. 5, pp. 299-316.

Jensen, M.C. & Meckling, W.H. (1976). "Theory of the firm: managerial behavior, agency costs and ownership structure". *Journal of Financial Economics*, Vol. 3 No. 4, pp. 305-360.

John, K. & Senbet, L.W. (1998). "Corporate governance and board effectiveness", *Journal of Banking & Finance*, Vol. 22 No. 4, pp. 371-403.

Kent, P., Routledge, J. & Stewart, J. (2010). "Innate and discretionary accruals quality and corporate governance". *Accounting and Finance Journal*, Vol. 50 No. 1, pp. 171-195.

Kent, P. & Zunker, T. (2013). "Attaining legitimacy by employee information in annual reports". *Accounting, Auditing & Accountability Journal*, Vol. 26 No. 7, pp. 1072-1106.

Koh, P.S., Laplante, S.K. and Tong, Y.H. (2007). "Accountability and value enhancement roles of corporate governance". *Accounting and Finance*, Vol. 47 No. 2, pp. 305-333.

Kothari, C. R. (2009). Research Methodology: Methods and Techniques (2nd Ed.). New Delhi: New Age International.

Kribat, M., Burton, B., & Crawford, L. (2013). Evidence on the nature, extent and determinants of disclosures in Libyan banks' annual reports. *Journal of Accounting in Emerging Economies*, 3(2), 88-114.

Kühn, A.L., Stiglbauer, M. & Fifka, M.S. (2018). "Contents and determinants of corporate social responsibility website reporting in Sub-Saharan Africa: a seven-country study". *Business and Society*, Vol. 57 No. 3, pp. 437-480.

Lindblom, C. K. (1994). The implications of organizational legitimacy for corporate social disclosures. Critical Perspectives on Accounting Conference. New York: University of St. Andrews.

Luethge, D., & Han, H. G. (2012). Assessing corporate social and financial performance in China. *Social Responsibility Journal*, 8(3), 389-403.

Maama, H. (2021). "Institutional environment and environmental, social and governance accounting among banks in West Africa". *Meditari Accountancy Research*, Vol. 29 No. 6, pp. 1314-1336.

Maama, H. and Appiah, K.O. (2019). "Green accounting practices: lesson from an emerging economy". *Qualitative Research in Financial Markets*, Vol. 11 No. 4, pp. 456-478.

Magness, V. (2006). Strategic posture, financial performance and environmental disclosures: an empirical test of legitimacy theory. *Accounting, Auditing and Accountability Journal*, 19(4), 540-563.

Maniora, J. (2017). Is integrated reporting really the superior mechanism for the integration of ethics into the core business model? An empirical analysis. *Journal of Business Ethics*, 140(4), 755-786.

Manita, R., Bruna, M.G., Dang, R. & Houanti, L. (2018). "Board gender diversity and ESG Disclosures: evidence from the USA". *Journal of Applied Accounting Research*, Vol. 19 No. 2, pp. 206-224.

Marrone, A. & Oliva, L. (2019). "Measuring the level of integrated reporting alignment with the framework". *International Journal of Business and Management*, Vol. 14 No. 12, pp. 110-120.

Maroun, W. (2022). "Corporate Governance and the use of external assurance for integrated reports". Corporate Governance: An International Review.

Mathuva, D.M. and Chong, H.G. (2018). "Impact of regulatory reforms on compliance with mandatory disclosures by savings and credit co-operatives in Kenya". *Journal of Financial Regulation and Compliance*. Vol. 26 No. 2, pp. 246-270.

Mathuva, D.M., Mboya, J.K. and McFie, J.B. (2017). "Achieving legitimacy through co-operative governance and social and environmental disclosures by credit unions in a developing country". *Journal of Applied Accounting Research*, Vol. 18 No. 2, pp. 162-184.

Mbithi, E., Moloi, T., & Wangombe, D. (2023a). An empirical examination of board-related and firm-specific drivers on risk disclosure by listed firms in Kenya: a mixed-methods approach. *Corporate Governance: The International Journal of Business in Society*, *23*(2), 298-322.

Mbithi, E., Moloi, T., & Wang'ombe, D. (2023b). Impact of Corporate Ownership on Non-Financial Risk Disclosure in a Developing Country: Moderating Effect of Companies Act 2015. In *Rethinking Management and Economics in the New 20's: The 2022 Centre of Applied Research in Management and Economics (CARME) Conference* (pp. 145-171). Singapore: Springer Nature Singapore.

Menassa, E. (2010). "Corporate social responsibility: an exploratory study of the quality and extent of social disclosures by Lebanese commercial banks". *Journal of Applied Accounting Research*, Vol. 11 No. 1, pp. 4-23.

Mensah, E., Frimpong, K. & Maama, H. (2017). "Environmental reporting practices by listed manufacturing firms: the perspective of an emerging economy". *Asian Journal of Economics, Business and Accounting*, Vol. 2 No. 3, pp. 1-12.

Meyer, J. W., & Rowan, B. (1977). Institutional organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 80, 340–363.

Michelon, G. and Rodrigue, M. (2015). "Demand for CSR: insights from shareholder proposals". *Social and Environmental Accountability Journal*, Vol. 35 No. 3, pp. 157-175.

Mills, T. C. (2014). Autocorrelation. Analyzing Economic Data, 204–218.

Mizruchi, M., & Fein, L. (1999). The Social Construction of Organizational Knowledge: A Study of the Uses of Coercive, Mimetic, and Normative Isomorphism. *Administrative Science Quarterly*, 44, 653–683.

Mooneeapen, O., Abhayawansa, S. & Mamode Khan, N. (2022). "The influence of the country governance environment on corporate environmental, social and governance (ESG) performance". *Sustainability Accounting, Management and Policy Journal*, Vol. 13 No. 4, pp. 953-985.

Nairobi Securities Exchange (NSE) (2021). ESG Disclosures Guidance Manual, NSE, Nairobi.

Nicolo, G., Zanellato, G., Manes-Rossi, F. & Tiron-Tudor, A. (2021). "Corporate reporting metamorphosis: empirical findings from state-owned enterprises". *Public Money and Management*, Vol. 41 No. 2, pp. 138-147.

Pistoni, A., Songini, L., & Bavagnoli, F. (2018). Integrated Reporting Quality: An Empirical Analysis. *Corporate Social Responsibility and Environmental Management*, 25(4), 489-507.

Raimo, N., Vitolla, F., Marrone, A. & Rubino, M. (2021). "Do audit committee attributes influence integrated reporting quality? An agency theory viewpoint". *Business Strategy and the Environment*, Vol. 30 No. 1, pp. 522-534.

Said, R., Zainuddin, Y.H. and Haron, H. (2009). "The relationship between corporate social disclosures and Corporate Governance characteristics in Malaysian public listed companies". *Social Responsibility Journal*, Vol. 5 No. 2, pp. 212-226.

Saunders, M., Lewis, P., & Thornhill, A. (2009). Research Methods for Business Students (5th Ed.). Essex: Pearson Education Limited.

Schieren, G. A., & Carr, R. P. (1982). The effects on forecasting of auto correlated disturbance terms and trended independent variables. *Southern Economic Journal*, 48(3), 662.

Scott, R. W. (2004). Reflections on Half a Century of Organizational Psychology. *Annual Review of Sociology*, 30, 1–21.

Sekaran, U., & Bougie, R. (2016). Research methods for business: A skill building approach. *John Wiley & Sons.*

Stacchezzini, R., Melloni, G., & Lai, A. (2016). Sustainability management and reporting: the role of integrated reporting for communicating corporate sustainability management. *Journal of Cleaner Production*, 136, 102-110.

Suchman, C. M. (1995). Managing legitimacy: Strategic and Institutional approaches. *Academy Management Review*, 20(3), 571–61.

Trireksani, T. & Djajadikerta, H.G. (2016). "Corporate Governance and environmental disclosures in the Indonesian mining industry". *Australasian Accounting, Business and Finance Journal*, Vol. 10 No. 1, pp. 18-28.

Trireksani, T., Djajadikerta, H.G. and Zhang, J. (2018). "Perceived importance of corporate sustainability disclosures: evidence from China". *CSR, Sustainability, Ethics and Governance*, Springer, Singapore.

Urquiza, F. B., Navarro, M. C., Trombetta, M., & Lara, J. M. (2010). Disclosure's theories and disclosures measures. *Spanish Journal of Accounting and Finance*, 39(147), 393-420.

Velte, P. and Stawinoga, M. (2017). "Integrated reporting: the current state of empirical research, limitations and future research implications". *Journal of Management Control*, Vol. 28 No. 3, pp. 275-320.

Vitolla, F., Raimo, N., & Rubino, M. (2019). Appreciations, criticisms, determinants, and effects of integrated reporting: A systematic literature review. *Corporate Social Responsibility and Environmental Management*, 26(2), 518-528.

Watson, A., Shrives, P., & Marston, C. (2002). Voluntary disclosures of accounting ratios in the UK. *British Accounting Review*, 34(4), 289-313.

Winship, C. & Western, B. (2016). "Multicollinearity and model misspecification". *Sociological Science*, Vol. 3 No. 27, pp. 627-649.

York, R. (2012). "Revisualization is not the answer: rethinking how to address multicollinearity". *Social Science Research*, Vol. 41 No. 6, pp. 1379-1386.

Zhang, J., Djajadikerta, H.G. & Trireksani, T. (2020). "Corporate sustainability disclosure's importance in China: financial analysts' perception". *Social Responsibility Journal*, Vol. 16 No. 8, pp. 1169-1189.

APPENDICES

Appendix I: Strathmore University Ethical Clearance Release Letter

Strathmore UNIVERSITY

27th June 2023

Muyogha Duncan

058216

duncan.muyogha@strathmore.edu

Dear Duncan,

RE: Examining Environmental, Social, and Governance Disclosure and Determinants among Listed Companies in Kenya

This is to inform you that the Strathmore University Institutional Scientific & Ethical Review Committee (SU-ISERC) and the Research Services Office received your above Thesis for Ethical Clearance. However, as communicated to you by SU-ISERC via email and further referred to the Office of Graduate Studies, your study cannot be reviewed since you have already collected data. The ethics approval process is ONLY done before any collection of primary or secondary data. Additionally, ethical clearance is mandatory for all studies including desktop research.

The office notes that: On the grounds of not having completed the ethical clearance process, with reason of having only sampled the annual reports of NSE listed companies and henceforth having already proceeded to data collection before ethical clearance. This is a letter for you to proceed with the next steps of your academic requirements.

Please be advised, that in future, all research proposals should be submitted to the SU-IERC through the RHIanO Ethics platform: https://strathmoreuniversity.rhinno.net/login

Disclaimer: 1) This is not in any way an ethical approval letter. 2) Should there be any legal implications/actions emanating from the research in terms of any ethical violations, you will be personally liable.

Yours sincerely,

Dr. Bernard Shibwabo
Director of Graduate Studies

Ole Sangale Rd, Madaraka Estate, PO Box 59857-00200, Nairobi, Kenya. Tel +254 (0)703 034000
Email admissions@strathmore.edu www.strathmore.edu

Appendix II: National Commission for Science, Technology and Innovation Research License

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **910627**

Date of Issue: **17/July/2023**

RESEARCH LICENSE

This is to Certify that Mr.. Duncan Mnyogha 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: Examining Environmental, Social, and Governance Disclosure and Determinants among Listed Companies in Kenya for the period ending : 17/July/2024.

License No: **NACOSTI/P/23/27506**

910627

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

Appendix III: Environmental, Social and Governance Disclosure Index

SN	Disclosure Item	Criteria	Score	Criteria	Score
1	Board of directors	> 5	1	≤5	0
2	Policy on diversity in its composition	Yes	1	No	0
3	Policies on independence	Yes	1	No	0
4	Set age limit for the board members	Yes	1	No	0
5	Developed a Code of Ethics and Conduct	Yes	1	No	0
6	Presence of a board charter	Yes	1	No	0
7	Presence of annual board work plan	Yes	1	No	0
8	Presence of board evaluation tool kit	Yes	1	No	0
9	Induction of Board members	Yes	1	No	0
10	Board members development	Yes	1	No	0
11	Continuous Board development	Yes	1	No	0
12	Annual evaluation of Board members, CEO and Company Secretary	Yes	1	No	0
13	Board remuneration policies and procedures	Yes	1	No	0
14	Level of remuneration	Yes	1	No	0
15	Developed and implemented a strategy on compliance with all applicable laws, regulations and standards	Yes	1	No	0
16	Organized for a legal and compliance audit carried out on a periodic basis	Yes	1	No	0
17	Annual governance audit	Yes	1	No	0
18	Environmental and social risk mitigation plans	Yes	1	No	0
19	Engagement with stakeholders	Yes	1	No	0
20	Compliance with regulations	Yes	1	No	0
21	Supply chain screening	Yes	1	No	0
22	Safeguards human rights.	Yes	1	No	0
23	Good working conditions	Yes	1	No	0
24	Adherence to occupational health and safety	Yes	1	No	0
25	Employees training and education programs.	Yes	1	No	0
26	Gender diversity in the board	> 1/3 of total	1	≤ 1/3 of total	0
27	Consumer protection	Yes	1	No	0
28	Data privacy	Yes	1	No	0
29	Compliance with environmental issues	Yes	1	No	0
30	Assess for carbon footprint	Yes	1	No	0

Sources: Nairobi Securities Exchange (2021) and Capital Markets Authority Code (2015)

Appendix IV: NSE Listed Firms in Kenya as of 31st December 2022

S/No.	Company Name	S/No.	Company Name
1	Eaagads	32	Crown Paints (K)
2	Kapchorua Tea	33	E.A. Cables
3	Kakuzi	34	E.A. Portland Cement
4	Limuru Tea	35	Total (K)
5	Sasini Tea	36	KenGen
6	Williamson Tea	37	K.P.L.C
7	Car & General	38	Umeme
8	ABSA Bank	39	Jubilee Holdings
9	Stanbic Holdings	40	Sanlam (K)
10	I&M Bank	41	Kenya Re-Insurance
11	DTB	42	Liberty (K) Holdings
12	HF Group	43	Britam Holdings
13	NCBA Group	44	CIC Insurance Group
14	Standard Chartered Bank	45	Olympia Capital Holdings
15	Equity Group	46	Centum Investments
16	Co-operative Bank	47	Trans-Century
17	Express Kenya	48	Home Africa
18	Kenya Airways	49	Kurwitu Ventures
19	Nation Media Group	50	Nairobi Securities Exchange
20	Standard Group	51	B.O.C (K)
21	TPS Eastern Africa	52	B.A.T (K)
22	WPP Scan Group	53	Carbacid Investments
23	Uchumi Supermarket	54	E.A.B.L
24	Eveready East Africa	55	Mumias Sugar
25	Longhorn Publishers	56	Unga Group
26	Deacons East Africa	57	Kenya Orchards
27	Sameer Africa	58	Flame Tree Group
28	Nairobi Business Ventures	59	Safaricom
29	Homeboyz Entertainment	60	ILAM Fahari I-REIT
30	ARM Cement	61	KCB Group
31	Bamburi Cement	62	Nairobi Securities Company

Source: Central Depository and Settlement Corporation (2022)

Appendix V: List of Delisted, Suspended, and Listed Companies between 2013 and 2021

S/No.	Company Name	Listed	Suspended	Delisted
1	Rea Vipingo			2015
2	Marshalls (EA)			2017
3	Atlas African Industries	2014	2015	
4	Hutchings Biemer			2017
5	Nairobi Business Ventures	2016		
6	ARM Cement		2020 and 2021	
7	Uchumi Supermarkets			2017/8/9
8	Kenol Kobil		2017 and 2018	2019
9	A.Baumann & Company		2013/4/5	2017
10	Flame Tree Group Holdings	2016		
11	Mumias Sugar Company		2019	
12	Stanlib Fahari I-REIT	2018		
13	Nairobi Securities Company	2014		
Source: Nairobi Securities Exchange (2022)				