

**BOARD CAPITAL, FOREIGN OWNERSHIP AND CORPORATE SOCIAL
RESPONSIBILITY DISCLOSURE AMONG LISTED FIRMS OF THE
NAIROBI SECURITIES EXCHANGE, KENYA**

BY

JACOB KIMUTAI YEGO

**A THESIS SUBMITTED TO THE SCHOOL OF BUSINESS AND
ECONOMICS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE AWARD OF DOCTOR OF PHILOSOPHY IN
BUSINESS MANAGEMENT (FINANCE)**

MOI UNIVERSITY

2022

DECLARATION

Declaration by Candidate

This is my original work and has not been presented for examination in any other institution. No part of this research should be reproduced without my consent or that of Moi University.

Signature:

Date:

Jacob Kimutai Yego
SBE/DPHIL/BM/10/12

Declaration by the Supervisors

This thesis has been submitted with our approval as University supervisors.

Signature:

Date:

Prof. Daniel Tarus

Department of Accounting and Finance

School of Business & Economics

Moi University, Kenya.

Signature:

Date:

Prof. Michael Korir

Department of Management Science and Entrepreneurship

School of Business & Economics

Moi University, Kenya.

DEDICATION

This research is dedicated to the memory of my father who believed in education and invested all for the pursuit of our studies and my mother who loved, encouraged and believed in me and sacrificed towards this realization. I also dedicate this research to my family for their support and sacrifice during the many hours that I spent writing this thesis denying them the quality time they had a right to, especially my son Shawn who never understood why a PhD. should take so many years to complete and my daughter Melody who must have certainly learned a lot from my dedication as she applied it to her own work.

ACKNOWLEDGEMENT

A number of people assisted me in completing this research, and I want to express my heartfelt gratitude and thank them for their support and contribution. It would have been difficult for me to complete this monumental work without their ongoing inspiration, direction, and assistance from the beginning to the end.

First and foremost, I want to express my heartfelt gratefulness to the almighty God, without whose strength I could not have accomplished this feat. I owe my gratitude to my supervisors Prof. Daniel Tarus and Prof. Michael Korir for their intellectual guidance, support and tireless efforts in the preparation of this work. I also acknowledge the Dean SBE and the Chairman of the Accounting and Finance Department for their continuous optimism and support towards the realization of this thesis. I am thankful to my lecturers, classmates and friends, especially Dr. Joel Tuwey, for enduring my questions and for critiquing my work, as well as contributing towards getting this work done. The valuable input and rich discussions in class helped me towards the completion of this research.

I would like to single out for appreciation the staff at Moi University's School of Business, for keeping their doors open for me. My heartfelt gratitude goes out to all of my friends for their encouragement and support while I worked on this PhD. Last but not least I thank Moi University and all the resource centers that I have used in writing this research.

ABSTRACT

Corporate Social Responsibility (CSR) disclosure has gained traction in the realm of scholars worldwide. In the dynamic business context, firms are expected to report on their social activities in order to gain legitimacy, minimize risk exposure, and meet expectations of diverse stakeholders. However, in emerging economies, most firms are still under pressure from society to bear their social obligations and to make this information known to the diverse stakeholders. Since boards are the focal points for corporate strategy, most organizations rely on them in an attempt to surmount stakeholder pressures and to make decisions on whether or not to engage in CSR disclosure. Whereas there is consensus among scholars that boards play an influencing role on CSR disclosure, there is still inadequate evidence in a developing setting, particularly Kenya. Although few studies have tested the relationship between board capital and CSR disclosure, the role of foreign investors has largely been ignored. Therefore, the study seeks to determine whether foreign ownership moderates the nexus between board capital and CSR disclosure in Kenya. The specific objectives were to determine the effect of board independence, expertise, and relations on CSR disclosure as well as foreign ownership as a moderator in the relationship. The study is anchored on resource dependence, human, social, and stakeholder salience theories. The study adopted positivism paradigm, explanatory and longitudinal designs. The target population was all listed firms in Kenya. The secondary data was collected from published reports using both content analyses and document analysis guides from 2008 to 2019 with 639 firm year observations from 56 firms. Both descriptive and inferential statistics were used to analyze the data by employing panel and hierarchical regression model. The study showed that board independence ($\beta=.1214$, $p<.05$), board expertise ($\beta=.0571$, $p<.05$), and board relations ($\beta=.0277$, $p<.05$) had a positive and significant relationship with CSR Disclosure. Further, the interaction effects showed that foreign ownership positively moderates the relationship between board independence ($\beta=.0854$, $p<.05$) and CSR disclosure and also positively moderates the relationship between board relations ($\beta=.088$, $p<.05$) and CSR disclosure, whereas it had a negative and insignificant effect on the relationship between board expertise ($\beta= -.0393$, $p>.05$) and CSR disclosure. The study concludes that the board member's independence, expertise and relations are central to CSR disclosure in listed firms. Moreover, the presence of foreign investors enhances the role of independent directors and expert directors in implementing CSR disclosure. The findings support the resource dependence perspective and the human capital view that for a firm to enhance its CSR disclosure it has to employ board members capabilities and independence, and that how long they relate is equally important. It further supports the stakeholder salience theory that the board prioritizes the assertions of foreign owners to engage in CSR disclosure when making decisions. The study therefore, recommends that for listed firms to advance CSR Disclosure, it should have board members who have the requisite expertise, are independent and who network well internally. Furthermore, such boards should promote increased foreign ownership in order to accomplish their CSR Disclosure goals.

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT.....	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES	x
LIST OF FIGURES	xi
ACRONYMS AND ABBREVIATIONS	xii
DEFINITION OF TERMS	xiii
CHAPTER ONE	1
INTRODUCTION.....	1
1.0 Overview.....	1
1.1 Background of the Study	1
1.1.1 CSR in the Kenyan Context	5
1.2 Statement of the Problem.....	10
1.3 Research Objectives.....	13
1.3.1 General Objective.....	13
1.3.2 Specific Objectives.....	13
1.4 Research Hypotheses	14
1.5 Significance of the Study	14
1.6 Scope of the Study	17
CHAPTER TWO	18
LITERATURE REVIEW	18
2.0 Introduction.....	18
2.1 The Concept of CSR Disclosure	18
2.2 The Concept of Board Capital	22
2.3 The Concept of Foreign Ownership.....	26
2.4 Theoretical Perspectives	29
2.4.1 Resource Dependency Theory	29
2.4.2 Legitimacy Theory	31
2.4.3 Human Capital Theory	32
2.4.4 Social Capital Theory.....	33

2.4.5 Stakeholder Saliency Theory	35
2.5 The Relationship between Board Capital and CSR Disclosure	36
2.5.1 The relationship between board independence and CSR disclosure	38
2.5.2 The Relationship between Board Expertise and CSR Disclosure	41
2.5.3 The Relationship between Board relations and CSR Disclosure	43
2.6 The Moderating Role of Foreign Ownership	45
2.6.1 Moderation of Foreign Ownership on Board Independence and CSR Disclosure	47
2.6.2 Moderation of Foreign Ownership on Board Expertise and CSR Disclosure	48
2.6.3 Moderating Role of Foreign Ownership on the Relationship between Board Relations and CSR Disclosure	49
2.7 Summary of Research Gaps	50
2.8 Conceptual Framework	51
CHAPTER THREE	53
RESEARCH METHODOLOGY	53
3.0 Overview	53
3.1 Research Philosophy	53
3.2 Research Design	54
3.3 Target Population	55
3.4 Sample Size Determination	55
3.5 Data Sources, Types and Collection Procedure	56
3.6 Measurement of Variables	57
3.6.1 Dependent Variable	57
3.6.2 Independent Variables	60
3.6.3 Moderator Variable	62
3.6.4 Control Variables	63
3.7 Data Processing and Analysis	64
3.7.1 Data Screening	65
3.7.2 Descriptive Statistics	65
3.7.3 Inferential Statistics	66
3.7.4 Model Specification	67
3.7.5 Testing for moderation	68
3.8 Regression Model Assumptions	70
3.8.1 Test of Linearity	71

3.8.2 Test of Normality	71
3.8.3 Test of Heteroscedasticity	71
3.8.4 Test of Multicollinearity.....	72
3.8.5 Test of Stationarity	72
3.8.6 Test of Serial Correlation	73
3.9 Ethical Considerations	73
CHAPTER FOUR.....	75
DATA ANALYSIS, PRESENTATION AND INTERPRETATION	75
4.0 Introduction.....	75
4.1 Data Preparation and Processing	75
4.1.1 Analysis of Missing Data	76
4.1.2 Analysis of Outliers.....	78
4.2 Descriptive Statistics.....	79
4.3 Correlation Analysis	87
4.4 Regression Assumptions and Panel Diagnostic Tests	90
4.4.1 Test for Panel Stationarity.....	90
4.5 Model Specification Test	93
4.5.1 Breusch Pagan, LM Model Specification Test.....	93
4.5.2 Hausman test for model specification	94
4.6 Regression Diagnostic Tests	96
4.6.1 Normality Assumption	96
4.6.2 Testing for Autocorrelation	98
4.6.3 Heteroscedasticity Assumption	99
4.6.4 Multicollinearity.....	100
4.6.5 Cross Sectional Dependence	101
4.7 Regression Analysis.....	102
4.7.1 Regression results for control variables	105
4.7.2 Hypothesis testing for direct-effects	106
4.7.3 Hypothesis testing for the moderating effect of Foreign Ownership	108
4.7.4 Moderation Graphs.....	116
4.7.5 Robustness Test.....	119
4.7.6 Summary of hypotheses	120
CHAPTER FIVE	121
SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS	121

5.0 Introduction.....	121
5.1 Summary of the Findings.....	121
5.1.1 Effect of board independence on CSR Disclosure	122
5.1.2 Effect of Board Expertise on CSR Disclosure CSR Disclosure.....	125
5.1.3 Effect of board relations on CSR Disclosure CSR Disclosure.....	127
5.1.4 Moderation of Foreign Ownership on Board Capital and CSR	128
5.2 Conclusions of the Study	129
5.3 Implications, limitations and recommendations for further research	133
5.3.1 Theoretical Implications.....	133
5.3.2 Methodological Contribution	135
5.3.3 Implications for practice.....	136
5.3.4 Policy Implications.....	137
5.4 Limitations and Recommendations for Future Research.....	138
REFERENCES	141
APPENDICES	164
Appendix I: Introduction Letter	164
Appendix I (I): University Research Authorization	165
Appendix I (II): NACOSTI Research Authorization Letter.....	166
Appendix II: Document Check.....	168
Appendix III (I): CSRD Score Sheet.....	169
Appendix III (II): Decision Rule for CSR Disclosure.....	171
Appendix IV: Companies Listed In NSE) As At December 2019.....	172
Appendix V: Cross-Tab for Computing Board Relations (Board Network Experience).....	175
Appendix V(I): Foreign Direct Investment 2008-2019.....	176
Appendix VI (I): Variable Descriptive Tabulations.....	177
Appendix VI (II): Model Specification Output	182
Appendix VI (III): Detailed Tabulation of Diagnostic Tests	184
Appendix VII: Correlation and Regression Output.....	190
Appendix VIII: Robustness Test Output	191
Appendix IX: Turnitin Originality Report	194

LIST OF TABLES

Table 3.1: Number of companies listed by Industry Sector.....	56
Table 3.2: CSR Item Categorization and Keywords.....	59
Table 3.3: Summary of the Study Variables.....	64
Table 3.4: Hypotheses to test and thresholds.....	67
Table 4.1: Description of Panel Data.....	77
Table 4.2: Analysis of Missing Data.....	77
Table 4.3: Cook's Distance and DFBeta outlier analysis	79
Table 4.4: Descriptive Statistics	82
Table 4.5: Descriptive Statistics for Board Expertise.....	84
Table 4.6: Analysis of pairwise correlation coefficients	89
Table 4.7: Fisher-type unit-root test.....	92
Table 4.8: Breusch and Pagan Lagrangian Multiplier Test: Board Capital and CSR	94
Table 4.9: Hausman test of random and fixed effects	96
Table 4.10: Test for normality- Jarque-Bera Test.....	97
Table 4.11: Breusch-Godfrey/Wooldridge for autocorrelation in panel data	99
Table 4.12: Breusch Pagan / Cook Weisberg test for Heteroscedasticity.....	100
Table 4.13: Multicollinearity Test	101
Table 4.14: Pesaran cross-sectional dependence test.....	102
Table 4.15: Effect of Controls on CSR Disclosure.....	105
Table 4.16: Effect of Independent Variables on CSR [Direct Effects].....	107
Table 4.17: The moderation of foreign ownership on board independence and CSR disclosure	110
Table 4.18: The moderation of foreign ownership on board expertise and CSR.....	112
Table 4.19: The moderation of foreign ownership on board relations and CSR	113
Table 4.20: Hierarchical Moderation Regression Summary.....	115
Table 4.21: Model Summary in terms of F change	116
Table 4.22: Summary of Results for Test of Hypotheses	120

LIST OF FIGURES

Figure 2.1: Conceptual Framework	52
Figure 4.1: Kernel Density Plot 1	98
Figure 4.2: Mod graph showing the moderating effect of foreign ownership on the relationship between board independence and CSR	117
Figure 4.3: Mod graph showing the moderating effect of foreign ownership on the relationship between board expertise and CSR Disclosure	118
Figure 4.4: Mod graph showing the moderating effect of foreign ownership on the relationship between board relations and CSR	119

ACRONYMS AND ABBREVIATIONS

CBK:	Central Bank of Kenya
CDSC:	Central Depository & Settlement Corporation
CMA:	Capital Markets Authority
CSR:	Corporate Social Responsibility
CSRD	Corporate Social Responsibility Disclosure
FE:	Fixed Effects
GDP	Gross Domestic Product
GOK:	Government of Kenya
MNC	Multinational Corporation
NSE:	Nairobi Securities Exchange
OECD:	Organization for Economic Cooperation and Development
SPSS:	Software Package for Social Sciences
WTO:	World Trade Organization
WWF	World Wide Fund for Nature

DEFINITION OF TERMS

- Board Capital:** Board capital refers to the human and social capital that comprises of expertise, knowledge, skills, networks and connections of the board of directors (Hillman & Dalziel, 2003). The dimensions of board capital in the study include board independence, expertise and relations.
- Board Expertise:** Board Expertise refers to the extensive knowledge that board members enjoy in relation to the firm and industry by serving on other corporate boards (Harris, 2014).
- Board Independence:** Board Independence refers to the proportion of outside directors in a board and the extent with which they are free of any relationship with the company or its senior management that may materially impair their ability to make independent judgments and decisions (Lu & Wang, 2018; OECD, 2001).
- Board Relations:** These are referred to as those symbolic and material resources that do not belong to a company but that can potentially be mobilized by boards through network relationships (Goncalves *et al.*, 2019).
- Corporate Social Responsibility Disclosure:** Corporate Social Responsibility Disclosure comprises of information relating to a corporations activities, aspirations and public image with

regard to environmental, community, employees and consumer issues (Gray et al., 1995).

Corporate Social Responsibility: Refers to the social responsibility of the business that encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time (Carroll, 1979).

Foreign Ownership: The percentage of common shares held by foreign investors at the beginning of each fiscal year (Jiang & Kim, 2004).

CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter presents the background of the study, Kenyan context, and statement of the problem, research objectives, hypotheses, significance and the scope of the study.

1.1 Background of the Study

Corporate social responsibility (CSR) has gained scholarly interest in the last two decades, leading to increased attention to the disclosure of these CSR practices in the global economy (Chang et al., 2017) as a result of increasing pressure on firms from diverse stakeholders to not only engage (Al-Dah, 2019; Wang et al., 2016), but to also report those socially responsible activities (Clarkson et al., 2011). CSR disclosure (CSRSD) which is defined as a range of documents intended to inform all stakeholders on a firm's CSR actions (García-Sánchez & Martínez-Ferrero, 2018), refers to the efforts of the firm to demonstrate and make visible to society the economic, legal, ethical and discretionary standards they practice (Gray et al., 1995) intended to earn them credibility and satisfy societal demands (Matten & Moon, 2004). It therefore represents a key element of stakeholder management and is regarded as a strategic tool to enhance a firm's reputation and address stakeholder concerns (García-Sánchez & Martínez-Ferrero, 2018). According to legitimacy theory (Suchman, 1995), companies are assumed to have an implicit social contract with the society in which they do business, and when faced with social and political pressure, they use social and environmental disclosure to reduce exposure and gain legitimacy (Mathews, 1995). This measures accords firms with a greater chance of attracting more consumers, accessing resources and enhancing corporate image that may indirectly

translate to higher financial returns (Han *et al.*, 2019). So CSR disclosure is an important component for corporate success.

Within the domain of CSR, firms are expected to align their activities towards societal demands with respect to ethical, legal and communal aspirations while reflecting the specificity of firm, sector, home and host country contexts (Matten & Moon, 2020). However, the exact direction of CSR and its manifestation is largely at the discretion of the board of directors, who are the primary governance mechanism in a firm (Al-Dah, 2019; Chen *et al.*, 2020) whose mandate includes that of reporting such activities (Michelon & Parbonetti, 2012). Boards of directors form an integral part of the firm's structure and their role as key setters of firm strategic direction has been the subject of consideration with many researchers arguing that they perform the three roles of control, provision of resources and strategic advice (Hillman & Dalziel, 2003; Jaskyte & Holland, 2015; Ramón-Llorens *et al.*, 2019). Corporate boards being key decision makers are both accountable and responsible for CSR Disclosure (Godos-Díez *et al.*, 2018; Rao & Tilt, 2016). Moreover, corporate boards as suggested by resource dependency theory, play a role that is beyond just monitoring, as they are in a better position to advice and act as key resource access mechanisms for organizations and help align the firm with its social environment in order to reduce uncertainty and secure legitimacy (Hillman & Dalziel, 2003; Pfeffer & Salancik, 1978). This resource includes the board capital that boards possess.

Board capital is defined as the sum of the individual director's human and social capital (Haynes & Hillman, 2010). In this regard human capital is the individual's expertise, experience, knowledge, reputation, and skills while social capital is the actual and potential resources like network of relationships acquired by that individual

(Coleman, 1988; Naciti, 2019). These qualities are important for understanding how directors provide access to resources by bringing experience, expertise, insights, connections and skills to the firm (Hillman *et al.*, 2000). Board members are not only optimizers with the sole goal of advancing wealth, but rather draw on differences in their professional knowledge, abilities, connections and independence (Al-Mamun & Seamer, 2021). In this case, board members with requisite human and social capital are more likely to encourage companies to be more concerned about the needs and expectations of various stakeholders.

Despite extant studies suggesting that corporate boards are more involved in CSR disclosure (Al Fadli *et al.*, 2019; Al-Mamun & Seamer, 2021; Endrikat *et al.*, 2020; Feng *et al.*, 2020; Hyun *et al.*, 2016; Ramón-Llorens *et al.*, 2020; Rao & Tilt, 2020), there is scant evidence on how the director's human and social capital influences strategic outcome such as CSR disclosure. Research on the role of the boards in CSR reporting has largely focused on board demographics such as CEO duality, board size, composition and leadership structure in developed contexts (Bear *et al.*, 2010; Cuadrado-Ballesteros *et al.*, 2017; Ferreira & Matos, 2008; Shaukat *et al.*, 2016; Zhuang *et al.*, 2018). However in the recent past, a few studies have concentrated on the effect of board attributes such as independence, social and human capital on CSR Disclosure (Muttakin *et al.*, 2018; Ramón-Llorens *et al.*, 2019).

Previous studies submit that board of director's human and social capital is one of the unique human resources that influences collective action and effectiveness of the members (Oh *et al.*, 2019; Pan *et al.*, 2020). Both human and social capital theories suggest that board members with relevant expertise, social connections and experience are more likely to engage in strategic alternatives such as CSR Disclosure

(Becker, 1964; Burt, 1997; Hillman & Dalziel, 2003). Independent directors with an objective mindset are likely to bring a wealth of expertise and knowledge to deal with external uncertainties and may recommend firms to disclose their CSR related strategies (Al-Mamun & Seamer, 2021; Ferreira & Matos, 2008). Board members with relevant expertise and social relations are more likely to understand the value of participating in CSR Disclosure and how such actions have an influence on the legitimacy of the firm (Ibrahim & Hanefah, 2016). Hence, it is essential for firms to utilize board human and social capital to fulfill their social obligations.

Extant literature recognizes that although foreign ownership may not result in a transfer of controlling power, it has significant influence because foreign institutions as major shareholders with significant voting rights can either influence the election of foreign directors (Kor, 2006; Shi et al., 2020) or exert indirect influence. (Zyguła, 2017). Furthermore, due to poor corporate governance structures and lack of experience in the growth of CSR Disclosure practices in developing markets, foreign owners may be a source of valuable insights for companies thinking about improving their CSR reporting (Garanina & Aray, 2020; Lau *et al.*, 2016). Existing studies argue that foreign investors greatly influence strategic decisions by encouraging corporate boards to pursue certain policies and adhere to certain norms (Akhtar *et al.*, 2019; Gu *et al.*, 2019). In this case, foreign ownership plays a crucial role in CSR Disclosure since foreign investors are likely to put more pressure on board members to alter their decisions in relation to corporate activities that they consider important to them (Mzembe & Downs, 2014). Additionally, foreign investors tend to transfer practices and value systems from their home countries to the firms in which they have a stake by persuading boards to adopt them (Gardberg & Fombrun, 2006; Jeon & Ryoo, 2013). Therefore, foreign ownership could potentially offer an indirect and

incisive channel for affecting CSR Disclosure policy. This is however contingent on whether the board prioritizes and acts upon their petitions and demands.

Stakeholder salience theory argues that firms prioritize demands of different stakeholders depending on the interplay of power, legitimacy and urgency (Mitchell *et al.*, 1997). In this case, boards identify the salient stakeholders and the level of the attention to afford them. Foreign investors have the ability to influence board decisions because of their power and legitimacy which makes them to be regarded as salient in the eyes of the board. Not only do foreign investors have power and legitimacy regarding board decisions but their demands are also urgent. Building on this literature, the study posits that foreign owners influence decisions of boards which may likely enhance or mitigate CSR Disclosure activities. Therefore, this study seeks to examine whether foreign ownership moderates the relationship between board capital and CSR Disclosure in the context of Kenyan listed firms.

1.1.1 CSRD in the Kenyan Context

Kenya has the largest economy in East and Central Africa with a gross domestic product (GDP) in 2019 of USD 99.23 billion with an annual growth of 5.6% (World Business Council of Sustainable Development, 2000) and has a vibrant capital market with an efficiently functioning securities exchange regulated by the Capital Markets Authority (Waweru *et al.*, 2019). Nairobi Stock Exchange (NSE) was started in 1954 as a voluntary association of stockbrokers in the European community registered under the Societies Act but its history can be traced back to 1920 when trading took place on simple individual agreements with no physical trading floor (Tarus, 2015). It changed its name to Nairobi Securities Exchange in July 2011. The NSE has a market

capitalization of Ksh2.186 trillion in 2020 making it the leading securities exchange in East Africa.

The NSE has 67 listed firms as at 2020 and is categorized into 13 sectors of which four firms have been delisted while one has been suspended from trading. To enforce compliance, NSE works with CMA and the Central Bank of Kenya to ensure that they comply with the Code of Corporate Governance Practices for Issuers of Securities to the Public (2015). The code emphasized the role of the board and the formation of board committees, ownership-related issues, their rights, and top management. It details the appointment, structure, role, and composition of the board. In Kenya, the role of these board members tends to be in an advisory rather than a monitoring capacity (Tarus, 2015). Consequently, boards, as strategic advisors, provide relevant resources that may aid in the implementation of CSR Disclosure policies and practices.

Although listed firms are generally regulated in terms of corporate governance, legislation and regulations guiding CSR practice in Kenya has progressed slowly with most legislation based on the ratification and subsequent domestication of international conventions which mainly focus on workplace issues and the physical environment. Kenya's notable attempts at CSR-related legislation include the Kenya National Environment Action Plan, CSR guidelines issued by the Kenya Bureau of Standards (KEBS), and legislation focusing on employee-related CSR issues. The Capital Markets Authority's 2015 Code of Governance Practices for Issuers of Securities to the Public, in particular, provides guidance on environmental and social responsibilities and reporting. The Code requires a company's board to ensure sustainability by implementing formal strategies to promote the company's

sustainability by ensuring that the company pays attention to the CSR aspects of the business that support sustainability. The Code applies to all companies, whether publicly traded or not, that issue debt and equity securities to the public. As a result, most Kenyan listed companies have recognized the importance of CSR, particularly the publication of this information in annual reports.

CSR practices in Kenya, like most emerging economies is regarded as less formalized, institutionalized and more philanthropic in nature (Jamali & Karam, 2018; Kivuitu, 2005; Visser, 2008) largely due to the lack of a comprehensive legal and policy framework, as well as guidelines for corporations' CSR practices. However, there has been legislative progress on CSR practices. For example, Article 10 (2) c of Kenya's 2010 Constitution requires that national values and principles of good corporate governance be applied in implementing strategic policies such as those on CSR disclosure. In general, the Companies Act requires directors of publicly traded companies to provide a business review in their directors' reports that contains information about, among other things, the impact of the company's activities on the environment, employees, and social and community concerns, as well as information on any company policies relating to those issues and the success of those policies. Culture has played a major role in shaping CSR practices in Kenya and was already ingrained in the indigenous concept of "Harambee" a Bantu word which was originally used by porters at the coastal parts of Kenya and literally means "Let us all pull together" (Ngau, 1987). The concept is embodied in the traditional African philosophy, where the survival and stability of the society depended on people being mindful of each other's welfare. It is therefore a concept that reflects the strong ancient value of mutual assistance, joint effort, social good and community self-sufficiency (Cheruiyot & Tarus, 2016).

CSR practice in Kenya has largely been focused on launching community projects, fundraising to source resources for these projects, and one-time donations from companies, NGOs, and politicians, rather than embedding CSR in business processes, largely as a result of this philosophy of pulling together for social good (Opondo, 2006). Kenya being a developing country has a weak health system, extensive poverty and ravaging diseases like HIV/AIDS and TB. Firms have had to develop CSR strategies to handle the increased responsibilities as a result of the state's failure to handle emerging social and environmental problems, as well as pressure from consumers in developed countries and historical mistrust of international business (Mwaura, 2004). Firms, for instance, have recently focused their efforts on education, HIV/AIDS, assisting underprivileged children, and, most recently, personal protective equipment in response to the emergence of the Covid19 pandemic.

With regard to the environment, international environmental principles such as the 'polluter pays principle', environmental management and conservation are reflected in a number of sector-specific statutes and policies in Kenya. For example, the Climate Change Act of 2016 established the National Climate Change Action Plan (NCCAP), which provides mechanisms and measures to achieve low-carbon climate-resilient development. Although corporate entities are cautious concerning environmental conservation and land use (Tarus, 2015), most firms in Kenya focus on pressing issues such as a lack of basic services like education, food, health, and sanitation. Indeed, a country with such problems may fail to recognize the role of the environment because it is not regarded as a priority.

Many scholars agree that in order for CSR Disclosure policies to produce gain, there has to be an alignment of multiple stakeholders towards one shared, desirable goal

(Unger & Luetz, 2019) and the policies be tailored to business practices of the firms that operate in Kenya (Muthuri & Gilbert, 2011). The initiatives by listed firms in Kenya include those by Safaricom Plc. whose dedication to CSR can be seen by looking at the work off its Safaricom Foundation through the M-Pesa Foundation Academy which gives full scholarships to learners from disadvantaged backgrounds in order to give them an opportunity to study. The Foundation also donates to causes such as the 'Heart Run' held yearly to sponsor surgical procedures for children with heart conditions (Lewa, 2020). Another renowned case is that of the Equity Group, a financial firm whose focus has mainly been on education of children from needy economic backgrounds, through its 'Wings to Fly' Program. The 'Wings to Fly' initiative has had remarkable success, collecting over 2.8 billion Kenya shillings, sponsoring over 20,000 students as of 2019 and achieving an 82 percent transition rate to university for its recipients, compared to the national rate of 22 percent. Other notable initiatives are the KCB Foundation involved in Healthcare through donating dialysis machines to hospitals and also in offering scholarships to needy children, Unilever Tea Kenya Ltd. a corporate member of WWF, which as part of its CSR agenda is involved in health care, employee welfare (housing), community participation and environmental care. All these initiatives have helped to increase outlook on corporate participation in social good in Kenya. This is consistent with the Sustainable Development Goals, which strives to provide long-term solutions to Kenyan society's problems, including poverty, by the year 2030. The reporting of the initiatives in the media and statutory reports has enhanced the exposure, image and reputation of these firms.

Foreign investors play a major role in the process of domesticating practices that are perceived to be alien to local firms. This role is primarily played out by these

investors through their influence on board decisions. Their influence has grown in direct proportion to their presence in Kenya's capital market. Foreign investor participation in the Kenyan capital market has continued to increase especially in the last two decades. In 2019 for instance, there were 1502 foreign firms and 13,516 foreign individual investors in the NSE and in the first quarter of 2020 alone there were a total of 175 new corporate and individual investors registered by the CDSC (CMA, 2020). Participation in terms of turnover by foreign corporate and individual investors in the Kenyan securities market accounted for 75.8% during the year 2019. These foreign participants represented a total of 18.41% of the trading market share in the NSE (CMA Quarterly Bulletin, 2020 q1). With this level of participation, their influence on the decisions by boards of the firms they invest in is substantial and cannot be ignored. This study contends that foreign investors in Kenya who come from regions well known for engaging in higher levels of CSR, primarily North America and Europe, frequently adopt CSR Disclosure practices that are standardized globally, making it more likely that the local firms they invest in will do the same.

1.2 Statement of the Problem

Despite its growing prominence globally, research shows that CSR disclosure, a critical stakeholder management tool, is still limited in developing-country firms, particularly in Kenya. This is exacerbated by the fact that, unlike financial reporting, there are no specific guidelines for CSR disclosure. CSR and CSR disclosure decisions become more complex as a result of the fact that it is a voluntary process, and companies are less inclined to disclose non-mandatory CSR information. Additionally, because top management frequently seeks only short-term benefits, CSR disclosure is not often given precedence at this level. The benefits of CSR reports are not easily quantifiable in monetary terms, and often their effects are not

seen in the immediate term, and are frequently left to the board of directors, who are more likely to take a more inclusive approach.

Existing scholarly work has demonstrated that boards influence CSR Disclosure decisions (Gennari & Salvioni, 2019; Mackenzie, 2007; Rao & Tilt, 2020). However, there is dearth of academic knowledge on how board capital influences CSRD particularly in listed firms of an emerging context. Despite the growing body of research suggesting that board capital is a key determinant of firm's involvement in CSR disclosure (Francoeur et al., 2019; Gulzar et al., 2019; Hyun et al., 2016; Jizi, 2017), the potential influence of board capital on CSRD has not been sufficiently studied (Hillman & Dalziel, 2003; Muttakin et al., 2018; Ramón-Llorens et al., 2019). In addition the few studies that have attempted to look at board capital and their effect on corporate strategy have assumed that board skills and abilities are homogenous (Bear et al., 2010; Cuadrado-Ballesteros et al., 2017; Shaukat et al., 2016). This assumption leads to an incomplete analysis of the level of expertise that actually exists in the board and its consequences

Moreover, while a sense of responsibility toward relevant stakeholders is an integral part and a sensitive strategic issue, stakeholder demands and expectations continue to pose challenges to most organizations, particularly in emerging economies (Bergman et al., 2019). Extant studies have acknowledged the growing awareness and activism related to environmental and social issues that have prompted companies to engage in socially responsible practices (Godos-Díez et al., 2018; Oh et al., 2019; Shahbaz et al., 2020; Yang et al., 2017). In this regard, CSR's growing importance among firms, particularly those that are publicly listed, and especially in developing countries, necessitates the indulgence of the corporate board's expertise to capitalize on their

independence, expertise, and social connections to engage in CSR (Chintrakarn et al., 2020; Coulson-Thomas, 2020; Feng et al., 2020; Saridakis et al., 2020). Thus; the current study intends to examine the effect of board capital on CSR in the context of listed firms in an emerging context.

With regard, to foreign ownership, foreign investors, both corporate and individual control a substantial trading market share in the Nairobi Securities Exchange(NSE), 75.8% in terms of turnover in 2019 (CMA Quarterly Bulletin 2020 Q1), making them an important participant in listed firms in Kenya capable of having a significant influence on strategic decisions. Furthermore, previous research has shown that foreign ownership has a significant influence on firm outcomes (Garanina & Aray, 2020; Haniffa & Cooke, 2005; Rustam et al., 2019). The studies have shown that foreign ownership has an effect on outcomes like financial, social and environmental disclosure, earnings manipulation and earnings quality (Rustam et al., 2019; Vo & Chu, 2019). However, the mechanism by which this influence occurs has received little attention. For example, while a plausible explanation for this effect is that foreign investors influence boards to adopt standards and practices that they deem beneficial to them, either in response to customer pressure in their home countries or to achieve their own belief systems, little research has been done in this area. This is a significant group of investors whose influence on firm decisions cannot be ignored. Based on this argument there is a considerable likelihood for them to ultimately motivate boards to adopt their agendas and suggestions on matters pertaining to norms and practices especially CSR (Gardberg & Fombrun, 2006).

Additionally, with regard to context, there has been a growing body of research focusing on CSR in developed countries while there is still scarcity of research in

the area from an emerging markets perspective, specifically an African context (Cheruiyot & Tarus, 2016; Hinson & Ndhlovu, 2011, p. 2011; Muthuri & Gilbert, 2011). Because of the disparities in socioeconomic development between these two contexts, a study of the mechanisms that drive decisions to engage in CSR disclosure may differ in these emerging economies. Developing economies like Kenya show significant differences in terms of economic growth, business environments, income levels and management practices which influence CSRD. Kenya being a developing country is a good contextual case since studies in CSRD is still in its infancy and more studies are necessary to build on this body of research.

1.3 Research Objectives

1.3.1 General Objective

The general objective of this study is to investigate the moderating effect of foreign ownership on the relationship between board capital and corporate social responsibility disclosure for the firms listed in Nairobi Securities Exchange.

1.3.2 Specific Objectives

The specific objectives of the study are to:

1. Determine the relationship between board independence and CSRD in listed firms in Kenya.
2. Examine the relationship between board expertise and CSRD in listed firms in Kenya.
3. Establish the relationship between board relations and CSRD in listed firms in Kenya.
4. Establish the moderating effect of foreign ownership, on the relationship between board independence and CSRD in listed firms in Kenya.

5. Determine the moderating effect of foreign ownership, on the relationship between board expertise and CSR in listed firms in Kenya.
6. Examine the moderating effect of foreign ownership, on the relationship between board relations and CSR in listed firms in Kenya.

1.4 Research Hypotheses

The following hypotheses were tested in this study:

H01: There is no significant effect of board independence on CSR in firms listed in Kenya.

H02: There is no significant effect of board expertise on CSR in firms listed in Kenya.

H03: There is no significant effect of board relations on CSR in firms listed in Kenya.

H04a: Foreign ownership does not significantly moderate the relationship between board independence and CSR in firms listed in Kenya.

H04b: Foreign ownership does not significantly moderate the relationship between board expertise and CSR in firms listed in Kenya.

H04c: Foreign ownership does not significantly moderate the relationship between board relations and CSR in firms listed in Kenya.

1.5 Significance of the Study

Previous studies have investigated and found a link between a company's corporate governance and corporate social responsibility disclosure strategy (Haniffa & Cooke, 2005; Michelon & Parbonetti, 2012). However, research linking board capital to corporate social responsibility disclosure is scarce. This study contributes to the corporate governance and CSR literature by expanding the research to examine

board capital. The study not only adds to our understanding of whether and how boards are engaged in these processes, but it also attempts to fill a gap by investigating boards' decision-making roles and their impact on CSR.

This study specifically investigate attributes of boards that may play a role in how they make decisions and their ability to do so. It focuses not only on why board attributes of independence, expertise and relations may drive its CSR practices but also the role of foreign investor presence in this association. Furthermore, while there has been an increase in research focus on companies' CSR practices in recent years (Chau & Gray, 2002; Kuokkanen & Sun, 2020), the majority of research attention has been focused on industrialized Western countries such as the United States, Europe, and Australia (Visser & Tolhurst, 2017), which have a more developed legal and socioeconomic environment that is favorable to CSR practice. In contrast, a limited number of research studies examined CSR practices of companies in developing economies like Kenya. Although there is clear indication that corporate organizations engage in social responsibility programs in Africa (Visser, 2002), the institutional legal frameworks and socio-economic needs in emerging economies like Kenya are not well entrenched compared to developed countries, which limits the benefits of their CSR efforts. Furthermore, Kenyan value systems, beliefs, and traditions, such as the "Harambee" spirit, play a significant role in shaping corporate behavior toward CSR and consequently CSR. In such a context, it is critical to understand how board capital influences CSR practice.

This study therefore, offers several significant contributions. First is the contribution to understanding the relationship between board capital, foreign ownership, and social responsibility disclosure since cases of corporate corruption, malpractices, and

financial crisis in the last decade has increased the interest on firms' transparency and accountability (Cox *et al.*, 2004). Because boards are important elements in the governing of firms, it is necessary to analyze how it can contribute to increasing a firm's social responsibility disclosure and how this is potentially moderated by the structure of ownership and particularly the extent of foreign ownership. This study is therefore important in not only contributing to literature on the area but also in shaping policy for CSRD in emerging markets. The study will not only benefit the corporate sector of Kenya, but it will be of value for other East African, and by extension African countries that are culturally and politically similar to Kenya. It will also benefit investors, decision makers, regulators and researchers as well as assist the policy makers to set new and improved standards for best practices. It will be of significance to academics as the new framework will be a useful future research tool to assess corporate governance and CSRD in developing countries.

The study also contributes to theory building in the area of CSRD and foreign ownership by drawing on new insights from resource dependency theory and drawing reference to social capital theory, human capital theory and stakeholder salience theory frameworks. Further contributions from this study arise from investigating if independent boards with expertise and good relationships are more likely to favor the decisions to report on their socially responsible practices and providing evidence on whether foreign equity ownership might strengthen this relationship.

Finally with regard to policy, the findings of this study will have policy implications, particularly for corporate governance developments in Kenyan listed companies. The findings will help policymakers make decisions about frameworks for regulating CSR reporting by firms, as well as the role of boards of directors with various attributes in

terms of representation and participation. It would also be useful in assisting policymakers in determining which disclosures should be made mandatory and which should remain voluntary.

1.6 Scope of the Study

This study focused only on listed firms in Kenya because they file their annual audited financial statements and relevant data for the study was thus readily available. The data was confined to relevant information on foreign ownership, corporate governance and CSR disclosure from the Nairobi Securities Exchange. Information on these firms is also well documented in other publications for example Annual Bulletins from Capital Markets Authority and the NSE. Secondly, with listed firms it is easier to control the impact of heterogeneous characteristics of companies that may affect different social responsibility aspects. The NSE has 63 firms but only 56 of them were actively trading at the time of data collection. Therefore the study focused on these 56 firms because of the availability and completeness of the data over this time period. The availability of corporate governance guidelines and the requirement to publish foreign ownership information since 2008 also rationalizes the use of this time period as the focus of attention in this study.

In terms of time scope, this research was limited to twelve years from 2008 to 2019. The base year 2008 was selected because it coincided with the requirement by CMA for firms to publish information on foreign shareholding by listed firms in the NSE.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The chapter reviews various works on the concept of corporate governance and CSR disclosure. It also contains literature on the empirical studies that have researched on the relationship between corporate governance and CSR disclosure as well as literature on the theoretical underpinnings of the proposed study. Included in the chapter also is foreign equity ownership which is used in the study as a moderating variable. The chapter also includes a summary of research gaps and a conceptual framework that reflects the hypotheses formulated for the study.

2.1 The Concept of CSR Disclosure

CSR disclosure has received remarkable attention by many scholars culminating into many definitions of the concept. Gray *et al.*, 1996 provided the broadest meaning of CSR disclosure referring to it as "the process of communicating the social and environmental consequences of an organization's economic actions to specific interest groups within society as well as to society at large." As such, it entails expanding organizations' (particularly corporations') accountability and extending it beyond financial transparency to capital owners, particularly shareholders. Such an arrangement is based on the notion that corporations have obligations that extend beyond purely generating profit for their shareholders. Other scholars have notably referred CSR Disclosure as the reporting of social and environmental actions adopted by firms to influence the quality of their relevant stakeholders' lives and reduce the negative impacts of their operations on the society they operate in (Mathew, 1995; Al-Mamun & Seamer, 2021; Hillman *et al.*, 2007). CSR itself has also been described as a cluster concept which overlaps with such concepts as business ethics, corporate

philanthropy, corporate citizenship, sustainability, and environmental responsibility which is dynamic, contestable and embedded in each social, political, economic and institutional context (Matten & Moon, 2004). World Business Council of Sustainable Development (2000) defined the concept of CSR Disclosure as the commitment of business to contribute to sustainable economic development, working with employees, their families and the local communities. It further described it as a set of policies, practices, and programs that are integrated throughout business operations and decision-making processes, and intended to ensure the company maximizes the positive impacts of its operations on society.

During the last few decades, this attention to CSR Disclosure has been augmented mainly by growing public awareness of the roles and responsibilities of corporations in society, a direct response to increasing international incidences of corporate actions that have been detrimental to both society and the environment (Al-Mamun & Seamer, 2021; García-Sánchez & Martínez-Ferrero, 2019; Wang et al., 2016). Because CSR assumes that an entity is influenced by and, in turn, has influence upon the society in which it operates (Braune et al., 2019; Deegan, 2002), CSR disclosure is seen as a mechanism where-by companies reveal the corporate social and environmental aspects of their corporate activities to their stakeholders. The need to demonstrate CSR through disclosure and to integrate it into business operations has grown in the past decade, in large part due to corporate scandals associated with profitable companies such as Royal Dutch Shell, Enron, and Wal-Mart whose reputations were tarnished as a result (Stuart, 2006). These scandals have led to a call by various stakeholders and regulators for more transparency by firms. Besides, the emerging stakeholder activism, the free flow of information aided by technology, global competitiveness, and long term sustainability demand that companies rethink

their business goals and objectives from solely focusing on making profit to how their businesses can make a positive impact both inside their organization and outside (Collierand & Esteban, 2007; Dahlsrud, 2006; Mion & Aduai, 2020). Companies today are concerned about the "reputational risks and opportunities that corporate responsibility disclosure brings," and "aligning corporate behavior with stakeholder expectations is an ongoing business priority" for them (Isaksson & Mitra, 2019).

The concept of CSR disclosure at the firm level is explained by several theories including resource dependency theory which posits that various board of director attributes help align the organization with its social environment in order to reduce uncertainty and secure legitimacy (Al-Mamun & Seamer, 2021; Hillman & Dalziel, 2003; Pfeffer & Salancik, 1978). In relation to specific board attributes this study considered board independence, expertise and relations and their effect on CSR disclosure as board members who are independent and are experts are likely to support firm CSR disclosure strategic decisions (García-Sánchez et al., 2019). This is consistent with a resource dependency theory perspective which states board members are the key resource access mechanisms for organizations (Hillman *et al.*, 2009). This board member attributes are particularly crucial in situations in which board discretion is required (Ramón-Llorens *et al.*, 2020) because they determine the practices organizations pursue to achieve their objectives. In addition, since attributes contain some normative aspects, they likely have significant bearing on the organization's moral development in that they determine its distinct organizational culture and also provide clues about how it will respond to environmental stimuli, such as societal issues (Feder & Weißenberger, 2019).

Although the scope and underlying purpose of CSR disclosure still remains contentious, there is a growing consensus that CSR disclosure is highly contextual. Several studies have found that the concept and practice of CSR Disclosure differ depending on the country, region, and corporation (Gray et al., 1995; Matten & Moon, 2020; Newson & Deegan, 2002), and that national, political, social, civil systems, and culture (Ho & Wong, 2001) have some influence on CSR reporting. In analyzing the CSR disclosure literature from a content and research perspective, research has found that there is a stronger emphasis on philanthropy and community development in developing countries than on environmental, ethical, or stakeholder issues which are of concern in developed nation (Bhattacharyya, 2019). In these countries, philanthropy is part of the value system and thus organizations which do not engage in corporate donations are viewed negatively by the society (Tarus, 2015). However, research in CSR disclosure in developing countries is still relatively underdeveloped and tends to be ad hoc with a heavy reliance on convenience-based case studies or descriptive accounts. The focus is often on high-profile incidents or branded companies and a few select countries, with a general lack of comparable benchmarking data commonly used in developed countries (Visser, 2008).

Corporate responsibility disclosure in emerging markets, while more widespread than commonly assumed, is less embedded in corporate strategies, less pervasive, and less politically rooted than in most high-income developed countries (Jamali & Karam, 2018) due to differences in socioeconomic and cultural settings. In emerging contexts, it is more common to report this as philanthropic giving than more formal CSR disclosure. In this study, we seek to further this argument that CSR disclosure is highly contextual and that it lays a stronger emphasis on philanthropy and community development in emerging economies.

2.2 The Concept of Board Capital

Many researchers have explored board capital from distinct viewpoints. For example, Hillman and Dalziel (2003) defined it as the human and social capital of a firm's board members, whereas Haynes and Hillman (2010) defined it as human capital, which is the individual's expertise, experience, knowledge, reputation, and skills, and social capital as the directors' resources such as networks. Reeb and Zhao (2013) further explore the board capital concept by addressing it as the ability of the board members governing the companies using their independence, expertise and networking. Notwithstanding the diverse standpoints on the concept, a general consensus on its conceptualization by many scholars is the agreement that it is a composite of the human and social capital of the board of directors which is intended to capture the ability of the board to provide resources to the firm (Pérez-Calero et al., 2016; Ramón-Llorens et al., 2019). Thus, when the board of directors provides the firm with skills and knowledge, they are allocating human capital, whereas when they provide abilities to obtain resources and maintain relationships with external environments or organizations, they are allocating social capital (Al Fadli et al., 2020). In its resource provision function, the board provides advice and counsel to the firm on substantial matters such as strategy formulation, access to information outside the firm, preferential access to valuable resources through personal connections, skills and expertise, and legitimacy (Pfeffer & Salancik, 1978). The significance of human and social capital in organizations has long been recognized as employees with high levels of human and social capital are more likely to provide high-quality services (Becker, 1993; Burt, 1997; Coleman, 1988; Naciti, 2019). Board capital is therefore a good proxy for the board directors' ability to provide the firm with specialized resources (Al Fadli *et al.*, 2020).

While board capital may be easily understood as the combination of human and social capital of the directors, scholars often note the interdependent nature of both aspects (Coleman, 1988; Naciti, 2019) and the inability to isolate the effects of one from the other. Additionally, the literature points out the interdependent nature of external and internal social capital (Haynes & Hillman, 2010). The concept of board capital therefore, represents the board's ability to monitor and assist management in their decision making processes. The most important part of the capital of a board is their independence. The Combined Code of the OECD defines independence of a board as the majority of non-executive directors who are independent of management and free from any other business or other relationship which could materially interfere with the exercise of independent judgment (OECD 2001). This independence of free judgment without inhibition is a vital resource that the Board needs to make objective decisions and is a key component of the capital of the Board.

Human capital refers to an individual's set of knowledge and skills, which are typically developed through investments in education, training, and various experiences (Becker, 1993). Human capital theory also distinguishes among expertise in form of knowledge and skills gained from team-level, firm-level, and industry-level experiences (Daily et al., 2003). Directors' current and past professional experiences as managers and board members can be strong indicators of their human capital (Certo, 2003; Daily et al., 2003; Westphal, 1999) because these experiences shape directors' thinking, frame of reference, and perceptions (Westphal, 1999), and allow them to develop specific skills and tacit or procedural knowledge about how boards, firms, and industries operate (Becker, 1993; Nahapiet & Ghoshal, 1998). The external connections developed via multiple board appointments and industry experience by

these directors may represent valuable capital because they help the firm access critical resources and initiate new business relationships (Burt, 1997; Pfeffer, 1972).

Social capital or relational capital refers to an individual's ability to access resources through relationships (Burt, 1997). In particular, the information and knowledge that can be gained through relationships is significant in creating social capital (Coleman, 1988). Social capital is therefore outside directors' collective ability to access information and resource networks through external and internal connectedness. Social capital theory also draws a distinction between the type of knowledge derived from internal and external sources (Adler & Kwon, 2002).

Externally, boards consisting of prominent and capable people such as board members or CEO of other big firms, university professors or high-rank government officers will have a better ability to perform their duties as compared to those that are inexperienced or those with unproven track records. These CEOs or board of directors of other big firms play important roles in disseminating information across firms, reducing environmental scanning costs, serving as mechanisms for diffusions of innovations, and revealing important information regarding other firms' agendas and operations. In addition, high rank government officers are often appointed to the board of directors to increase the flow of information regarding current and future rules and regulations, government agendas and operations, more open communication between the government and the firms, and increase the firms' influence on the government's policies (Hillman et al., 2000). High rank government officers tend to have good negotiation skills and maintain good relationship with the society. Firms who appoint university professors to the board of directors often benefit from the research insights and consulting abilities brought in by the university professors.

Although the quality of professors and civil servants may vary, companies only appoint high quality professors and civil servants to benefit from their expertise. Studies using resource dependence theory argue that board members with these prestigious occupations are likely to have a positive impact on the quality of decisions made by management, and in turn, improve firm outcomes by using their skills, and expertise to perform monitoring activities, advice and counsel to management, enhance company reputation and establish contacts with external parties (Hillman & Dalziel, 2003; Hillman et al., 2000; Naciti, 2019; Pfeffer & Salancik, 1978; Saidat et al., 2019). Pangeran (2020) argue that the ability to monitor and the credibility of advice and counsels are affected by the directors' abilities.

The reputation of the board members and its ability to represent multiple perspectives on the role of the company within its environment, does indeed enhance the credibility and reputation of the company they serve and the mediation among different stakeholders (Certo, 2003). Directors' firm-specific and board specific experiences produce internal social capital in the form of familiarity and working knowledge about directors, firm's management, and other employees. These relations may affect board processes that influence the quality of communication and information exchange among directors and executives (Letendre, 2004). Outside directors' past and current professional experiences also produce social capital (Certo, 2003; Hillman & Dalziel, 2003). Since the board is a group, this study conceptualizes board capital as a high, group-level construct, and assigns it the most appropriate composition model.

2.3 The Concept of Foreign Ownership

The concept of foreign ownership is as old as internationalization of stock markets and has its origins in expansion of companies across borders in the last century. Most scholars trace the first attempt to systematically explain the activities of firms outside their natural boundaries to Hymer's 1960 dissertation on growth in the activities of US firms abroad (Hymer, 1976). It refers to the sum of the holdings of all investors domiciled in a country different from the country the stock is issued in as a percentage of firm's total shares (Jiang & Kim, 2004). The term foreign ownership should be distinguished from multinational companies and foreign direct investment by virtue of control. While foreign direct investment (FDI) refers to controlling ownership and Multinational Corporation (MNC) refers to complete ownership, foreign ownership does not necessarily mean control of a firm by a foreign entity but refers to, and is limited to the level of share ownership by a foreign entity (Haniffa & Cooke, 2005).

More recently and in the context of deeper integration of capital markets, many countries have gradually opened the door of their market to attract foreign investment, and foreign ownership varies across countries with different corporate governance mechanism and legal systems (Bekaert & Harvey, 2000; Dahlquist et al., 2003). Although several obstacles preventing cross border investment still exist, foreign investors can now invest in equities, fixed-income securities, money market funds or hybrid funds in most of the host countries directly or through mutual funds (Kang & Stulz, 1997). Foreign investors have gradually become important actors in domestic ownership structure systems (Abaeian et al., 2019). They can exert an influence on corporate policies since countries especially in emerging markets are heavily dependent on foreign capital inflows for their economic growth (Choi & Park, 2019).

Globalization has therefore created opportunities for investors to expand their activities and exploit their capabilities abroad to reap greater benefits.

Investing in shares of companies in foreign countries is one of the ways a firm uses to enter foreign markets with its enormous potential to create jobs, raise productivity, enhance exports and transfer technology. Research examining the influence of foreign investors suggests that the presence of foreign owners can cause strategic shifts for firms as these foreign owners' priorities supersede those of domestic owners (Abaeian et al., 2019; Feng et al., 2020). Foreign institutional investors wield substantial influence especially because they maintain superior managerial skills, best-practice policies and efficient operations and are able to provide services of high quality and obtain diversification of risks which help them gain access to more opportunities and sway (Bekaert et al., 2001).

Although the impact of foreign ownership on firm outcomes has been widely studied, its findings are mixed and the underlying rationale to explain its influence is not entirely clear (Gu et al., 2019). Many scholars have suggested that foreign investors are an important catalyst in improving corporate governance practices like advising boards to engage in socially responsible activities and to be more transparent (Ferris & Park, 2005; Gul & Leung, 2004; Khanna & Palepu, 2000; Kiel & Nicholson, 2003; Mishra & Ratti, 2011) and have proposed that foreign investors bring added value by stamping out or constraining sub-optimal behaviors of local firms, thus playing certain governance roles to benefit their invested-firms. Oxelheim and Randoy (2003) argue that the appearance of foreign investors is a signal for stronger commitments toward transparency and more advanced corporate governance. Foreign institutional investors are often believed to play more of a role in prompting changes in corporate

governance practices than domestic money managers (Hillman & Dalziel, 2003). This positive impact arises from the managerial efficiency, technical skill, state of technology and years of experience foreign owners bring into the working environment. Foreign investors provide expertise, monitoring, value-added intellectual resources and are productive (Choi *et al.*, 2012), thereby enabling them to contribute additional resources to their companies (Le *et al.*, 2020). In addition, foreign investors bring valuable links to external actors controlling valuable resources. They enhance the knowledge base accruing to managerial human capital (Hamdan, 2018).

On the contrary however, Viet (2013) argues that foreign investors may pursue their potential private benefits at the expenses of other shareholders in the firm if their ownership is large enough to do so. They may also retain weak corporate governance with insufficient monitoring to create conditions which allow them to expropriate benefits from the firm. Mangena and Taurigana (2007) also found that foreign investors tend to become part of insider shareholders when they have control over the firm and react like other local investors which result in weak corporate governance and consequently result in low level of CSR disclosure.

Haniffa and Cooke (2005) find a positive significant relationship between foreign ownership and CSR reporting indicating that companies use CSR disclosure as a proactive legitimating strategy to obtain continued inflows of capital and to please ethical investors. Additionally, foreign investors are likely to have different values and knowledge because of their foreign market exposure causing them to influence the board to engage in more social and environmental activities. The reason for this argument may arise because stakeholders in foreign countries have diverse interests

and power and may therefore, exert different pressures on companies. For example, in developing countries, there are few consumer and interest groups that are powerful and articulate enough to put pressure on companies to be socially responsible (Adler & Kwon, 2002).

2.4 Theoretical Perspectives

The theoretical perspectives that are relevant to this study are based on the determinants and motivations to pursue CSR disclosure and due to the apparent multifaceted nature and consequences of CSR practices (Devinney, 2009; Jensen, 2002; Parker, 2005), there is an increasing consensus that these practices have to be examined from a multi-theoretical vantage point, which encompasses both legitimating and efficient use of resources (Judge *et al.*, 2010; Zattoni & Cuomo, 2008). This study draws on resource dependency theory, legitimacy theory, social capital theory, human capital theory and stakeholder salience theory. For a theoretical framework to be relevant and useful in explaining phenomena such as CSR Disclosure, Morgan (2007) opined that a theoretical model would comprise of variables of interest, laws of interaction of these variables, boundaries of the theory, and system states. Therefore, the proposed theories formed a comprehensive lens for understanding boards, foreign ownership and CSR Disclosure in this study.

2.4.1 Resource Dependency Theory

Resource dependency theory is based on the idea that in social systems and social interactions, interdependence exists whenever an actor does not entirely control all of the conditions necessary for achieving an action, or for obtaining the outcome desired from the action (Pfeffer & Salancik, 1978). Early authors connected resource dependency theory to the relationship between CSR Disclosure and corporate

governance (Lawrence & Lorsch, 1967) and brought forth evidence that successful organizations possess internal structures that match environmental demand, which links to Pfeffer's (1972) argument that board size and composition is a rational organizational response to the conditions of the external environment. More recently (Godos-Díez et al., 2018) has linked resource dependency theory to the nexus between board decision making and CSR Disclosure engagement. Furthermore, directors may serve to connect the external resources with the firm to overcome uncertainty (Hillman *et al.*, 2000), because coping effectively with uncertainty is essential for the survival of the company.

According to the resource dependency role, the directors bring resources such as information, skills, key constituents (suppliers, buyers, public policy decision makers, social groups) and legitimacy that will reduce uncertainty. Thus, Hillman et al., (2009) consider the potential results of linking the firm with external environmental factors and reducing uncertainty is the reduction of transaction cost associated with external linkage. This theory supports the appointment of directors to multiple boards because of their opportunities to gather information and network in various ways.

In this regard, as Bear *et al.* (2010) point out, the resource dependence theory provides a general theoretical basis on how the diversity and the composition of the board can affect CSR Disclosure. The resource dependence theory views organizations as operating in an open system and needing to exchange and acquire certain resources to survive and obtain resources, creating a dependency between firms and external units. In this context, greater board diversity expands existing board member networks and contacts and helps place firms in networks and linkages to other firms (Hillman *et al.*, 2000). The theory serves as a base for the function that

is assigned to the board of providing the firm with such critical resources as legitimacy, consultation, (Hillman & Dalziel, 2003). Resource dependency theory is the preferred theoretical perspective for this study because it provides a framework to uncover the determinants of and possible motivations behind and the variations in CSR Disclosure between firms.

2.4.2 Legitimacy Theory

Among the most extensively used theories for explaining CSR disclosure is Legitimacy theory (Deegan, 2010). Similar to social contract theory, legitimacy theory is based upon the notion that there is a social contract between the society and an organization. Legitimacy theory is therefore defined as “a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate with some socially constructed systems of norms, values, beliefs and definitions” (Suchman, 1995). This means that a firm receives permission to operate from the society and is ultimately accountable to the society for how it operates and what it does, because society affords it the authority to own and use natural resources and to hire employees (Deegan, 2004). Traditionally profit maximization was viewed as a measure of corporate performance. But according to the legitimacy theory, profit is viewed as an all-inclusive measure of organizational legitimacy (Ramanathan, 1976). The emphasis of legitimacy theory is that an organization must consider the rights of the public at large, not merely the rights of the investors. Failure to comply with societal expectations may result in sanctions being imposed in the form of restrictions on firms operations, resources and demand for its products.

This study argues in line with Abaeian *et al.* (2019) who highlighted the explanatory power of organizational legitimacy theory in the context of CSR Disclosure in

developing countries, as addressing more than profit-maximizing motives and embracing societal factors. In agreement with this view, Abaeian *et al.* (2019) extended the theoretical notion that managers aim to enhance legitimacy by attempting to satisfy “demanding” and expectant stakeholders through CSR Disclosure initiatives. Therefore, we believe that this theory offers a useful lens to underpin our comprehensive approach to CSR Disclosure in a developing country such as Kenya.

2.4.3 Human Capital Theory

The theory of human capital Schultz (1961) was proposed by Schultz and developed by Gary S. Becker in his seminal work on the economics of employer-provided training (Becker, 1964). Human capital theory advocates that education or training imparts useful knowledge and skills to workers which in turn increase their productivity and incomes (Chowdhury *et al.*, 2014). Becker distinguishes between specific human capital and general human capital. Specific human capital includes expertise acquired through education and training which is specific to a particular firm. General human capital, on the other hand, is knowledge gained through education and training which is not limited to a particular firm but valuable across the board. Bohlander *et al.*, (2001) defines human capital as “knowledge, skills, and capabilities of individuals that have economic value to an organization.” The Organization for Economic Cooperation and Development (OECD, 2001) describes human capital as “the knowledge, skills, competencies, and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being.” Dess & Pickens (1999) see human capital as capabilities, knowledge, skills, and experience, all of them embodied in and inseparable from the individual.

A number of authors have criticized the human capital theory for being too simplistic in its analysis of employee productivity and have argued that education alone cannot lead to organizational productivity but must be complemented by other variables. Levin and Kelley (1994) have pointed out that economists and other social scientists have overestimated the payoffs from increased education and ignored complimentary inputs such as, training, contract terms, and management practices which must exist for education to improve productivity. This study within the broader theoretical context of resource dependence theory builds on this view on human capital of boards and sees it as the knowledge, skills, competencies, experience and attributes that individual directors have which affect firm outcomes like CSR.

2.4.4 Social Capital Theory

The social capital perspective can be traced back to the work of Mark Granovetter (1973) but what we now know as Social capital Theory is attributed to Adler and Kwon (2002). The study of social relations is however the ground for sociological studies since its beginning through Durkheimian and Marxist approaches to social theory (Breiger & Mohr, 2004). However, only after Mark Granovetter published his seminal works regarding social embedding did the structure of social relations gain much more attention. The author's theory of the strength of the weak ties (Granovetter, 1973), along with his proposition of the influence of social embedding economic action (Granovetter, 1973) are considered the foundation of the current social networks theory. The work of Granovetter was therefore fundamental for the development of the social capital perspective (Moran, 2005).

Adler and Kwon (2002) reviewed the works of earlier writers from various disciplines including sociologists, economists and political scientists to come up with what we

now known as Social Capital Theory. Adler and Kwon (2002) and Chen (2014) attribute social capital to goodwill that others have toward the focal person. Chen (2014) defines social capital as an individual's ability to access resources through a network of relationships. In organizational studies, two main areas of interest on social capital developed recently. The first is concerned with the development of social capital on the intra-organizational level (Tsai & Ghoshal, 1998), that is, within organizational boundaries. In this sense, social capital was found to be relevant in explaining strategic alignment (Preston & Karahanna, 2009), investors' assessments of CEOs' changes (Tian *et al.*, 2011), and improvement of employees' performance (Ben-Hador, 2016). The second main area concerns the development of inter-organizational social capital (Inkpen & Tsang, 2005; Sorenson & Rogan, 2014), that is, outside organizational boundaries. Recent findings account to social capital the improvement in organizational and alliance performance (Mallin, 2007), knowledge transfer and innovation, and internationalization (Preston & Karahanna, 2009). The social relations of the directors can therefore be tapped into as sources of competitive advantage. Johnson *et al.*, (2013) observe that social capital of directors can be viewed from three levels: directors' ties to other firms, personal relationships with firm managers, or social standing.

Since most studies of the board's resource dependence role have concentrated on linkages between firms. We are seeking instead to follow Burt (1997) and study the 'network relations involving a specific firm'; particularly the networks of individuals, since it is individuals who provide access to resources, span boundaries and legitimize the firm. This approach recognizes that mobilizing resources depends on relationships between individual directors rather than linkages between corporations. Our aim in

this paper is to better understand ‘exactly who is linked with whom?’ so as to examine social capital as it applies to boards of directors.

2.4.5 Stakeholder Salience Theory

Stakeholder salience theory, a branch within stakeholder theory, deals specifically with the identification and prioritization of stakeholders and is argued to counter some of the difficulties of defining them and evaluating their respective claims (Mitchell *et al.*, 1997). Stakeholder theory proposes that when a firm makes decisions they must be accountable and transparent to its stakeholders. Freeman (1984) defines stakeholders as “any group or individual who can affect or is affected by the achievement of the organization’s objectives”, but fails to address the prioritization of stakeholder claims. To identify stakeholder relevance, Mitchell *et al.* (1997) proposed the stakeholder salience theory. They define salience as the degree to which managers give priority to competing stakeholder claims, which is positively related to the stakeholder’s power to influence the firm, the legitimacy of the stakeholder’s relationship with the firm, and the urgency of the stakeholder’s claim on the firm. Mitchell *et al.*’s (1997) framework defines stakeholders who possess one attribute as latent stakeholders comprising dormant, discretionary and demanding types. Dormant stakeholders have power but do not have a legitimate nor urgent claim. Discretionary stakeholders possess legitimacy but have no power or urgent claim.

Demanding stakeholders have an urgent claim but have neither the power nor legitimacy to push it through. Latent stakeholders become expectant stakeholders when they acquire a second attribute. They are categorized as dominant, dependent or definitive stakeholders. Definitive stakeholders have and exhibit the highest salience, as they possess all the three attributes; power, legitimacy and an urgent claim.

Organizational actors are expected to pay particular attention to their claims. Any expectant stakeholder becomes definitive by acquiring a third attribute individually or through forming an alliance. What distinguishes the model proposed by Mitchell *et al.*, (1997) is the dynamic rendition of the three stakeholders attributes of power, legitimacy of claims and urgency. Possession of the three attributes influences the salience of a stakeholder and more attention is paid by organizational actors to the highly salient stakeholders. The more attributes managers assess as strong, the higher the salience of a particular stakeholder.

Drawing on stakeholder salience theory, this study argues that the more powerful and vocal the shareholders, the greater their influence on a firm's decision to disclose their CSR. We also argue that foreign investors fall under this category due to the stake they hold in local firms. Foreign Shareholders seem to be more influential than other stakeholders and are therefore more likely to influence board decisions.

2.5 The Relationship between Board Capital and CSR Disclosure

The reason and motive as to why firms act in a socially responsible way has elicited lot of debate in the last three decades. Campbell (2007) identifies economic and institutional conditions like the firm's financial performance, the level of industry competition, and the status of the economic environment as the primary basis for firms to engage in socially responsible activities. But the question of what specific institutional conditions drive CSR disclosure implementation by firms remains largely unanswered.

The CSR information reported by an organization is largely defined by its organizational attributes (Beji *et al.*, 2020), often reflecting the personal values and interests of board of directors and managers (Godos-Díez *et al.*, 2018). Several studies

highlight the significance of board of directors' personal values and discretion in shaping a company's behaviors (Barbour *et al.*, 2019). Because board members are the core decision-makers, those with strong attributes are likely to spur their organizations to make CSR disclosure considerations fundamental (Barbour *et al.*, 2019; Godos-Díez *et al.*, 2018). Previous studies have documented that CSR disclosure policies emanate from the board (Cerbioni & Parbonetti, 2007; Gul & Leung, 2004; Haniffa & Cooke, 2005), and based on Campbell's assertions that the major bases for CSR Disclosure implementation depends upon conditions relevant to the particular firm, we expect that the attributes of directors in company boards are fundamental determinants of companies' CSR Disclosure because the board of directors is a key corporate governance mechanism. Therefore, it plays a decisive role in the development of environmentally, ethically, and socially responsible business strategies that are also responsible in terms of the management of inherent risks and the monitoring of green initiatives (García *et al.*, 2020). Being the key decision-makers' with the responsibility of formulating corporate strategy, the board of directors' predominant attributes and personal qualities are expected to have the most pronounced effect upon the extent and the results of a firm's CSR Disclosure initiative (Waldman *et al.*, 2006b). Notwithstanding this, there is scarcity of research done linking board attributes with the CSR Disclosure decision making process. This study therefore tries to fill this gap by aiming to establish the relationship between board attributes and qualities, in particular board capital and CSR Disclosure decision process. In addition, only a few studies have empirically examined the effect of certain elements of director human and social capital on strategy and governance effectiveness (Certo, 2003; Westphal, 1999). Another significant limitation of this literature is that while managerial capability and superior environmental strategies are

assumed to be the main factors driving superior environmental performance, these variables are neither directly measured, nor explicitly incorporated in the research design leading to conceptually incomplete analysis (Al-Tuwaijri *et al.*, 2004; Clarkson *et al.*, 2011).

Boards play three critical roles in a firm: control, service, and resource provision (Hillman & Dalziel, 2003). Board capital is important in the day-to-day operations of firms because board members' capabilities represent the board's ability to monitor and assist management decisions. Previous research shows that board members with high human and social capital effectively perform various duties (Ferreira & Matos, 2008). As outlined above, board members with higher levels of expertise and richer social networks are better able to perform their duties than directors with lesser experience, unproven track records and limited social networks. The values, motives and expertise of directors influence corporate social policies (Haniffa & Cooke, 2005). We argue that directors with skills, experience and knowledge have a greater ability to provide key resources to the firm by providing the relevant guidelines towards CSR disclosure strategy.

2.5.1 The relationship between board independence and CSR disclosure

Independent directors are those who are neither employed by nor affiliated with the firm in any way (Chen, 2008). Independent directors are seen as accountability mechanisms as their role is to help ensure that companies are pursuing the interests not only of shareholders but also of stakeholders (Harte & Owen, 1991; Shahbaz *et al.*, 2020). Furthermore, independent directors are seen as more able to respect with honor the obligations of the company and are generally more interested in developing and maintaining the social responsibility of the company (García-Sánchez *et al.*, 2019;

Zahra & Pearce, 1989; and Stuart, 2006) since doing so may enhance their prestige and honor in society. According to Mallin and Michelon (2011), independent directors became useful to the firm by providing insightful advice to top management about stakeholders' expectations. Consistent with these arguments, they find a positive relationship between a variety of board characteristics, including board independence and CSR Disclosure. Other authors have also found independent directors to play an important role in CSR disclosure (Al Fadli *et al.*, 2020).

Because independent directors are less aligned with management, they may be more inclined to encourage firms to engage more in CSR Disclosure. They advise on the public presentation of companies' activities and provide pressure on companies to engage in sustainability disclosure and practice in order to ensure congruence between organizational decisions and actions and societal values and corporate legitimacy (García-Sánchez *et al.*, 2019; Haniffa & Cooke, 2005).

In addition, greater independence and objectivity is expected from non-executive directors than executive board members (Prado-Lorenzo & Garcia-Sanchez, 2010). According to resource dependence theory, board independence is expected to be positively associated with corporate social performance (Karim *et al.*, 2019). This is because independent directors are less likely to be manipulated by the CEO than non-independent directors (Hussain *et al.*, 2018). Empirical evidence supports a positive relation between the proportion of independent directors and the adoption of CSR Disclosure practices (Harjoto *et al.*, 2015).

According to Johnson and Greening (1999), because of their past experience of representing various constituents and being knowledgeable about the critical contingencies facing firms, independent directors may be more inclined to comply

with environmental standards to avoid penalties, fines and negative media exposure and a subsequent loss of reputation. In addition the presence of independent directors on the board should increase the board's objectivity and its ability to represent multiple points of view of the firm's role in the environment and among stakeholders (Haniffa & Cooke, 2005). Independent directors, since they come from outside the firm, have closer relations with stakeholders, know their expectations better, and are more likely to meet their demands, know the environment better and are usually more efficient in controlling external contingencies (Ibrahim & Hanefah, 2016). Consistent with such arguments, studies tend to find a positive association between the proportion of outside directors and various measures of CSR Disclosure performance (Mallin & Michelon, 2011; Post et al., 2011; Webb, 2004).

More recent empirical evidence also supports this association, for instance Cucari *et al.*, (2018) and Pucheta-Martínez and Gallego-Álvarez (2020) documented a significant positive association between companies' board independence and CSR Disclosure involvement. Further, both Ibrahim and Hanefah (2016) in his panel study of Jordanian listed firms, and Hussain *et al.*, (2018) found that independent directors are associated with higher levels of CSR Disclosure performance. Jaiswal (2014) documented that strengthening board independence enhances sustainability practices within the energy sector. However, there is also contrary evidence from Eng and Mak (2003) who examined a sample of 158 Singapore listed firms and found that an increase of outside directors will reduce voluntary disclosure of CSR Disclosure information as they are a good substitute for each other in monitoring the organization's managers.

2.5.2 The Relationship between Board Expertise and CSR Disclosure

Previous studies have made an attempt to explain the link between board expertise and CSR Disclosure. Jain and Jamali (2016) carried out a meta-analysis examining the relationship between board characteristics and CSR Disclosure activities and note that among boardroom attributes, human and social capital are crucial to improving CSR Disclosure (Tian et al., 2011; Wincent et al., 2010). Russo and Fouts (1997) highlighted the importance of nurturing and building resources through sustained actions for creating and maintaining pro-environmental internal capabilities and external reputation. Hart (1995) asserted that companies that need to maintain their competitive advantages concerning social and environmental matters should consistently build upon their internal human and organizational competencies and resources, to avoid erosion over time. Carpenter *et al.* (2001) examined the relationship between human capital embedded in the top management team in the form of skills and knowledge that managers collectively bring to the team and the quality of organizational outcomes

Scholars have drawn on resource dependency theory to explain the role of the board in achieving CSR Disclosure objectives (Mallin & Michelon, 2011; Mallin et al., 2013). The board is seen from the resource dependency theory perspective as a resource for managing a firm's external environmental dependencies and uncertainties, such as those posed by the social and natural environmental challenges (Pfeffer, 1972; Pfeffer, 1972; Pfeffer & Salancik, 1978). Based on a comprehensive review of prior relevant research, Hillman and Dalziel (2003) outline key resource dependence related contributions of the board, including providing expertise that play a role in enhancing strategic decision making to the firm. Mallin and Michelon (2011) argue that boards can improve a firm's social performance by providing insightful

advice on meeting the expectations of various stakeholders as providers of human capital such as expertise. Thus, prior studies tend to find a positive association between various board attributes and measures of corporate social performance.

Therefore, these board contributions have a direct relevance for a firm's CSR disclosure. For instance, gaining social legitimacy and positive stakeholder reputation are considered vital for economic success in today's natural resource-depleted, stakeholder-sensitive business climate (Hart, 1995; Hillman & Keim, 2001; Jensen, 2002; Porter & Kramer, 2006). To this end, a firm has to have the right mix of directors who can bring the diversity of knowledge, skills, experience, expertise, and ties (Fama & Jensen, 1983; Pfeffer & Salancik, 1978), as well as a broader stakeholder orientation that can help develop an effective CSR Disclosure strategy leading to superior CSR Disclosure engagement.

Hillman and Dalziel (2003) posited that the human and social capital of individual board members shapes their ability to govern and offer advice to the management team with regard to pursuing CSR disclosure strategies, this study argues that board members with expertise can improve a firm's CSR disclosure standing because their proficiency in the industry in which the firm operates plus the solid knowledge on how the industry functions in its competitive environment will put them in a prime position from which to advise the firm's managers. Coupled with the specific skills and tacit knowledge about how the board and the firm operates acquired during their tenure on the board, this industry-specific expertise equips them with the ability to detect emerging opportunities and evaluate managers' proposals to engage in CSR Disclosure. Some of this specific expertise includes political skills and competence through working in government agencies giving the directors proficiency in

effectively handling regulations and policy-related issues which in turn improves the firms' overall CSR Disclosure standing. We also argue that directors who have a research expertise in the field of CSR Disclosure and sustainability or other related areas may have a strong motivation to encourage the firm to achieve greater CSR Disclosure practice as the benefits are more observable to them.

2.5.3 The Relationship between Board relations and CSR Disclosure

Relational capital is generally defined as the sum of the actual and potential resources embedded within, available through, and derived from an individual's or a social unit's network of relationships (Wiseman, 1982). Relational capital refers to both a board's ties and the assets the board can obtain and mobilize through those ties. Board relational capital is therefore a compilation of the resources that accumulate to an individual or group by virtue of possessing mutual acquaintance and recognition (Wiseman, 1982). With regard to CSR Disclosure decisions, board members must reach an agreement on whether or not to pursue CSR Disclosure, which necessitates a clear understanding among the members gained from working together over time. Board relational capital is thus essential in this case because it is a component of a board's internal social capital that accumulates over time and involves a bonding and internal cohesiveness of board members, facilitating the pursuit of such collective goals as CSR Disclosure (Adler & Kwon, 2002; Pérez-Calero et al., 2016). Furthermore, having key resources does not guarantee that they will be mobilized and applied to the board's decision-making process. When board members act as a cohesive group with strong relationships, they are better able to share, integrate, and use their expertise, experience, and external resources (Pérez-Calero et al., 2016). As a result of the complexity of the board's decisions, including engaging in CSR Disclosure, this study is of the view that greater cooperation and cohesiveness is

required to enable a diverse set of directors to apply their various perspectives, knowledge, and approaches to this critical strategic decision making process.

Board relations are concerned with the quality of relationships among board members, which serves as the foundation for decision-making collaboration. Members of boards with high relational capital will experience relational closeness and hold beliefs that their colleagues share (Fredette & Bradshaw, 2012), creating the work environment required for decisions that lead to positive firm outcomes such as CSR Disclosure. Furthermore, ties within a social network, such as the board, are thought to influence communication among members, allowing for rich discussion of the organization's most pressing issues, such as CSR Disclosure (Ramón-Llorens et al., 2019).

The cohesiveness and common values developed as board members interact and work together over time as well as collective goals and a shared vision which are core dimensions of social capital are seen to be critical for effective group functioning and are rich grounds for decisions towards CSR Disclosure involvement (Fredette & Bradshaw, 2012). This argument is supported by social network theory, which explains how social networks shape the behavior and performance of a focal firm and allows board members to exchange information and observe the leadership styles of their peers (Gujarati, 2013).

Board relational capital determines the ability of the board to function effectively and its source lies primarily in the relationships between the directors (Barroso-Castro *et al.*, 2016). Trust is the condition that determines the willingness of directors to share their external social capital benefits within the board (Kim & Cannella Jr, 2008). Internal ties strengthen board trust and facilitate the exchange of information and

knowledge, which is critical in any decision-making process, including CSR Disclosure decisions (Kiel & Nicholson, 2003).

Because a lack of “teamness” reduces the ability of board members to work together effectively (Kiel & Nicholson, 2003) and for the reason that boards meet only occasionally and director service is a part-time responsibility (Mohan, 2001), the length of time a board member interacts with another is very critical. We therefore argue that a board’s ability to function as a team will be greatly improved when directors have high levels of internal social capital which derive from their interaction and working together as a board or in board committees. This social capital when acquired helps to resolve the problems associated with the lack of team spirit, trust, and collaboration which are critical to fulfilling the board’s service task. This study therefore argues that a board is a human group that needs decision-making abilities (Hillman & Dalziel, 2003), which it gains by building internal social ties. These ties, shared values, trust and generally the quality of relations are very critical in the process of board decision making including that of better and more CSR Disclosure.

2.6 The Moderating Role of Foreign Ownership

Due to the separation between management and owners geographically, the level of foreign ownership in a local firm is likely to influence the board decisions towards firm outcomes like CSR Disclosure (Bradbury & Fincham, 1991). Additionally firms are motivated to engage in CSR Disclosure activities as a proactive legitimating strategy to obtain continued inflows of capital and to please ethical investors (Haniffa & Cooke, 2005). Further to this, since institutions in developed countries may prefer active CSR Disclosure engagement for corporate transparency and accountability, foreign shareholders from these countries are likely to exhibit

similar behaviors as they exert their influence on local firms (Chapple & Moon, 2005). It is, therefore, plausible to posit that this group of investors can influence CSR Disclosure practices of listed firms through boards. On the resource front, foreign investors are likely to have different values and knowledge because of their foreign market exposure and for institutional foreign investors, ethical compliance pressure from their parent company abroad. Thus, as a result of this, a company with foreign investors is expected to influence board decisions to engage more in CSR Disclosure. Based on analysis of 540 Western European multinationals by Rathert (2016) provides evidence that firms with foreign ownership manage the legitimacy of their global operations by adopting CSR Disclosure policies fitting distinct institutional contexts. Beddewela and Fairbrass (2016) obtained similar results studying this type of firms' CSR Disclosure strategies in Sri Lanka.

Additionally, foreign shareholders have been found to participate and have an influencing role on boards of directors in firms (Choi & Park, 2019; Jeon & Ryoo, 2013; Oxelheim & Randoy, 2003). Ahmadjian & Robbins (2005) in their study show that foreign shareholders often influence director's decision making. Likewise, the results of a recent study by Pangeran (2020) reveal that foreign shareholders have capacity to influence managerial policies and decisions, thereby reducing the possibility of expropriation.

The Stakeholder Salience Theory put forth by Mitchel proposed that boards pay attention to and the degree to which they give priority to competing stakeholder claims (Mitchel *et al.*, (1997). Arguing from the three key attributes of power, legitimacy, and urgency this would suggest that boards will pay more attention to the preferences of institutional owners who have a longer term interest in the firm; this

study argues that because foreign investors fall into the category of long term owners, they will influence boards to promote CSR disclosure therefore moderating the effect of board decisions towards CSR Disclosure policies. In addition, the influence of foreign investors is important as they are more inclined to ‘exercise their voice’ rather than exit (Huang, 2010), which is consistent with stakeholder salience theory which argues that vocal stakeholders are likely to have a greater influence on firm strategy.

2.6.1 Moderation of Foreign Ownership on Board Independence and CSR Disclosure

Existing research indicates that foreign ownership has the potential to influence board decisions due to foreign firms' superior capability and management experience compared to their domestic counterparts (Al-Gamrh *et al.*, 2020). The results of a recent study by Pangeran, (2020) also reveal that foreign shareholders have capacity to influence managerial policies and decisions. Ahmadjian & Robbins (2005) argued that foreign ownership might accrue positive input to non-executive directors since they tend to infuse best practices that may have implications on issues such as CSR Disclosure. For instance, in a study of Swedish listed firms it is shown that foreign institutional investors generally influence boards especially when they participate in nomination of committees in the boardroom (Mandaza & Mirad, 2020). As such, the presence of foreign owners may ensure that best practices on CSR Disclosure are enforced by outside directors in the board committees.

Previous studies have suggested that foreign ownership may be a potential moderator board decision aspects like board capital and firm outcomes (Al-Gamrh *et al.*, 2020; Yoshikawa *et al.*, 2010). For instance, Yoshikawa *et al.* (2010) suggested that foreign ownership can weaken the negative impact of family control on the company's

financial performance. Other evidence suggests that foreign investors moderate on boards dominated by outside directors towards positive firm performance (Al-Gamrh et al., 2020; Yoshikawa et al., 2010). This study focused on the moderating effect of foreign ownership in the relationship between board capital and CSR Disclosure in the listed firms in Kenya on the basis of evidence from previous studies showing that foreign ownership plays an influential role in other corporate governance relationships and has the potential to influence management policies and decisions, this research suggests that there is a good possibility that such an effect may also be realized in the relationship between board independence and CSR.

2.6.2 Moderation of Foreign Ownership on Board Expertise and CSR Disclosure

Existing evidence on the impact of foreign ownership on different firm outcomes has so far been either mixed or inconclusive. But there is consensus among scholars in the area that foreign ownership has good prospects to influence board level decisions. For example in their study of Korean firms, Choi and Park (2019) found that firms with high foreign ownership impacted positively on the relationship between board decisions on dividends and long-term firm growth. This supports the assertion that foreign ownership affects certain relationships within firms. On the converse, some studies have shown that the presence of foreign investors result in a negative effect on the relationship between R&D investment and executive bonus payments, which affirms the argument that foreign ownership, plays an influencing role (Yoshikawa *et al.*, 2010) on firm relationships.

Boards with professional and industry experts are able to advice the firm leadership on strategic decision making (Adams & Ferreira, 2008; Kor & Sundaramurthy, 2009) by proposing ways of pursuing social good and secure resources needed for achieving that. Chien-Chiang *et al.*, (2020) in their study found that firms with foreign

ownership are associated with transfer of know-how and technology which supports the argument that foreign investors have the know-how that can augment the expertise of the board members leading to favorable decisions with regard to CSR disclosure. This suggests that foreign investors are a mechanism that provides boards with support in their decision making mandate. This would also suggest that foreign investors are better placed in terms of understanding to throw their weight on expert board opinion as regards CSR disclosure. This study therefore argues that in the relationship between board expertise and CSR disclosure, foreign ownership could play an amplifying and significant influencing role as shown by these extant, albeit different studies.

2.6.3 Moderating Role of Foreign Ownership on the Relationship between Board Relations and CSR Disclosure

Several studies have shown that foreign investors have a long-term vision and would therefore be presumed to make an attempt to support the creation of long term relationships especially those between board directors (Bena *et al.*, 2017; Shubita & Shubita, 2019). A study on board interlocking and firm performance in Saudi Arabia found evidence of a positive effect exerted by foreign ownership in terms of turning around the otherwise negative relationship between board interlocking and firm performance in the second level of interlocking (Hamdan, 2018).

Such a result reflects the significant role foreign ownership plays in influencing the relations between board members and hence effectiveness of the functioning of the board. This influence is affirmed by (McGuinness *et al.*, 2017) who found in their study on listed firms in two exchanges in China that where strong networks already exist, foreign investors have less incentive to boost CSR disclosure change. This study

reasons that if foreign ownership has been confirmed to have an altering role on certain board attributes and firm outcomes, then it has the potential of moderating the relationship between board relations and CSR disclosure which is a consequence of positive board relations.

2.7 Summary of Research Gaps

This study reviews literature on board capital, foreign ownership and CSR disclosure in listed firms of a developing context. Existing literature acknowledges that corporate boards are responsible for CSR disclosure related decisions (Gennari & Salvioni, 2019). Empirical evidence indicates that scholars have largely focused on the influence of board composition, structure and demographics on CSR disclosure (Rao & Tilt, 2020; Shaukat et al., 2016; Wellalage et al., 2018; Zhuang et al., 2018). With respect to these studies a key component; board capital has largely been ignored especially in CSR Disclosure (Muttakin *et al.*, 2018). Specifically board of directors bring into the firm relevant human and social resources in the form of experience, expertise, independence and social relations (Hillman and Dalzel, 2003; Haynes & Hillman, 2010; Chen, 2014). Despite the key role played by board capital, not much has been studied more so on how it influences CSR disclosure (Jizi, 2017; Muttakin et al., 2018; Ramón-Llorens et al., 2019; Shaukat et al., 2016). For example, number of studies on the relationship between board independence and the level of CSR disclosure have produced conflicting results (Ibrahim & Hanefah, 2016; Khan et al., 2013; Muttakin et al., 2015). This study therefore explored the effect of board capital on CSR disclosure in the context of an emerging economy.

Studies have also shown that foreign investors play an influencing role in board decisions (Pangeran, 2020). These studies have demonstrated that boards tend to pay

more attention to the demands of influential shareholders. Foreign investor's especially institutional ones have a longer outlook on a firm and prefer to exercise their voice in firm decisions (Huang, 2010). Notwithstanding the great influence exerted by foreign investors, little is known on their effect on boards towards CSR Disclosure. Consequently, this study examined their role in influencing boards to engage in CSR Disclosure. In addition, there is a large body of research on CSR Disclosure from a developed economy perspective, but there is a scarcity of research from a developing country context, particularly in the African context (Hinson & Ndhlovu, 2011, p. 2011; Orazalin, 2019). This research therefore, investigated the moderating effect of foreign ownership on the board capital - CSR Disclosure nexus from an emerging context perspective, Kenya.

2.8 Conceptual Framework

A conceptual framework is defined as a system of concepts, assumptions, expectations, beliefs, and theories that supports and informs your research (Maxwell, 2005). It is viewed as a visual representation of a study's main theoretical tenets or concepts usually introduced in the form of a graphical or schematic diagram depicting the key concepts and their relationships. A conceptual framework is required in research to identify key concepts, conceptualize them and indicate their interrelationship (Ravitch & Riggan, 2016). Consequently, in this study, the conceptual framework below provides an understanding of the direct relationship between board capital and CSR disclosure as well as foreign ownership as the moderating variable. In addition, the framework includes firm size, profitability, firm age and board size as control variables. Therefore, the diagram below is a conceptual framework that elucidates and rationalizes the moderating effect of foreign ownership on the link between board capital and CSR disclosure in listed firms. Below is a

conceptual framework to show the relationship between board capital, foreign ownership and CSR disclosure.

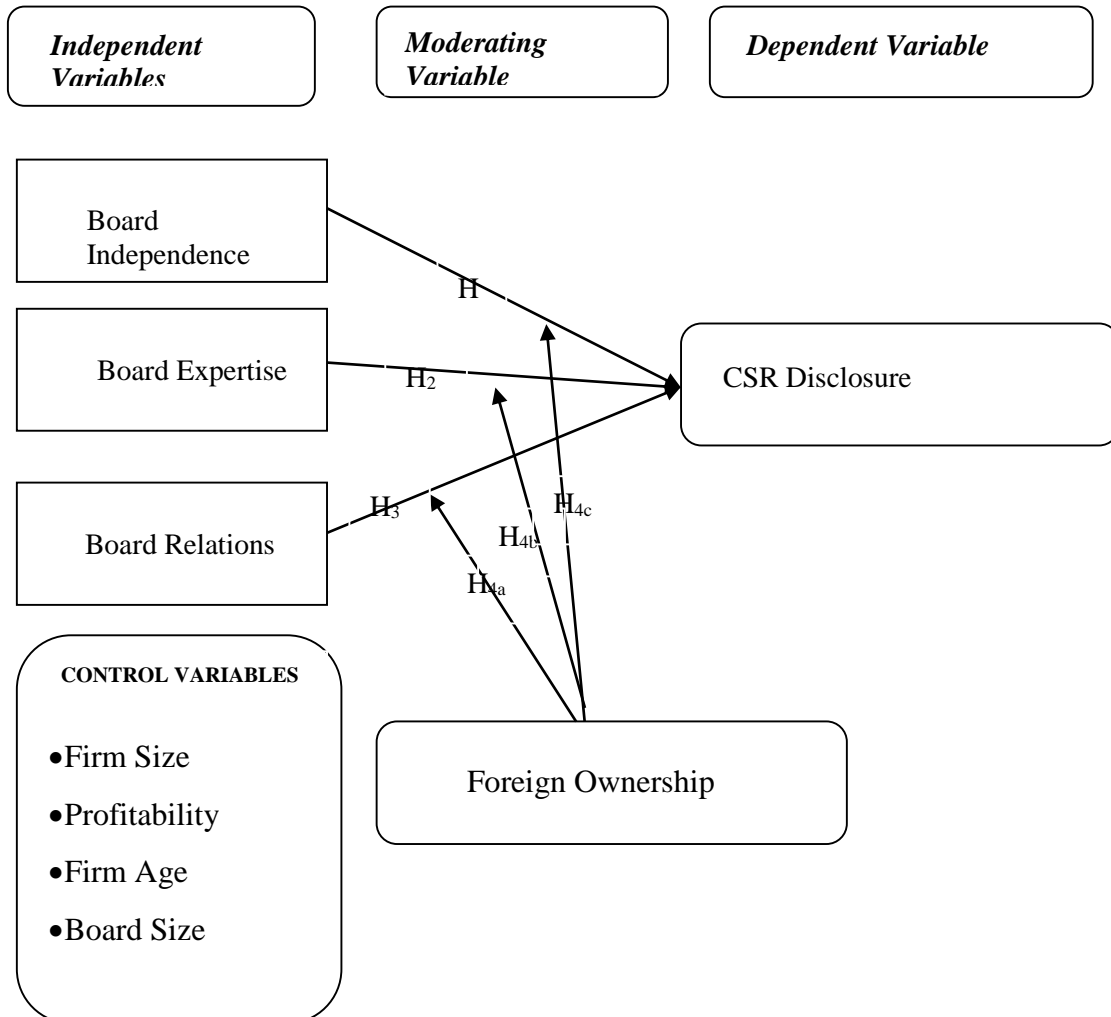


Figure 2. 1: Conceptual Framework

Source: Researcher 2020

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Overview

This chapter presents the research philosophy, design, and target population, sampling procedure and sample size that was used in the study. Further, it discusses the data types and sources, research instruments, validity and reliability, data collection procedures the data analyzing techniques and ethical issues.

3.1 Research Philosophy

This research takes a positivist objectivist research paradigm or approach. The major goal of objectivists is to identify causal explanations and fundamental laws that explain regularities in human social behavior which is aligned with that of the natural scientists (Easterby-Smith *et al.*, 2021). Positivism is a form of philosophical realism adhering closely to the hypothetical–deductive process which involves the generalization of results from ample sample sizes (Dannels, 2018). This process entails the formulation of hypotheses developed from the researcher’s conceptualization of a particular phenomenon. Objectivists believe that there are independent causes, external to us and other social actors that lead to the observed effect which is also known as causality (Saunders & Lewis, 2017), and hypotheses are either verified or refuted by the observed effects. The hypothetical-deductive approach involves the quantitative operationalization of concepts, which involves reductionism, that is, the problem is reduced to its smallest elements. Objectivists believe that reduction enhances a problem’s comprehension.

3.2 Research Design

Explanatory research design was used in this study. The explanatory method allows researchers not only to describe and predict CSR disclosure but also to determine whether a cause-and-effect relationship exists between the variables of interest, which in the case of this study are Board capital and CSR disclosure. The researcher has control over the conditions of at least one independent variable to which a subject is exposed in explanatory research by determining what the levels are, how they are implemented, and how and when cases are assigned to and exposed to them (Tabachnick et al., 2019). This involves both, prediction which is the extent to which one or more independent variables can predict the dependent variable, and explanation which examines the magnitude, sign, and statistical significance of coefficients for each independent variable and attempts to develop a substantive or theoretical reason for the effects of the independent variables (Hair *et al.*, 2019). In other words, this method enables us to know by what means and why CSR disclosure occurs (Jackson Jr, 2012). Because explanatory research is conducted in order to identify the extent and nature of cause-and-effect relationships, it is the appropriate method for this study which seeks to identify the link between Board Capital and CSR.

Explanatory studies are characterized by research hypotheses that specify the nature and direction of the relationships between or among variables being studied. This study employed quantitative data and multivariate analysis which provides for both descriptive and inferential procedures to search for patterns in the data and test hypotheses about patterns of a priori interest which in the case of this study is the Board Capital-CSR disclosure link. Multivariate descriptive techniques empower a

researcher to scrutinize the depth of the variables to extract relationships at the core of the system (Warner, 2020).

3.3 Target Population

This study utilized data from all the firms listed in the Nairobi Securities Exchange (NSE) in Kenya during the period 2008 to 2019. The Nairobi Securities Exchange (NSE) based in Nairobi was established in 1954, is the leading bourse in East Africa. It was demutualized and became a listed company on its main board in 2014 is regulated by the Capital Markets Authority (CMA). The total number of firms listed in the bourse, as at the end of 2019 was 67 (CDSC, 2019). All the firms actively trading were considered for the study. Data was collected from secondary sources, particularly from financial reports and CMA's quarterly bulletins. Although it is a statutory requirement for firms listed in the securities market of developed countries to disclose CSR Disclosure related information in their annual reports (Barako *et al.*, 2006) , the disclosure of CSR disclosure information in Kenya is voluntary (Muthuri & Gilbert, 2011) and no CSR disclosure reporting standards are set for corporations doing business in Kenya. In countries where disclosure is voluntary, as in Kenya, firms may still provide disclosure for other reasons, such as legitimacy and stakeholder pressure.

3.4 Sample Size Determination

Sampling is a technique that ranges from probability to non-probability random selection and is used to select a small percentage of the target population to be its true representative in the study (Saunders & Lewis, 2017). The sample for the study consisted of 56 companies listed in the NSE yielding a total sample size of 639 firm-year observations. The criterion that was used for sampling the firms was inclusion-

exclusion for the entire period of the study (Gray *et al.*, 2017). Some of the inclusion-exclusion criteria used was delisting, suspension, and availability of foreign ownership data for all years under study. Firms which are no longer on the NSE do not form part of the sample because the scope of the study is listed firms. Because some of the firms did not have some data in some years, an unbalanced data approach was utilized. An unbalanced data set is one in which the target variable has more observations in one specific class than the others.

Table3.1: Number of companies listed by Industry Sector

Sector	Number of Firms
Commercial and Services	12
Telecommunication & Technology	1
Agricultural	7
Manufacturing and Allied	9
Investment and Investment Services	6
Insurance	6
Banking	12
Energy and Petroleum	7
Automobiles and Accessories	1
Construction and Allied	5
Real Estate Investment Trust	1
Total	67

Source: NSE, 2019

3.5 Data Sources, Types and Collection Procedure

Secondary data allows researchers to construct vast databases of high-quality information on a wide range of subjects and topics while saving time and resources, enabling them to study trends and changes of phenomena over time (Vartanian & Novak, 2011). This study made use of data collected from the NSE, CMA and company websites mainly published annual reports, statistical bulletins and other

research material as was deemed useful. Published and audited annual reports formed the main source of information for both CSR Disclosure and board capital data. In early studies, the annual report was viewed as the principal means for corporate communication of operations to the public (Wiseman, 1982), and it has been the source for almost all previous CSR Disclosure studies (Campbell, 2007; Gamerschlag et al., 2010; Jizi, 2017). Foreign ownership information was obtained mainly from the CMA Quarterly Capital Markets Statistical Bulletin.

3.6 Measurement of Variables

3.6.1 Dependent Variable

CSR Disclosure was measured using a composite index, the Corporate Social Disclosure Index (CSDI). The index was developed from data collected using content analysis. Content analysis is a research technique used to interpret and draw inferences in an objective/systematic and quantifiable manner by evaluating textual material such as reports against predetermined measures. This technique has been extensively used in previous CSR Disclosure research (Aggarwal & Singh, 2019; Haniffa & Cooke, 2005) and entails codifying the text of a piece of writing into various groups or categories depending on selected criteria (Weber, 1988). A key element of content analysis is the selection and development of categories into which content units can be classified.

The disclosure items and the categories used in this study were drawn not only from previous research in the area (Aggarwal & Singh, 2019; Hannifa & Cooke, 2005) but also from relevance to the Kenyan context (Muthuri & Gilbert, 2011). Following Haniffa and Cooke (2005) and Aggarwal and Singh, (2019), a research instrument (Appendix II) covering items relating to three broad themes; environment and

product, human resource and community was employed. The approach to scoring items is essentially binary in that an item in the research instrument scores one if disclosed and zero if it is not. No penalty is imposed if the item is considered irrelevant. To ensure that there is no prejudice in the judgment of relevance, the entire annual report is read before any decision is taken (Haniffa & Cooke, 2005). The scores for each item are then added to derive a final score for the firm.

A research instrument comprising three key social and environmental subgroups and target words, as shown in Table 3.2, was developed in accordance with previous research works on CSR disclosure (Aggarwal & Singh, 2019; Haniffa & Cooke, 2005; Ramón-Llorens et al., 2019) to facilitate the establishment of the subgroups of social and environmental data contained in annual reports for use in the research. The majority of CSR research has examined social and environmental reporting in the subgroups of environmental; product quality and human resource issues; and community engagement. Thus, in this study, social and environmental disclosure includes disclosure in three broad categories: (1) environmental; (2) product/employee issues; and (3) community involvement.

It is worth noting, however, that in company annual reports, CSR information is frequently found under corporate governance, and vice versa for corporate governance information, but recent developments in this area have seen CSR disclosure moving towards conventionality, while reporting on corporate governance being relegated to a subset of CSR disclosure (Dhaliwal et al., 2011). Table 3.2 presents a research instrument covering three expansive categories of CSR disclosure and related keywords, while Appendix III (I) contains a more detailed one. Since the application of well-defined decision rules can also help to reduce the

number of discrepancies, a clearly defined designation of decision-making guidelines was also created (see Appendix III (II)).

Table 3.2: CSR Item Categorization and Keywords

Dimension of CSR disclosure	Disclosure Category	Keywords
Environment and Product Safety	Pollution control	Environmental, Product, Service, Energy, Rehabilitation, ISO Climate, Carbon tax, Emission, Biodiversity, Conservation, Polluting, Air, Water, Dust, Noise, Waste Management, Recycling, greening, Customer, Client, Consumer,
	Tree Plantation	
	Conservation of natural resources	
	Energy efficiency of products	
	Water discharge or management information	
	Solid waste disposal information	
	Recycling plant of waste products	
	Installation of biomass processing plants	
Human Resource	Product Quality Disclosure	Employees, Human resource, Safety, Health, Diversity, benefit, Human right, Labor rights, Minority, Gender, Union, Disability, Equal, injury, ethics, discrimination, equal opportunity employment
	Product Safety	
	Employee Diversity	
	Employment for the afflicted areas	
	Hiring Discrimination rights/Non HIV Screening etc.	
	Employee health and safety	
	Employee training and education	
	Employee benefits	
	Employee/Staff Welfare/Maternity etc./Funeral	
	Award program for employee or scholarship for child of workers	
Community Development	Employee Recreation/Teambuilding etc.	Communities, Charities, Donations, Philanthropy, Volunteer, Students, Scholarships, Schools, Education, Social, Sponsorship, Societies, stakeholders, Corporate responsibility, sponsorship, football, children's homes, orphanage, HIV-AIDS, COVID19, donation
	Employee and management relation	
	Charity program	
	HIV/TB/COVID19 assistance related activities	
	Education facilities for needy areas/or related school programs	
	Support to organization working with physically challenged children/persons	
	Sponsor for Sport, Art & Cultural program	
	Cash donation program for disaster people by calamities such as floods, post-election violence, terror attack, pandemics	
	Beautification activities	
	Information pertaining to school fees	
	programs for needy students	
	Information in establishment and management of children's homes	
Information pertaining to accommodation for the slum-dwellers		
Disclosure relating to women's rights and anti FGM practices		
Grants to Public Universities/other institutions		

Source: Adapted from Aggarwal & Singh, 2019 and Haniffa & Cooke, 2005

To arrive at the CSR disclosure index, the study adopted an approach used in previous research (Barako & Brown, 2008; Haniffa & Cooke, 2005; Khan et al., 2013) that takes the ratio of actual scores awarded and the maximum score that could be awarded

by a sample firm-year observation. The approach to scoring is additive and equally weighted to give the final CSDI (index) and is calculated as follows,

$$CSDI_j = \frac{\sum_{t=1}^{n_j} X_{ij}}{n_j}$$

Where;

$CSDI_j$ = corporate social disclosure index of j^{th} firm

n_j = number of items expected for j^{th} firm,

X_{ij} = 1 if i^{th} item disclosed, 0 if i^{th} item not disclosed

So that $0 \leq CSDI_j \leq 1$; the total number of items for this study (n_j) is 34

3.6.2 Independent Variables

Board Independence was measured as the proportion of independent directors to the total directors in a board (Mallin & Michelon, 2011; Shahbaz et al., 2020). The presence of independent directors on the board should increase the board's objectivity and its ability to represent multiple points of view of the firm's role in the environment and among stakeholders (Haniffa & Cooke, 2005). Moreover, by representing various constituents and being knowledgeable about the critical contingencies facing firms, they may be more inclined to comply with environmental standards to avoid penalties, fines and negative media exposure and a subsequent loss of reputation (Johnson & Greening, 1999).

Board Expertise was measured as the proportion of outsiders classified as Sustainability Experts, Government and Political Experts, Previous directorships and Current Directorships over the total number of directors on the board (Ramón-Llorens et al., 2019). The number of the different expert groups is added and the total is divided by the total number of directors. Sustainability experts are active or retired

executives from other firms, with experience in strategic decision-making in the area of sustainability, their main goal being to provide not only their expertise, but also their knowledge, advice and alternative viewpoints about sustainability areas like CSR (Hillman et al., 2000; Markarian & Parbonetti, 2007). Previous directorships represent the number of directorships that the board member has served in before, with their expertise and knowledge from the companies and organizations that they have previously served in their boards (Ramón-Llorens et al., 2020). The Political and Government experts is made up of directors such as politicians, members of the clergy, and leaders of social organizations that provide networking and reputation opportunities to the company (Harjoto *et al.*, 2015).

Board Relations was measured using directors' Shared Networking Experience which is the tenure overlap of the directors serving together on the same focal board. This measure was used in previous research to measure board relations (Fernandez & Thams, 2019; Kor, 2006; Tian et al., 2011). To calculate the variable, the *common historical experience* measure was employed (Harrison et al., 2007), which captures board directors' shared experience as a proxy for their internal relationship dynamics over time. The number of years that two directors have served together is used to calculate common historical experience. For example, if one director has served for three years and the other for five, their co-working experience is three years because they have interacted under the same board for three years. The overlap times is then averaged by the number of paired comparisons to get the Shared Networking value. This measurement captures the internal board social capital as the independent directors' history of networking experience within the focal board. Consistent with previous research (Tian *et al.*, 2011; Carroll & Harrison, 1998) this variable which represents the amount of interpersonal interactions among independent directors was

calculated as the overlap in the board tenure of independent director. The instrument for this data is found in Appendix V.

$$\text{Shared Networking Experience} = \frac{1}{N} \sum_{i \neq j} \min(u_i, u_j)$$

Where u_i is the board tenure of the i^{th} director

u_j is the board tenure of the j^{th} director.

$1/N$ -the sum of the shared or overlapping board tenure is divided by the number of pair wise comparisons.

(Total pair wise comparisons= $n(n-1)/2$ with n elements)

Non-independent directors were not used in this measure since non-directors already have networking experience from their daily interactions as employees. This measure is more fine-grained than the average of outside director board tenure used in earlier research (Kor & Sundaramurthy, 2009).

3.6.3 Moderator Variable

Foreign ownership was measured as the proportion of total shareholding by foreign investors in one particular firm to total number of shares outstanding (Al-Gamrh *et al.*, 2020). This includes both foreign institutional investors and foreign individual investors. Foreign investors play a particularly important role in emerging markets because their participation promotes development by supplying capital, spill-over of technology and managerial know-how and competition to improve the efficiency of the markets (Bekaert & Harvey, 2000; Bekaert *et al.*, 2001). Foreign shareholders are also likely to transfer to emerging markets ethical practices and value systems from their developed countries (Gardberg *et al.*, 2019).

3.6.4 Control Variables

In line with previous studies on corporate governance, this study includes a list of control variables to monitor the extent to which they might affect the relationships proposed. This study accounted for four control variables firm size, firm age, firm profitability and board size because these are the variables that have been found by previous studies to have the most significant influence on CSR Disclosure. In as much as it can affect firm outcomes like CSR Disclosure, firm size has been found to be an important control factor in much of board research (Kiel & Nicholson, 2003; Miguel et al., 2005), and was measured in this study by the natural logarithm of total assets (Martínez-Ferrero et al., 2015a). Assets like all other monetary values in financial statement are in millions of shillings in NSE firms and interpretation of test results must take this into consideration. Firm size is expected to have a significant impact on CSR Disclosure, due to the fact that larger companies are required to disclose more social, economic and environmental information than smaller ones in order to satisfy stakeholders' needs (Cook & Weisberg, 1994). Firm age is measured in this study as the natural log of the number of years since the firm's inception. Previous research has shown that the firm's age is associated with CSR Disclosure (Moir, 2001). Studies have also shown that profitability positively affects CSR (Clarkson *et al.*, 2011). They find empirical support for the assertion that firms with greater financial resources pursue a proactive environmental and social strategy. In spite of most of the previous literature confirming a positive relationship between profitability and the extent of CSR Disclosure (Wallace & Naser, 1995; Wallace et al., 1994) few studies have found a negative relationship between them (Brammer & Pavelin, 2008). In this study profitability is measured using return on assets (ROA) and it is calculated as the earnings before taxes, divided by total assets. The last

control variable is board size since larger boards may bring more expertise and knowledge (Daily et al., 2003), board size is expected to affect stakeholder management. Board size was measured in the study as the total number of directors on the board.

Table 3. 3: Summary of the Study Variables

Variable	Scale	Measurement
Dependent Variable		
CSR Disclosure(CSRD)	Ratio	Proxy of CSR disclosure (CSDI). The ratio scale index is derived from dichotomous variable of 34 items, CSR Disclosure takes value '1' if disclosures '0' if not. (Haniffa & Cooke, 2005 and Jitaree, 2015) CSR Disclosure divided into 34 items classified into environmental, employee and community dimensions.
Independent Variables		
Board Independence	Ratio	Proportion of independent directors to total number of directors (Al Fadli <i>et al.</i> , 2020)
Board Expertise	Ratio	Proportion of experts to total number directors (Masud <i>et al.</i> , 2019)
Board Relations	Ratio	Relative time spent by directors in tenure with other directors. This is measured as Shared Network Experience between directors. (Ramon-Llorens et al., 2019; Tian <i>et al.</i> , (2011)
Moderating Variable		
Foreign Ownership	Ratio	Proportion of Foreign investors to total investors in a company (Jiang & Kim, 2004).
Control Variables		
Firm Size	Ratio	Natural Logarithm of Total Assets
Board Size	Ratio	Total Number of Directors
Firm profitability	Ratio	Return on assets (ROA)
Firm Age	Ratio	Natural log of number of years since inception

Source: Researcher, 2019

3.7 Data Processing and Analysis

This section describes the process that was used to process the data and then analyze it. It covers procedures for data screening, descriptive statistics, inferential statistics,

model specification and testing for moderation. The statistical software STATA was used to explore and analyze the data both initially and at later stages; precisely, descriptive information is useful in exploring, summarizing and giving an explanation of the data. On the other hand the use of correlation analysis is to scrutinize the linear pairwise relationships. Multiple regression of panel data was then utilized in hypotheses testing. STATA was used because it is able to analyze panel data.

3.7.1 Data Screening

Before the analysis, interpretation, and conclusion, data was screened through data preparation, editing, coding as well as checking for potential outliers and missing values (Tabachnick et al., 2019) to ensure integrity, reliability, and relevance of the data for estimation and regression purposes. Because the study data is secondary, randomization was undertaken on the annual statements to check for validity and reliability. In randomization, comparable groups are produced through random selection of firms which are then regressed and compared with other sets therefore eliminating bias and reducing confounding.

3.7.2 Descriptive Statistics

Descriptive statistics were used to summarize data and make general explanations about the entire data in the study. Descriptive approaches such as frequencies, percentages, mean and standard deviations were used with frequencies describing the rate of observations in the form of percentages while measures of central tendency and variability, the mean and standard deviation used to describe and summarize the data (Sekaran, & Bougie, 2016). Data were then analyzed and presented by means of tables and graphs.

3.7.3 Inferential Statistics

The study employed inferential statistics to draw conclusions on the hypotheses. To test the strength of the relationships between variables, Pearson's product moments correlation was used. To make inference, panel regression was utilized. Panel regression is preferred for two reasons. One is that panel data usually contain more degrees of freedom and more sample variability than cross-sectional data hence improving the efficiency of the estimates. Secondly, the availability of multiple observations for a given entity or at a given time may allow a researcher to make different transformations to induce different and deducible changes in the estimators; hence, to identify an otherwise unidentified model (Hsiao, 2014). However, since panel data has not only posed estimation but also inference problems in previous studies which affect time series data and also cross sectional data (Gujarati Damodar, 2013), appropriate diagnostic tests were carried out to determine whether to use, pooled, fixed or random effects models. The first step in the main analysis process was the development of the CSR Disclosure index using content analysis. The independent and control variables were then measured and regression of the collected data carried out to determine the relationship between the dependent and independent variables and the underlying moderation. Since the data is longitudinal covering 15 years across 63 companies, panel regression was then carried out to analyze obtained data. Hierarchical Regression was used to test the relationship between board capital, CSR Disclosure, foreign equity ownership and the control variables. This process entails determination of the relationship between the dependent variable and the control variables followed by direct effects between the dependent variable and the independent variables. The moderating variable was thereafter introduced to test for the effect on the dependent variable of the interaction of the moderator and the

independent variables. Hausman and Breusch Pagan panel data diagnostic tests to determine the use of pooled, random or fixed effects was carried out. Table 3.4 shows the parameters that are expected and the cutoff levels of significance. Parameter estimates measure the change in the response variable associated with a unit change in the predictor variable. When a parameter is standardized, the unit of measurement of the predictor or the response variable has been taken out.

Table 3.4: Hypotheses to test and thresholds

Hypothesis Formulated	Parameter	ρ – value level
H₀₁: Board member’s independence has no significant effect on CSR disclosure	Beta (β)	0.05
H₀₂: Board member’s expertise has no significant effect on CSR disclosure.	Beta (β)	0.05
H₀₃: Board member’s relations has no significant effect on CSR disclosure	Beta (β)	0.05
H_{04a}: Foreign ownership does not moderate the relationship between board member’s independence and CSR disclosure	Beta (β)	0.05
H_{04b}: Foreign ownership does not moderate the relationship between board member’s expertise and CSR disclosure	Beta (β)	0.05
H_{04c}: Foreign ownership does not moderate the relationship between board member’s relations and CSR disclosure	Beta (β)	0.05

Source: Researcher, (2021)

3.7.4 Model Specification

The overall panel regression model that was used to test the hypotheses is of the following general form:

$$y_{it} = \alpha + \beta_i x_{it} + c_{it} + \varepsilon_{it}$$

Where:

y_{it} = dependent variable for the study is CSR Disclosure

α = constant term or intercept

x_{it} = predictor variable for the study is board capital

β_i = coefficients of predictor variables

c_{it} = control Variables

ε_{it} = error term

3.7.5 Testing for moderation

The study examined whether Foreign Ownership moderates the relationship between board capital and CSR Disclosure in listed firms in Kenya. A moderator is a variable, which is thought to temper or modulate the magnitude of the effect of an independent variable on a dependent one. This modulation affects the magnitude of the relationship between an independent variable and a dependent variable (Judd, 2015). In the study, an interaction term is computed as a product of a moderator and an independent variable (Jaccard *et al.*, 2003) and panel regression is undertaken to establish the underlying relationships. There are two types of panel models: fixed effects models and random effects models. When a researcher wants to investigate the impact of variables that change with time, the fixed effect model is appropriate. The fixed effect model is based on the assumption that each individual has distinct properties that could or might not be related to predictor variables. Furthermore, the FE model is predicated on the notion that entities possess certain inherent traits that may introduce bias and impact the predictors and therefore need to be controlled. The individual error terms and independent variables are therefore correlated in the Fixed Effects model. To assess the net effects of the independent variable on the dependent

variable, the Fixed Effects approach eliminates the impact of those time invariant features.

When the predictors and the residuals are not correlated, the Fixed Effects model is not the preferred model therefore necessitating the use of the Random Effects model (Gujarati, 2013). Consequently, the variables that do not vary over time are allowed to function as the model's independent variables. If the study revealed that differences between entities have an effect on the response variable, the Random Effects model must be used. The Random Effects model enables deductions to be generalized beyond the sample. Hayes (2013) outlined the following conditions that must be met in moderation:

- i. The amount of variation explained by the factors with the interaction should be significantly greater than the total variance explained without the interaction.
- ii. The coefficient for the interaction terms should be different from zero.
- iii. The overall models with and without the interaction should be significant.

Since with hierarchical regression changes in the coefficient of determination (R^2) can be tracked after an extra predictor variable is introduced to the model at every step, this is considered to be an appropriate technique for such a study. Moderation graphs, sometimes referred to as interaction graphs were used to evaluate the moderating effect of foreign ownership on the relationship between, board capital and CSR Disclosure. Moderation graphs are slopes that are employed to determine if the relationship between predictor and outcome variables is significant at a given moderator value (Dawson, 2014). Through hierarchical regression the following Models were used to test the relationships between the independent and the dependent variable and also the moderator.

The equation for the control variables was as follows:

$$CSRI_{it} = \beta_0 + \beta_2 BoardSize_{it} + \beta_3 FirmSize_{it} + \beta_4 FirmAge_{it} + \beta_5 Profitability_{it} + \epsilon_{it} \dots \text{model 1}$$

The main effects were estimated using the following equation:

$$CSRI_{it} = \beta_0 + \beta_2 BoardSize_{it} + \beta_3 FirmSize_{it} + \beta_4 FirmAge_{it} + \beta_5 Profitability_{it} + \beta_7 BoardIndependence_{it} + \beta_8 BoardExpertise_{it} + \beta_9 BoardRelations_{it} + \epsilon_{it} \dots \text{model 2}$$

The first moderated model was as follows:

$$CSRI_{it} = \beta_0 + \beta_2 BoardSize_{it} + \beta_3 FirmSize_{it} + \beta_4 FirmAge_{it} + \beta_5 Profitability_{it} + \beta_7 BoardIndependence_{it} + \beta_8 BoardExpertise_{it} + \beta_9 BoardRelations_{it} + \beta_7 BoardIndependence * ForeignOwnership_{it} + \epsilon_{it} \dots \text{model 3}$$

The second moderated model was as follows:

$$CSRI_{it} = \beta_0 + \beta_2 BoardSize_{it} + \beta_3 FirmSize_{it} + \beta_4 FirmAge_{it} + \beta_5 Profitability_{it} + \beta_7 BoardIndependence_{it} + \beta_8 BoardExpertise_{it} + \beta_9 BoardRelations_{it} + \beta_7 BoardIndependence * ForeignOwnership_{it} + \beta_8 BoardExpertise * ForeignOwnership_{it} + \epsilon_{it} \dots \text{model 4}$$

The third and overall moderated model was as follows:

$$CSRI_{it} = \beta_0 + \beta_2 BoardSize_{it} + \beta_3 FirmSize_{it} + \beta_4 FirmAge_{it} + \beta_5 Profitability_{it} + \beta_7 BoardIndependence_{it} + \beta_8 BoardExpertise_{it} + \beta_9 BoardRelations_{it} + \beta_7 BoardIndependence * ForeignOwnership_{it} + \beta_8 BoardExpertise * ForeignOwnership_{it} + \beta_9 BoardRelations * ForeignOwnership_{it} + \epsilon_{it} \dots \text{model 5}$$

3.8 Regression Model Assumptions

When the assumptions of the linear regression model are correct, ordinary least square (OLS) provides efficient and unbiased estimates of the parameters (Long & Ervin, 2000) asserts that violations of assumptions lead to serious biases and therefore knowledge and understanding of the situation is necessary, but when assumptions are of little consequence, meaningful data analysis can be done. The assumptions that

underpin regression model analysis, as well as the tests that should be performed are as follows.

3.8.1 Test of Linearity

The manner in which the change in the dependent variable is related to the change in the independent variable is referred to as linearity. This assumption requires that the relationship be linear (Hansen, 1999). An examination of the scatter plot was done to ensure that the variables exhibit a linear relationship. When the points on a scatterplot resemble a straight line then the relationship is said to be linear.

3.8.2 Test of Normality

The assumption of normality is that data is normally distributed around the mean. A Shapiro-Wilk and Jarque Berra test was employed to test for normality (Gujarati Damodar, 2013). If this assumption is violated by the data then an appropriate method is applied to remedy the problem. One of the ways to cure this violation is through transformation of the data.

3.8.3 Test of Heteroscedasticity

Ordinary least squares (OLS) regression assumes that all residuals are drawn from a population that has a constant variance. Heteroscedasticity is when there is a linear relationship between the predictor variables and the variance of error terms that is to say there is a systematic change in the spread of the residuals over the range of measured values. In the presence of heteroscedasticity, ordinary least squares (OLS) estimates are unbiased, but the usual tests of significance are generally inappropriate and their use can lead to incorrect inferences (Long & Ervin, 2000). Breusch Pagan test was carried out to test for heteroskedasticity and is essentially a χ^2 test. To do a Breusch Pagan test one has to first carry out normality test for residuals. The test

assumes that the error terms in a regression analysis are normally distributed and tests whether the variance of the errors from a regression is dependent on the values of the independent variables.

3.8.4 Test of Multicollinearity

OLS also assumes that the predictor variables are not correlated. Multicollinearity is redundancy among the predictors. If the redundancy is total, one has singularity, which may prevent algorithms from computing any answer. High but not complete redundancy will still mean that the standard errors of the coefficients of the predictors are unreliable for purposes of comparing which predictor is more important than another (Tabachnick et al., 2019). Variance Inflation Factor (VIF) was used in the study to test for Multicollinearity. An acceptable criterion was adhered to and appropriate measures of correction undertaken to ensure that the assumptions are not violated.

3.8.5 Test of Stationarity

A stationary time series is one whose statistical properties such as mean, variance, and autocorrelation, are all constant over time. Panel regression is based on the assumption that the time series can be rendered approximately stationary through transformation (Hadri, 2000). A stationarized series is relatively easy to predict since it assumes that its statistical properties will be the same in the future as they have been in the past. The augmented Dickey Fuller (ADF) unit root test was conducted, for which the null hypothesis is on the contrary that the series possesses a unit root and hence is not stationary (Guney & Komba, 2016). Other tests like Fisher's and Levin Lin (LL) were also considered.

3.8.6 Test of Serial Correlation

Serial correlation also referred to as auto-correlation is the extent to which observations from different time periods are correlated with each other (Quinlan *et al.*, 2015). When a given variable is related to a lagged version of itself over various time intervals we say that it is auto-correlated. Therefore a variable that is serially correlated indicates that it may not be random. In linear panel data, serial correlation of residuals causes a bias in estimated standard errors, resulting in some less efficient estimates (Drukker, 2003). The Durbin Watson test was carried out to test for auto correlation (Gujarati, 2013) and remedial measures undertaken depending on the cause.

3.9 Ethical Considerations

Ethics is a branch of philosophy which deals with one's conduct and serves as a guide to one's behavior. Ethical issues are the fundamentals by which a researcher should conduct research. As a result, it is critical to be ethical because data collection involves people making moral decisions that may influence research decisions, standards, and behavior (Punch, 2013). The respondent's privacy and confidentiality must therefore maintained by assuring them that the information they give is solely for the use with which it is sought and not for any other use.

This study observed safeguarded confidentiality of the identity and the information of entities under study. The researcher was fully responsible for the conduct of the research and was also open and honest in dealing with other researchers and ensured that all sources were properly cited and appropriately acknowledged. Permission to carry out the research was sought from the Moi University through the chair of postgraduate studies, see Appendix I(II). Moreover, permission was also sought from

the National Commission for Science, Technology, and Innovation (NACOSTI) to conduct research in Kenya's financial institutions, see Appendix I (II).

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.0 Introduction

This chapter presents the research findings of the study on the moderating effect of foreign ownership on the relationship between board capital and corporate social responsibility disclosure in listed firms on the Nairobi Securities Exchange, Kenya. The chapter provides descriptive statistics, assumption tests of the regression analysis, panel data diagnostic tests and the results of panel regression models.

4.1 Data Preparation and Processing

Data preparation and processing involves editing, classifying and tabulating of the data collected (Hair *et al.*, (2019). The present study relied on secondary data retrieved from annual reports of 56 NSE-listed companies. Data was collected by directly obtaining quantitative information from financial statements and by using content analysis to retrieve information from text published in company annual reports. Researchers utilize content analysis to investigate the occurrence of specific concepts or phrases within sets of text. The method is also useful in the analysis of information either written or recorded (Marquez *et al.*, 2018). The study looked at application of word content analysis, which involves selecting words for investigation and then quantifying and tallying them (Jauch *et al.*, 1980). Content analysis was deemed appropriate because the study is intended to use inconspicuous measures for CSR disclosure. Because the main purpose of data preparation and processing in any research is to check for any potential problems in relation to missing data before data analysis is carried out (Tabachnick *et al.*, 2019). Subsequently the data was processed and evaluated for data completeness and to check whether there were any missing values. In order to minimize the chances of missing data, accuracy was maintained

during the coding process. Panel data preparation was done by converting string values to numerical and creating the panels of the 56 companies.

4.1.1 Analysis of Missing Data

Missing data is the lack of records of information in a given variable as a result of non-response, non-publication or non-disclosure (Young & Johnson, 2015). The problem of missing data is prevalent in social science studies and may not be easy to avoid (Hair et al., 2019; Hayes, 2013). It may however adversely affect statistical analysis results (Sidi & Harel, 2018), leading to ambiguous inferences on variables of interest in the study. There are three types of missing data: missing completely at random, missing at random, and non-ignorable also known as missing not at random. Data that is missing completely at random (MCAR) is that which does not rely on any other information in the data (Young & Johnson, 2015). Missing at random (MAR) refers to situations in which the missing value can be predicted based on the available information, while data that is not missing at random (NMAR) means that we cannot confidently make any conclusions about the likely value of the missing information, and we cannot use any standard method in dealing with it (Young & Johnson, 2015). Consequently, the study made all the necessary efforts to eliminate the likelihood of missing data right from the time of data collection. All efforts were made to obtain the data from all possible sources.

Missing values were evaluated with respect to variables under study. The analysis was performed to ensure that the data was complete and to evaluate the extent of incomplete details for each entity over a period of 12 years. Because the entities were formed and their listing done at different periods, some of the firms under study did not have annual reports throughout the entire span of time. The information was gathered for every firm during their period of listing on the Nairobi Securities

Exchange. Because the companies' time since listing varied, the data was not anticipated to be strongly balanced. As shown in Table 4.1, the resulting panel data was handled as unbalanced with 639 firm year observations.

Table 4.1: Description of Panel Data

Count of Firms	Type of data	Mean	Firm Years
56	Unbalanced	11.41	639

Source: Research Data (2021)

In this study, none of the entities contained greater than 10% missing data in any of the variables on the sample with the largest percentage being that in 13 entries with 8.113% missing information. A response or observation with less than 10% missing data is not deemed to contain a significant amount of missing data (Cohen et al., 1987). None of the 639 entries would have therefore been considered a candidate for deletion for having more than 10% missing data; as a result none of the entries were deleted. Details of the assessment of missing values in the unbalanced data are recorded in Table 4.2.

Table 4.2: Analysis of Missing Data

Missing Data	Firm Years	%	Cum. %	Action
0.00%	581	91%	91%	Retained
3.618	45	7%	98%	Retained
8.113	13	2%	100%	Retained

Source: Field Data (2021)

Handling missing data is an important, yet difficult and complex task when analyzing data. There are several documented approaches of handling missing values ranging from simple imputation, list-wise deletion, multiple imputation techniques, and weighting techniques (Loukopoulos *et al.*, 2017). Multiple imputation technique is

preferred by researchers because it does not affect standard error calculations, increase biasness or decrease the sample variance like the other techniques. Multiple Imputations is a predictive approach that aims to replace missing values using a series of feasible values reflecting the difficulty in predicting the correct imputation values. Furthermore, it integrates random error since the imputation procedure necessitates random variability (Young & Johnson, 2015). Missing at random (MAR) data allows prediction of the missing values based on the participants with complete data. Because the information was missing at random (MAR) and concerned multivariate analysis, all missing values were dealt with by using multiple imputation.

4.1.2 Analysis of Outliers

Observations that deviate from the centroid are referred to as outliers (Zink *et al.*, 2018). An outlier is an observation point that differs or appears to significantly move away from other members (Barnett and Lewis, 1994). Other scholars refer to it as an observation in a data set which appears to be inconsistent with the rest. The likelihood of finding multivariate outliers in all predictor and outcome variables was anticipated since there is a high tendency of outliers in any random distribution, but they are often indicative either of measurement error, model misspecification or that the population suffers hard-tail distribution. Outliers have the potential of distorting estimates of regression coefficients if they happen to be problematic outliers (Gujarati Damodar, 2013; Hair *et al.*, 2019). In particular, it distorts statistics and may lead to results that are not generalizable to a certain sample except one with the same type of outliers (Tabachnick *et al.*, 2019).

The study employs two different outlier detection techniques *dfbetas* and Cook's distance, *D* (Cook & Weisberg, 1994; Laghi & Di Marcantonio, 2016). The rule of thumb for *dfbeta* is to flag observations that are influential on the regression line,

where a $dfbeta$ value $> 2/\sqrt{n}$ or 1.00 is a cutoff point (Wu & Matteson, 2020). Cook's distance measures the influence of individual cases by measuring the effect of deleting a given observation (Cook and Weisberg, 1994). Observations with larger D values are those with unusual leverage. $D > 4/n$ or > 1.0 is a criterion to indicate a possible problem. The Cook's distance, D calculated for all the 639 entries had values less than 1.00 suggesting that no year in any of the firms studied were a multivariate outlier. The $dfbetas$ also calculated for all the observations did not exceed 1.0 indicating that there were no such influential outliers as to adversely affect the regression estimates.

Table 4.3: Cook's Distance and DFBeta outlier analysis

		Cook's distance, D			
Cooks' Distance(D)	639	.0016682	.0032576	2.12e-09	.0279135
		Dfbeta			
_dfbeta_1	639	.0000515	.0390612	-.150241	.2331935
_dfbeta_2	639	.0000144	.0416685	-.1748306	.3250057
_dfbeta_3	639	.0000583	.0489027	-.2594516	.6479699
_dfbeta_4	639	-.000037	.041237	-.1785336	.1499219
_dfbeta_5	639	7.98e-06	.0404157	-.0945236	.25466
_dfbeta_6	639	.0000477	.0352943	-.1494867	.1631773
_dfbeta_7	639	-.0003152	.0691751	-.7773764	.1601493
_dfbeta_8	639	-4.02e-06	.0371973	-.1347035	.1621986

Variables: Firm Age ROA Firm Size Board Size Board Independence Board Expertise Board Relations Foreign Ownership

Source: Research Data, 2021

4.2 Descriptive Statistics

The purpose of the study was to determine the moderation of foreign ownership on the link between board capital and CSR disclosure among Nairobi Securities

Exchange listed firms. The data obtained for the study was analyzed on the basis of specific variable scale of measurement. Table 4.4 summarizes the study's descriptive statistics. CSR disclosure was explored the process of communicating the companies engagement in community, environmental and human resource issues. CSR disclosure was measured using information derived from annual report documentation by way of content analysis. Specifically, the proxy measurements of CSR disclosure are disclosures of pollution control, tree planting, conservation, energy efficiency, water management, solid waste disposal, recycling, product quality and safety, employee diversity, hiring non-discrimination, employee health and safety, training benefits, welfare, recreation, HIV assistance, education, physically disabled, sports, disaster assistance, school fees programs, children's homes, shelter for slum dwellers and women rights issues. The information collected was from 56 listed firms over a period of eleven years and was unbalanced.

The single indicator of CSR Disclosure was calculated as a combination of the three dimensions of community, environment and human resource. Following Haniffa and Cooke (2005), Khan *et al.*, (2013) and Muthuri and Gilbert (2011), the CSR Disclosure index was calculated by taking the ratio of actual scores awarded to the 33 items within the three dimensions of CSR Disclosure. Summary of descriptive statistics on CSR disclosure found in Table 4.4 indicates a mean of 0.401 and a variance of 0.209. CSR disclosure was worked out as a composite of all three dimensions of CSR Disclosure. Here the value and positive sign of CSR disclosure indicates that the firms were involved in CSR disclosure on average, but not to a very great extent. This demonstrates Nairobi Securities Exchange listed firms participate in CSR disclosure, but the rate of participation varies across companies and over time. The variable's standard deviation is decomposed into between and within components,

taking into account the multi-level configuration of the dynamic panel, to show the amount of variation throughout entities (between group variation) and over time (within groups on). During the period of study, the average CSR disclosure for each firm was 0.2093, while CSR disclosure between firms was 0.1871 and within firms was 0.0923.

Board independence was measured as the proportion of independent directors to the total number of directors on the board. The ratio used as the proportion of board independence was calculated using data obtained on the number of non - affiliated directors to the total number of directors for each institution for each year (firm-year). Table 4.4 displays a descriptive analysis of the ratio, while Appendix VI contains a more detailed analysis.

Table 4.4: Descriptive Statistics

	Statistic	Mean	Std. Dev.	Min	Max	Observations
Firm Age	Overall	29.398	17.668	1	69	N = 639
	Between		17.690	3.5	63.5	n = 56
	Within		3.358	23.898	34.898	T-bar = 11.39
ROA	Overall	0.097	0.517	-11.39	1.856	N = 639
	Between		0.214	-0.853	0.694	n = 56
	Within		0.471	-10.44	1.960	T-bar = 11.37
Firm Size(log)	Overall	7.104	0.930	4.049	9.358	N = 639
	Between		0.868	5.345	9.111	n = 56
	Within		0.389	4.184	9.310	T-bar = 11.39
Board Size	Overall	8.536	2.744	3	16	N = 639
	Between		2.562	3	14.583	n = 56
	Within		0.997	5.286	12.702	T-bar = 11.36
CSRD	Overall	0.401	0.209	0.012	0.8787	N = 639
	Between		0.187	0.045	0.7727	n = 56
	Within		0.092	-0.086	0.8052	T-bar = 11.39
Board Independence	Overall	0.709	0.171	0.2	0.9333	N = 639
	Between		0.147	0.333	0.920	n = 56
	Within		0.091	0.276	1.0786	T-bar = 11.37
Board Expertise	Overall	0.323	0.128	0.031	0.659	N = 639
	Between		0.109	0.062	0.545	n = 56
	Within		0.068	0.044	0.681	T-bar = 11.41
Foreign Ownership	Overall	0.281	0.282	0	0.945	N = 639
	Between		0.272	0.032	0.913	n = 56
	Within		0.075	0.054	0.972	T-bar = 11.39
Board Relations	Overall	2.136	2.356	0	13.966	N = 639
	Between		1.941	0.054	8.983	n = 56
	Within		1.314	-4.247	8.226	T-bar = 11.37

As per Table 4.4, the average number of independent non-executive directors serving on the board is 0.709, which is 70.9% of all the directors on the board, with a standard deviation of 0.1718. The standard deviations of the dispersion broken down into within and between were 0.1474 and 0.0914, respectively. The descriptive analysis determined that the lower limit of board independence between the firms is 0.20 and the upper limit is 0.933. Values for the entities' minimum level of board independence ranges between 0.276 and 1.0. Considering that the mean for board size is 8.536, it means that at least 6 out of members in Kenyan boards are independent. Although the Companies Act of 2015 does not make a distinction between executive and directors and in practice the board acts as one, it envisages the non-executive directors to

enhance the independence and objectivity of the board and provide the necessary checks and balances in the board by contributing independent views to matters under consideration. Therefore having such a high proportion of independent directors would be expected to work positively in terms of firm strategic decisions.

Board relations sought to address the question of the relationship that board members have built in their tenure serving on the board of the firm. The proxy for board relations in this study was the average period of time in years that members of the board co-served. To determine this, the amount of time each board member had served on the firm's board as of the year of recruitment was first ascertained, followed by determining the history of networking experience within the focal board. by computing pairwise co-working experience Kor (2006) and Tian *et al.*, (2011) for each firm year. According to the descriptive statistics summary in Table 4.4, average board relation across all firms considered through all years was 2.135 the overall standard deviation being 2.356, broken down into within variation in the entities as indicated by the standard deviation of 1.314 a value lower than the between groups standard deviation of 1.941. This suggests a high turnover of directors in terms of board tenure, which could be due to directors constantly moving across firms in short periods of time, resulting in low levels of co-working experience. The relatively high standard deviation shows that there is heterogeneity between the entities in the population due to some firms having relatively more stable and longer-tenured board members. This is also demonstrated by the high range between the highest and lowest co-working experience (Min. 0.0312 Max 0.659).

The study also sought to establish board expertise among listed firms in Kenya. The study used four indicators to measure this variable that is, expertise in sustainability, government or political background, previous directorships and current directorships.

The measure of the variable is an additive constituent of the four indicators. The overall results are shown on Table 4.4 with an overall mean of 0.323 and standard deviation 0.1285. This was broken down into variation within entities, with a standard deviation of 0.068, a figure lower than the between standard deviation among panels of 0.109. This suggests that within firms there is homogeneity in terms of the expertise of the directors but this varies greatly between firms likely explained by the unique requirements of the sectors where these firms are situated.

The detailed descriptive results for board expertise are shown on Table 4.5 Based on the results, board members have extensive experience in sustainability issues from working in related fields ($M = .80$, $SD = .40$) meaning that board members are familiar with CSR Disclosure related issues. Hence, board members who are knowledgeable in these areas are crucial in guiding the firm in the right direction, as they can understand the trends of the sustainability matters and respond by coming up CSR Disclosure initiatives that are critical to the progress of the firm.

Table 4.5: Descriptive Statistics for Board Expertise

Indicator	Observations	Mean	Variance	SD	Min	Max
Sustainability Expertise	605	.800	.160	.400	0	1
Government and Political Background	605	.066	.062	.248	0	1
Previous Directorship	605	.131	.114	.337	0	1
Current Directorships	605	.213	.168	.409	0	1
<i>N</i>	605					

Based on the results, board members actively participate in boards of other firms ($M = 0.213$, $SD = .409$). Therefore, listed firms are able to get valuable insights since board members bring into the firm their experiences from other firms with regard to their CSR Disclosure practices. Additionally, from the results presented, most board members of listed firms in Kenya have served previously in other boards ($M = .131$,

SD=.337) and some have also served in either a political position or a government role ($M = .066$, $SD = .062$). These preliminary findings from the descriptive analysis show that the majority of the directors have mostly served on boards of other firms and fewer in government or political positions, and that more board members are currently serving on other boards than they previously did. Consequently, it would be expected that such board members are capable of advising the board on how to capitalize on the benefits of disclosing CSR practices by other competing firms and also bring in rich knowledge on opportunities available through their experience in serving in government or in political positions.

Foreign Ownership was the moderating variable in this study. In the study the measure of foreign ownership was the proportion of total firm shareholding held by both institutional and individual foreign investors. According to the results presented in Table 4.4 foreign ownership had a mean of 28.07% and a standard deviation of 28.24% ($M=28.07$, $SD=38.24$). This is in line with the trend analysis of the study period (See Appendix V(I). While this appears to be a small proportion of shareholding compared to the domestic owners, it is a large relative to firms in other developing countries (Ferris & Park, 2005). The standard deviation shows that there is a huge variance between the foreign shareholding of companies. This would be due to the influx of new capital from foreign entities as a result of the repealing the 30 per cent domestic ownership requirement for foreign companies established in the Companies Act 2015 by the adoption of the new Finance Act 2016.

With regards to the descriptive results of the control variables, Firm Age in the study was measured as the age of the firm measured as the number of years since the firm was listed (Fama & French, 2004; Chun *et al.*, 2008). The findings are presented in Table 4.4. Firm age had a mean of 29.398 with a standard deviation of 17.668. The

minimum value of firm age was 1 while the maximum was 69. This implies that there are relatively young firms in the securities exchange but also considerably older firms. Measuring age is a challenge where companies merge. This did not seem to be a significant problem in the data for this study since companies like NIC which merged with Bank of Africa were consolidated to NCBA since NCA was already listed.

Firm size in the study was a measure of the size of firms calculated as the natural log of the value of the firm's assets (Choi et al., 2012). The findings are presented in Table 4.4 Firm size had a mean of 7.10 with a standard deviation of 0.93. The minimum value of firm size was 4.05 while the maximum was 9.36. Firms whose values lie within the first quartile would be considered as small firms. Similarly, firms that lie in the fourth quartile would be considered as large firms while the remaining would be considered as medium sized firm. This would indicate that most firms in Kenya have sizes that are concentrated close to the mean as shown by the standard deviation, resulting in a normal curve with a few firms as outliers.

Board size was quantified as the overall number of directors serving on the organization's board in a particular year. This study thus investigated if the board's size had any impact on CSR disclosure in firms listed on the Nairobi Securities Exchange. Larger boards can lead to more effective decision making by bringing more information to the table, but they can also have an impact on decision-making by making it more difficult to reach a collective decision. As a result, finding a balance between more information and more effective decision-making would result in an ideal board (Aggarwal & Singh, 2019). The average board size is about 9 members (mean = 8.54). The board size in Kenya appears to relatively smaller than the board size in the US, e.g., mean size of 11.45 (Bhagat & Black, 2001). The overall standard deviation of 2.745 suggested that, the board size of firms in Nairobi

Securities Exchange does not deviate much from the mean of 8.45. The variable's decomposed variation, both within and between groups were 2.56 and 0.99 respectively. As per the results, the within standard deviations are lower than the standard deviation between revealing variation throughout all entities in board size and within an entity over time. The board size for each entity ranged from 3 to 16, and the deviation from the average over the period ranged from 5.29 to 12.

4.3 Correlation Analysis

Correlation analysis assesses the strength and nature of the association of pairs of variables forming the basis for regression analysis (Jackson Jr, 2012). Therefore, it is appropriate in research to carry out this procedure. It is useful since it quantifies the strength of the linear relationship between a pair of variables (Bewick *et al.*, 2003). A correlation analysis was carried out in the current study to examine the link between board capital and CSR disclosure when being moderated by foreign ownership. Using Pearson product moment correlation coefficient (r), the study analyzed the relationships that are inherent among the variables to assess the association and the strength of the linear link between study variables.

The range of the correlation coefficient always falls between -1.0 and +1.0 such that if the correlation (r) is positive, there is a direct relationship between variables whereas if correlation (r) is negative, then the relationship is inverse. Additionally, an (r) value that is between 0.00 and 0.10 implies negligible correlation; 0.10 to 0.39 a weak correlation; 0.40 to 0.69 a moderate correlation; 0.70 to 0.89 a strong correlation and 0.90 to 1.00 infers a very strong correlation (Rebekic *et al.*, 2015). Consequently, Pearson correlation coefficients were generated to measure the strength of the link between the study variables.

From the results of correlation analysis on Table 4.6, CSR disclosure was found to have a positive and significant correlation with the independent variables. The control variable of profitability was found to have an insignificant correlation with CSR disclosure. Particularly, the correlation results revealed that board member's independence has a positive and significant relationship with CSR disclosure ($r = .234$, $\rho < .001$). This means that as the percentage of independent directors increases in this sample, so does the level of CSR disclosure. Board member's expertise a positively and significant association ($r = .318$, $\rho < .001$) and board member relations positively and significantly relates to CSR Disclosure ($r = .732$, $\rho < .001$). This indicates that as director expertise and relations increases in our sample, the level of CSR disclosure would also rise with board relations showing the strongest positive relation.

The Moderating variable showed a positive and significant correlation with CSR Disclosure ($r = .186$, $\rho < .01$) With respect to the association between controls and CSR Disclosure, firm age had a positive and significant relationship ($r = .109$, $\rho < .01$), firm size a positive and significant relationship ($r = .345$, $\rho < .01$) and board size a positive and significant relationship with CSR Disclosure ($r = .506$, $\rho < .01$). Further, profitability ($r = -.0063$, $\rho > .05$) showed a negative but significant correlation. According to the above findings, it appears that all regressors have a linear relationship with CSR disclosure in firms, therefore justifying the need to perform a more complex analysis such as multiple regression to show causality between variables.

Table 4.6: Analysis of pairwise correlation coefficients

	CSRD	Firm Age	Profitability	Firm Size	Board Size	B_Independence	B_Expertise	B_Relations	Foreign Ownership
Foreign Ownership									1
B_Relations								1	0.048
B_Expertise							1	0.168***	0.155***
B_Independence						1	0.244***	0.229***	0.009
Board Size					1	0.508***	0.430***	0.446***	0.142***
Firm Size				1	0.423***	0.254***	0.306***	0.242***	0.0015
Profitability			1	0.039	0.128**	-0.0394	-0.013	0.095*	-0.105**
Firm Age		1	-0.029	-0.129**	-0.212***	-0.241***	-0.246***	0.038	0.117**
CSRD	1	-0.109**	0.006	0.348***	0.507***	0.237***	0.318***	0.733***	0.185***

*Level of significance: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$*
 B_Expertise=Board Expertise, B_Relations=Board Relations, B_Independence=Board Independence

Source: Researcher 2021

4.4 Regression Assumptions and Panel Diagnostic Tests

In order for one to fit a multiple regression model using panel data and to use it for testing hypothesis for the research objectives, the model should be tested for regression assumptions. Furthermore, model specification tests must be performed to ascertain the best model for data fitting. Because information on this study was collected over time and across entities forming longitudinal data, unit root tests were done during specification tests. to check panel Stationarity and carry out tests for selecting between the three models; random, pooled and fixed effects.

4.4.1 Test for Panel Stationarity

The regression models to be fitted for a panel study require the data to exhibit panel Stationarity. Therefore before moving to the estimation process it is necessary to determine the existence of unit roots in the panels. Some of the panel data unit root tests adopted for analysis of time series models, are; Im Pesaran Shin (IPS) test, Phillips-Perron test and the Augmented Dickey-Fuller (ADF) unit root test (Maddala & Wu, 1999). ADF cannot be used to test for Stationarity in panel data since it is devoid of power in distinguishing Stationarity alternatives from the unit root null (Dickey & Fuller, 1979). The LL tests are based on pooled regressions and on homogeneity of the autoregressive parameter. Thus the LL tests a very restrictive hypothesis that is rarely of practical interest especially where pooling is not in use. The IPS test on the other hand, is based on heterogeneity of the autoregressive parameter and the test amounts to a combination of different independent tests and there is no pooling of data involved as in the LL tests. The Fisher test is an exact test and unlike the IPS test is not asymptotic (Maddala & Wu, 1999). The p-values in the Fisher test are derived from simulations based on combining the significance levels of the different tests. Also, if the length of the time series for the different samples is

different, there is a problem using the tables prepared by IPS. The Fisher test does not have any such limitations. It can be used with any unit root test and even if the ADF test is used, the choice of the lag length for each sample can be separately determined. Unlike IPS, Fisher's unit root test does not require a balanced panel. Therefore for an unbalanced panel as in the case of this study where some companies have shorter T periods because of year of listing, using Fisher test based on Phillips-Perron test is the best alternative because it overcomes most of the limitations of the other tests and unlike ADF is robust to serial correlation (Greene & William, 1990). The results for the unit root tests using Fisher-type based on Phillips-Perron are as shown on Table 4.8. Unit root tests were also done using Dickey-Fuller method and are presented in Table 4.8.1 in Appendix VI (II).

Table 4.7: Fisher-type unit-root test

(Founded on Phillips-Perron)

Variable	Test		Statistic	p-value
CSR	Inverse chi squared(112)	P	374.35	0.000
	Inverse normal	Z	6.30	0.000
	Inverse logit t(279)	L	10.82	0.000
	Modified inv. chi squared	Pm	17.53	0.000
Board Independence	Inverse chi squared(112)	P	314.36	0.000
	Inverse normal	Z	-7.31	0.000
	Inverse logit t(279)	L	15.82	0.000
	Modified inv. chi squared	Pm	7.53	0.000
Board Expertise	Inverse chi squared(112)	P	319.62	0.000
	Inverse normal	Z	-4.95	0.000
	Inverse logit t(279)	L	-8.51	0.000
	Modified inv. chi squared	Pm	13.87	0.000
Board Relations	Inverse chi squared(112)	P	328.91	0.000
	Inverse normal	Z	-6.69	0.000
	Inverse logit t(279)	L	-8.59	0.000
	Modified inv. chi squared	Pm	14.49	0.000
Board Size	Inverse chi squared(112)	P	216.89	0.000
	Inverse normal	Z	-6.35	0.000
	Inverse logit t(279)	L	8.26	0.000
	Modified inv. chi squared	Pm	10.82	0.000
Firm Size	Inverse chi squared(112)	P	331.68	0.000
	Inverse normal	Z	-1.99	0.023
	Inverse logit t(279)	L	-5.34	0.000
	Modified inv. chi squared	Pm	14.67	0.000
Profitability	Inverse chi squared(112)	P	316.60	0.000
	Inverse normal	Z	-5.41	0.000
	Inverse logit t(279)	L	-8.33	0.000
	Modified inv. chi squared	Pm	13.67	0.000
Foreign Ownership	Inverse chi squared(112)	P	278.55	0.000
	Inverse normal	Z	-4.84	0.000
	Inverse logit t(279)	L	-6.83	0.000
	Modified inv. chi squared	Pm	11.12	0.000

Ho: All panels contain unit roots***Source: Research Data, 2021***

The results of the Fisher-type Stationarity test as displayed on Table 4.7 shows that all the study variables did not contain unit roots. The Chi square statistics' p-values, which were all less than .01, served as an illustration of this. This results are confirmed by the Dickey-Fuller method (Appendix VI (II)) with all the results reported being less than .01. As a result, the null hypothesis that all panels contained unit roots was disapproved, and the inference that all study variables displayed panel Stationarity was made.

4.5 Model Specification Test

4.5.1 Breusch Pagan, LM Model Specification Test

For model specification, the Breusch Pagan Lagrange Multiplier Test was used to evaluate the model for panel effects. The said test allows you to choose between the random effect regression model and the pooled ordinary least squares regression model (Hsiao, 2014). The pooled effect regression model is recommended because, central to the test is the null hypothesis that panel effects are absent and thus no variance. The pooled effect is a weighted average set that presumes no panel effects after any latent heterogeneity has been averaged out. Latent heterogeneity refers to entity specific individual effects that are assumed to be time-invariant (Pesaran, 2021). Individual effects that are unique to each entity and are assumed to remain invariant over time are referred to as latent heterogeneity. The pooled OLS model assumes homoscedasticity and that the observations of each entity are not associated over time or between various units in the same period. As a result, the study then investigated the feasibility of fitting a pooled OLS model. The results of the Breusch Pagan Lagrange Multiplier test are shown in Table 4.8, with a p value of 0.00, which is less than 0.05. As a result, the null hypothesis was rejected, and the inference made that panel effects exist was reached. This indicates the presence of

substantial variations over time between the entities. Hence, the decision is to choose the random effects model over pooled OLS. The next step is to now select between random effects and fixed effects with the assistance of the Hausman test.

Table 4.8: Breusch and Pagan Lagrangian Multiplier Test: Board Capital and CSR

Variable	Variance	SD
CSRI	.04392	.20956
e	.00424	.06515
u	.01169	.10814

Test: Var(u) = 0 chibar2(01) = 1265.73 Prob. > chibar2 = 0.000
H₀: No panel effect

Source: Field Data, 2021

4.5.2 Hausman test for model specification

A central assumption in random effects estimation is that the intercepts are uncorrelated with the explanatory variables. One common method for testing this assumption is to employ a Hausman (1978) test to compare the fixed and random effects estimates of coefficients, Baltagi (2005), and to choose which model is appropriate between the fixed effects model and the random effects model (Baltagi & Song, 2006). Random effects assumes that the individual unobserved heterogeneity is uncorrelated with the predictor variables and can therefore be ignored. In contrast, the fixed effect model assumes that individual specific effects are correlated with the independent variables and are also time-invariant, and thus cannot be ignored (Bell & Jones, 2015). Fixed effects are estimated using least squares (maximum likelihood) while random effects are estimated using linear unbiased prediction.

As a result, the Hausman specification test was employed to determine which model was more appropriate and effective among the fixed effects model and the random effect model. The advantage of both Pooled models and fixed effects models is that one can use them with data that is not balanced. To perform the Hausman test one must first estimate a model with both fixed effects and a random effects specification (Baltagi & Song, 2006). We first estimated the random and fixed effects model by the method of ordinary least squares and stored the estimates then performed the Hausman test. Table 4.9 displays the Hausman specification test results. To draw conclusions about the specified model, the study computed and utilized chi-square. Chi square yielded a value of 17.81 and a p-value of 0.0227 (<0.05). The p-value for the Chi-square statistic was less than 0.05, indicating preference for the fixed effect model.

For cases in which the Hausman specification test supports random effects, alternative models have been employed to deal with unbalanced panel data (Baltagi & Song, 2006) because the random effects model yields biased estimators when applied to unbalanced panel data. Swamy-Arora and matrix-weighted least squares are examples of such estimators (Baltagi & Song, 2006). For this study, the fixed effect model was used.

Table 4.9: Hausman test of random and fixed effects

Variables	Coefficients		Difference	Standard Error
	Fixed effects	Random Effects		
Firm Age	.1066	.0777	.0288	.
ROA	-.0954	-.0929	-.0024	.
Firm Size	.0298	.0320	-.0021	.
Board Size	.0062	.0082	-.0019	.
Board Independence	.1216	.1184	.0031	.0307
Board Expertise	.0590	.0778	-.0188	.
Board Relations	.0267	.0287	-.0019	.
Foreign Ownership	.0010	.0009	.0001	.0001
Ho: difference in coefficients not systematic $\chi^2(8) = 17.81$ Probability > $\chi^2 = 0.0227$				

Source: Field Data, 2021

4.6 Regression Diagnostic Tests

A conventional linear regression model consists of a set of assumptions on how a data set should be produced by the underlying ‘data-generating process.’ The assumptions are: normality, linearity, exogeneity of the independent variables, homoscedasticity and autocorrelation.

4.6.1 Normality Assumption

The assumption of normality is that the distribution of sample means across independent samples is normal. To test for normality in this study, the Jarque Berra (JB) test for normality was used (Gujarati, 2013). The null hypothesis for the JB test assumes normality. Breach of the assumption necessitates the utilization of alternative methods. The disturbance term is attributable to either between or within effects because of the multi-level structure of panel data. Thus, in panel data, both parts of the disturbance term are examined. The JB test looks at the normality of each component's error separately, and it is founded on the assertion that for a variable that is normally distributed, its skewness is 0 and its kurtosis is 3. Skewness measures the degree of asymmetry of the distribution while kurtosis measures the relative

peakedness or flatness of the distribution relative to the normal distribution. Error component normality test results are shown in Table 4.10. With p-values of 0.0746 and 0.096, the Jargue-Berra joint test of firm specific components and the unobservable revealed symmetry. Because the residuals are normally distributed, values that exceed 0.05 indicate that there was no violation of normality assumptions.

Table 4.10: Test for normality- Jarque-Bera Test

	Observed Coefficient	Bootstrap Std. Err.	z	P> z 	[95% Conf. Interval]	
Skewness(e)	.00013	.00016	0.81	0.4160	-.00018	.00044
Kurtosis (e)	.00011	.00005	2.13	0.0330	8.73e-06	.00021
Skewness (u)	-.00027	.00031	-0.91	0.3640	-.00088	.00032
Kurtosis (u)	-.00010	.00005	-1.96	0.0490	-.00021	-2.48e-07
Normality Joint test on e: chi2(2)=5.19			Prob > chi2 = 0.0746			
Normality joint test on u:chi2(2)=4.69			Prob > chi2 = 0.0961			
Observations 639			Replications 50			

A confirmation of normality was also done by use of a Kernel density plot, qnorm and pnorm plots contained in Appendix VI (III). From Figure 4.1 below, the density plot followed closely a normal bell shaped curve. This indicates normality at a mean of zero and deviation of 0.5. This affirms the results from the Jarque-Bera test.

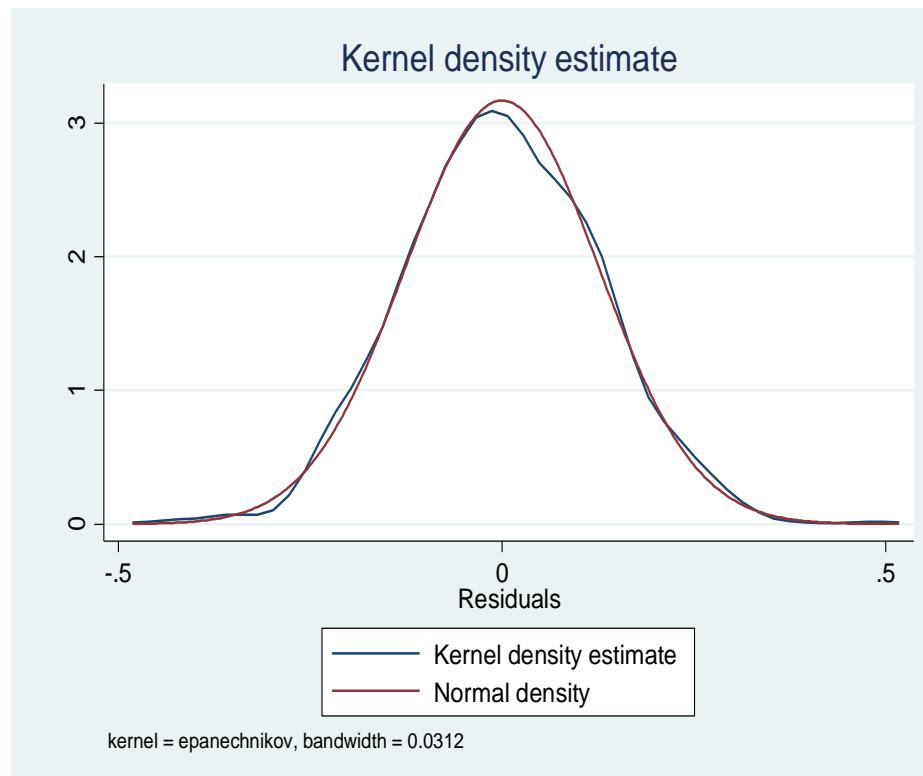


Figure 4.1: Kernel Density Plot 1

4.6.2 Testing for Autocorrelation

Autocorrelation is a potential source of endogeneity in FE and RE panel estimation. The regression model fitted for the current study assumed no autocorrelation. Autocorrelation refers to lack of independence between the residual terms of observations (Gujarati, 2013). Serial correlation of residuals, when it occurs in panel-data models that are linear, may result in biased standard error and consequently less efficient estimates (Drukker, 2003). It is believed that the Wooldridge test for serial correlation is more reliable than other tests (Drukker, 2003; Wooldridge, 2002) and it entails calculating the Wooldridge F-statistic, with a null hypothesis that assumes no first order auto-correlation. A significant test statistic indicates the presence of serial correlation. For this study the findings were significant $F(1, 55) = 27.68$, $\text{Prob} > F = 0.00$ as shown in Table 4.11. Because the F-statistics was less than 0.05, this implied that there was marginal autocorrelation of the first order in the data set. The

assumption of non-serial correlation was therefore violated. In order to deal with these problem robust standard errors must be used. Some common standard errors used in the presence of serial correlation and heteroscedasticity are Newey-West and Driscoll-Kraay standard errors (Newey & West, 1987; Driscoll Kraay, 1998). For this study we used Driscoll Kraay standard errors as proposed by Wooldridge (2002).

Table 4.11: Breusch-Godfrey/Wooldridge for autocorrelation in panel data

H0: no first-order autocorrelation

$$F(1, 55) = 27.678$$

$$\text{Prob.} > F = 0.000$$

Source: Research Data, 2021

4.6.3 Heteroscedasticity Assumption

One of the assumptions made about residuals in regression is that the errors have the same but unknown variance. Heteroscedasticity, also referred to as non-constant of variance, is a condition in which the variance of a regression model's residual term varies greatly (Cohen et al., 1987). The Breusch-Pagan /Cook-Weisberg test for homoscedasticity was used in this study. If the p value of the test is greater than 0.05, it indicates the existence of uniform variance. If this assumption is violated, the estimators can no longer be said to be the Best Linear Unbiased Estimators (BLUE) and are therefore inefficient; therefore the regression will yield biased standard errors, spurious results and incorrect conclusions about significance of the regression coefficients (Gujarati Damodar, 2013). Table 4.12 shows that the test's p-value is less than 0.05, indicating the presence of Heteroscedasticity. The Wald Test for group-wise Heteroscedasticity (see Appendix VI (III)) and Whites general test for Heteroscedasticity (see Appendix VI (III)) both of which give p-values less than 0.05 confirm this. This demonstrates that the fitted fixed effects model breaches the

assumption of the disturbance term's group-wise homoscedastic variances. Although standard OLS is based on the assumption that the residuals are independent and identically distributed (Greene & William, 1990), this independence assumption is often violated in panel data sets (Petersen, 2009). This assumption is violated when there is Heteroscedasticity across panels. Where there is Heteroscedasticity across panels the problem is addressed by using a model that is robust which allows for Heteroscedastic errors (Baltagi, 2005; Petersen, 2009). Driscoll Kraay's covariance matrix estimator is such a test, robust to Heteroscedasticity and produces reliable coefficients estimated by either pooled OLS or FE regression (Hoechle, 2007).

Table 4.12: Breusch Pagan / Cook Weisberg test for Heteroscedasticity

Ho: Constant variance

Variables: fitted values of CSRI

chi2(1) = 34.56

Probability > chi2 = 0.000

Source: Research Data, 2021

4.6.4 Multicollinearity

Multicollinearity refers to a statistical concept where two or more explanatory variables in a model are highly linearly related (Hair *et al.*, 2019). This means that the predictors are not truly exogenous as to be expressed as linear functions of other predictors (Tabachnick *et al.*, 2019). By and large, a good regression model should not exhibit any correlation between explanatory variables (Katidjan *et al.*, 2018). Estimating each independent variable's Variance Inflation Factors (VIF) helps determine Multicollinearity (Alin, 2010). Variance Inflation Factors that have a value equal to or exceeding 10 indicate a Multicollinearity issue, whereas Variance Inflation Factors that do not exceed 10 indicate nonexistence of Multicollinearity (Hair *et al.*,

2019). Multicollinearity causes inflated standard errors in the coefficients related with the variables affected, which may be resolved by removing the variable that is collinear with other predictors (Alin, 2010). Table 4.13 shows that there was no multicollinearity seen between independent variables since the VIFs of the predictor variables in this study did not exceed a value of 10.

Table 4.13: Multicollinearity Test

Variables	VIF	1/VIF
Board Size	2.01	0.497051
Board Independence	1.44	0.694641
Board Expertise	1.32	0.757858
Board Relations	1.27	0.787421
Firm Size	1.25	0.799360
Firm Age	1.17	0.857246
Profitability(ROA)	1.04	0.959973
Mean VIF	1.36	
Source: Research Data, 2021		

4.6.5 Cross Sectional Dependence

A typical assumption during model estimation using panel data sets is that the panels are not cross-sectional dependent. This is particularly true of panels with large N. In the case of panels where N is small and the time dimension (T) is adequately large the cross correlations of the errors can be modeled using tests such as the Lagrange multiplier (LM) test of Breusch and Pagan (1980) which is based on the average of the squared pair-wise correlation of the residuals. Nonetheless, in cases where N is large standard techniques will not be appropriate and other approaches must be considered. Pesaran-Friedman test (Pesaran, 2021), is appropriate test where $N > T$ and can handle both balanced and unbalanced panels (Baltagi & Song, 2006). Because ignoring cross-sectional dependence implies biased estimates especially in panels that rely on fixed effects, the models were subjected to the Pesaran Friedman test to look for cross-sectional dependence. The results are shown in Table 4.14. The p-value was

<.05 and the correlation between the residuals is 0.383, therefore implying that the Pesaran CD test rejects the null hypothesis of spatial independence on any typical level of significance and hence violating the assumption. As a result, the regression should be estimated with standard errors that are robust to cross-sectional dependence.

Table 4.14: Pesaran cross-sectional dependence test

Pesaran Friedman Test		
Pesaran's test of cross sectional independence	= 7.206	p-value=0.000
Average absolute value of the off-diagonal elements	= 0.383	

4.7 Regression Analysis

Regression analysis is a technique that is used in statistics to model and estimate relations especially between a response variable and one or more predictor variables. Regression analysis assesses both the nature and strength of the relationship between variables (Gujarati, 2013). It is a procedure used to estimate associations between predictor variables and an outcome variable (Jackson Jr, 2012).

The objective of this study was to establish the moderation of foreign ownership on the relation between board capital and CSR disclosure for Nairobi Securities Exchange-listed firms. Regression equations were built and employed to evaluate study objectives, testing hypotheses, and drawing inferences from the results. Multiple regression models were employed to examine the relations between the board capital constructs and CSR disclosure. Appendix VII contains the results of each bivariate model.

The Hausman test suggests the use of fixed effects for estimation, the presence of heteroscedasticity and serial correlation calls for use of an approach with a standard

error that is robust to heteroscedasticity and correlations. The first approach is to use an OLS estimator but with a clustered robust standard error (Arellano et al., 1987; White, 1980). If this approach were used for this study, fixed effects would be applied and then clustered by entities, which in this case are listed firms. However, Abadie *et al.*, (2017) argued for caution in the application of clustered standard errors unnecessarily since they may give rise to conservative confidence intervals. Classes of standard errors that are robust to Heteroscedasticity include the well-known White-Arellano estimators analyzed by Arellano et al. (1987), the Newey-West standard errors, Newey and West (1987) and the Driscoll-Kraay standard errors proposed by Driscoll and Kraay (1998). Newey-West and Driscoll-Kraay variance estimators handle autocorrelation up to and including a specified lag, with a lag of 0 being identical to the White estimator. Wooldridge recommends use of Driscoll-Kraay standard errors because they are not only robust to heteroscedasticity and serial correlation but also cross-sectional correlation (Wooldridge, 2002). Driscoll and Kraay (1998) demonstrate that the standard estimator can be modified such that it is robust to general forms of cross-sectional as well as temporal dependence and thus eliminate the deficiencies of other techniques which become inappropriate when N gets large.

Because the Hausman test rejected the null hypothesis of non-systematic difference of coefficients, a fixed effects model was fitted for the study. Furthermore, the diagnostic tests violated the assumption of residual homoscedasticity, spatial correlation and auto correlation, necessitating a more robust approach that allows for both Heteroscedastic errors and first order serial correlation in unbalanced panels. To determine the causal connection between board capital, foreign ownership, and CSR disclosure among firms listed on the Nairobi Securities Exchange, a fixed effect panel

regression model was fitted. Fixed effect models are a type of model in which the predictor levels are assumed to be constant and only the response variable changes in response to the predictor levels. The model provides an estimate of the within effects, which is not biased by differences between entities also referred to as between effects (Beck & Katz, 2007). When using fixed effects we assume that time-invariant differences between the entities may bias the predictor or outcome variables and must be controlled for. The regressions were all fixed effect estimates using Driscoll-Kraay standard errors. Whereas the key findings of the models are shown in Appendix VI-2, the results for the fitted models are included in the regression models summary Table 4.15-17. The F-test of overall significance in a fixed-effects output indicates whether your linear regression model provides a better fit for the data than a model that contains no predictors. The F-test is used in regression analysis to test the hypothesis that all model parameters are zero. It is also used in statistical analysis when comparing statistical models that have been fitted using the same underlying factors and data set to determine the model with the best fit. If the ratio is significant, this would suggest that there is no substantial difference between the two models. Like the Wald Chi-square, the F-statistic examines the possibility that the coefficient estimates in the model are all equal to zero. The significance of the models fitted and the model specifications of the fitted hierarchical regression models were compared in this study using the F test, and the results are displayed in Tables 4.15–17.

Three iterations of the regression models were used. Control variables' first stage was finished, and then came direct effects, which concerned nesting independent and control variables against the dependent variable. Lastly was the introduction of the moderating variable together with the interaction terms to test the moderating effect of foreign ownership on the relationship between board capital and CSR disclosure.

4.7.1 Regression results for control variables

Regression model (M1) was designed to examine the link between the control variables and the dependent variable. Table 4.15 shows that the fixed effect regression results for the first model are generally significant ($F=101.49$; $p<.05$). The overall model generated an R^2 value of .216 implying that the variation in the dependent variable attributable to control variables is 21.60%. The results further showed that the control variables firm age, firm size, firm profitability and board size all showed a significant effect on CSR disclosure at the variable level. Firm age yielded a positive and significant relationship with CSR disclosure ($\beta= .2458$, $p<.05$), firm size ($\beta= .0302$, $p<.05$) and board size ($\beta= .0092$, $p<.05$), firm profitability resulted in a negative but significant link with CSR disclosure ($\beta= -.1056$, $p<.05$). This suggested that, as firms expand in size and mature in age, there is a tendency to disclose more CSR information when likened to smaller younger firms. There also was evidence that firms that are profitability have a tendency to pursue less CSR disclosure in comparison to firms that are struggling in terms of performance suggesting that less profitable firms may be using CSR disclosure as a legitimacy strategy but once they attain a certain level of growth they no longer find a motivation to make social investment. Further, the results suggest that larger boards tend to engage more in CSR disclosure practices.

Table 4.15: Effect of Controls on CSR Disclosure

CSRSD	Coefficient	Std.Err.*	t	P> t	[95% Conf. Interval]	
Firm Age	0.2458	0.0293	8.37	0.000	0.1811	0.3104
Profitability	-0.1056	0.0364	-2.9	0.014	-0.1858	-0.0255
Firm Size	0.0302	0.0130	2.33	0.040	0.0016	0.0588
Board Size	0.0092	0.0033	2.75	0.019	0.001	0.0165
<i>Observations = 639</i>		<i>Number of groups = 56</i>				
<i>F(4,11) =101.49</i>		<i>Prob>F =0.00</i>		<i>Within R-squared =0.2160</i>		
<i>Driscoll-Kraay standard errors)</i>						

Source: Research Data, 2021

4.7.2 Hypothesis testing for direct-effects

In order to assess and ascertain the direct effect of the connection between board capital and CSR disclosure in the second model, a multiple regression model was fitted (M2). The control variables were included in this model. Table 4.16 presents the results of fixed effects estimation for this model. The F statistic shows that the model is generally significant ($F=164.99$; $p<.05$). The variation contributed by the independent variables to this second model resulted in R2 value of .479 showing an improvement from the first model. This indicates that the variation attributable to controls and predictors is 47.93%. This implies that board capital had a significant contribution to the change in CSR disclosure. The main effect hypotheses have been explained using the results generated for the direct effects, which are shown in Table 4.16:

H₀₁ which was the first hypothesis proposed that there is no significant relationship between board independence and CSR disclosure among Nairobi Securities Exchange firms. The findings revealed a positive and significant relationship between board independence and CSR disclosure ($\beta=.1214$; $p < .05$) consequently leading to the rejection of the null hypothesis. This suggests that the agenda for CSR disclosure is driven by independent directors. As a result, when the number of independent directors on a board are increased, the likelihood of firms participating in CSR disclosure also increases, implying that independent directors possess a more CSR-leaning orientation not only because their backgrounds are more diverse, as well as because they represent external stakeholders.

H₀₂ According to the second hypothesis, there is no significant relationship between board expertise and CSR disclosure among the companies listed on the Nairobi Securities Exchange. The null hypothesis was rejected as a result of the findings that

board expertise had a positive and significant relationship with CSR disclosure ($\beta = .0571$; $p < .05$). This suggests that there is enough evidence in this study to suggest that the more expert directors we have on a board, the more the firm will engage in CSR disclosure due to access to more resources in terms of experience and skills that expert directors bring to the firm.

H₀₃ According to the third hypothesis, there is no significant connection between board relations and CSR disclosure among companies listed on the Nairobi Securities Exchange. The null hypothesis was rejected as a result of the findings, which indicated a positive and significant relationship between board relations and CSR disclosure ($\beta = .0277$; $p < .05$). The results indicate that, the longer board members work together and members develop an understanding of the way the other one works, the greater the likelihood of them engaging or supporting CSR disclosure.

Table 4.16: Effect of Independent Variables on CSR [Direct Effects]

Method: Fixed-effects regression						
CSR	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Firm Age	0.110	0.038	2.85	0.017	0.025	0.194
Profitability	-0.096	0.028	-3.44	0.000	-0.157	-0.034
Firm Size	0.031	0.008	3.88	0.005	0.013	0.048
Board Size	0.007	0.001	5.9	0.000	0.004	0.009
Board Independence	0.121	0.049	2.48	0.031	0.013	0.229
Board Expertise	0.057	0.032	1.78	0.008	-0.013	0.127
Board Relations	0.028	0.004	6.32	0.000	0.018	0.036
_cons	-0.180	0.057	-3.18	0.009	-0.305	-0.055
<i>Number of observations</i> = 639		<i>Prob > F</i>		= 0.000		
<i>Number of groups</i> =56		<i>F(7,11)</i>		=164.99		
		<i>Within R-squared</i>		= 0.479		

Source: Research Data, 2021

4.7.3 Hypothesis testing for the moderating effect of Foreign Ownership

A summary of the results of hierarchical regression analysis undertaken to assess the moderation of foreign ownership is shown in table 4.17. The Five models were applied in an additive manner to test for moderation. A moderator is any variable that affects the association between two or more other variables; moderation is therefore the effect the moderator has on this association. As a consequence, it follows that the statistical test for moderation must demonstrate the predictor variable's differential effect as a function of the moderating variable (Dawson, 2014). A moderation effect could be enhancing, where increasing the moderator would increase the effect of the predictor on the outcome; buffering, where increasing the moderator would decrease the effect of the predictor on the outcome; or antagonistic, where increasing the moderator would reverse the effect of the predictor on the outcome (Nielsen & Seay, 2014). Moderation is deemed to be present when the amount of variance accounted for by interaction is significantly greater than the level of variance accounted for by the moderation alone (Dawson, 2014). This is typically represented by changes in R-squared in OLS regression models and the F statistic in FE models.

The study utilized Fixed Effects regression with Driscoll-Kraay (DK) standard errors, Driscoll and Kraay (1998). The advantage of using the DK standard error approach is because it produces unbiased and reliable estimators (Baloch et al., 2019). In the within estimator generated by this approach, the coefficients of the regression model have only one time-invariant intercept for each entity. Foreign ownership was used as a moderating variable in the study which was assessed to moderate the relationship between board capital and CSR disclosure. A series of regressions were done with model (M1) showing controls, model (M2) showing the main effects while Model (M3), model (M4) and model (M5) cover the interaction effects. This was done in a

series of hierarchical regressions with the preceding model nested in the subsequent model. The model comparison results are presented in Table. 4.17.

Moderation of Foreign Ownership on board Independence: In an attempt to assess the moderating effect of foreign ownership on the relationship between board independence and CSR disclosure, the interaction between board independence and foreign ownership was added to the model. The test results for this model (M3) are presented in Table 4.17. The results show that addition of the interaction term to the model is significant as shown by the F statistic ($F=938.48$, $p=.000$). Model (M2) which is the direct effects model is nested in model (M3) facilitating for testing for improvement or weakening of the subsequent model. The results of the Wald test show that addition of the interaction term to the model has a 5.55 change in the F statistic. The change is significant as shown by the p value (.0381) which is less than .05. This shows that there was an improvement in the model from the preceding model (M2).

With regard to the beta value of the moderation of foreign ownership and board independence ($\beta=.116$, $p=.049$), the results show that it is significant as the p-value is less than .05 albeit marginally. This shows that foreign ownership as a moderator enhanced the effect of board independence on CSR disclosure. In addition the R^2 for the model ($R^2=.487$) was also higher than for model 2 implying that the explanatory power of the model improved. This means that the variation in the dependent variable explained by the controls, independent variables and the interaction term was 48.7%.

H_{04a} stated that foreign ownership does not moderate the relationship between board independence and CSR disclosure. The results on Table 4.17, Model 3, indicate that foreign ownership has a significant effect on the relationship between board

independence ($\beta = .116$, $p < .05$) and CSR disclosure. The study thus rejected the null hypothesis and concluded that indeed there is evidence that foreign ownership moderates the relationship between board independence and CSR disclosure. The Wald test results ($F(9, 11) = 938.48$), also confirms that indeed foreign ownership moderates the relationship and hence produced a better model.

Table 4.17: The moderation of foreign ownership on board independence and CSR disclosure

Method: Fixed Effects Regression						
CSRD	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Firm Age (ln)	0.107	0.035	3.020	0.012	0.029	0.185
Profitability	-0.096	0.012	-7.720	0.000	-0.123	-0.068
Firm Size (ln)	0.030	0.010	3.130	0.010	0.009	0.051
Board Size	0.006	0.001	7.680	0.000	0.004	0.008
Board Independence	0.085	0.030	2.840	0.016	0.019	0.152
Board Expertise	0.061	0.021	2.900	0.015	0.015	0.108
Board Relations	0.027	0.004	6.480	0.000	0.018	0.036
Foreign Ownership	0.011	0.041	0.260	0.800	-0.079	0.101
BI*FO(Moderation)	0.116	0.052	2.210	0.049	0.001	0.231
_cons	-0.168	0.061	-2.770	0.018	-0.301	-0.035
<i>Number of Observations. = 639</i>			<i>F(9,11</i>		<i>=938.48</i>	
<i>Number of groups =56</i>			<i>Prob. > F</i>		<i>= 0.000</i>	
			<i>Within R-squared</i>		<i>=0.487</i>	

Legend: BI=Board Independence FO =Foreign Ownership

Source: Research Data 2021

Moderation of foreign ownership on board expertise; With a view to evaluate the moderating effect of foreign ownership on the link between board expertise and CSR disclosure in all firms listed in Nairobi Securities exchange, the interaction between board expertise and foreign ownership was introduced to the model. The test results for this model are presented in Table 4.18, Model 4. The direct effects model is nested in this model facilitating for testing for improvement or weakening of the subsequent model. The results show that the model with an addition of the interaction term was overall significant as shown by the F statistic ($F=1207.09$, $p=.000$) but the results of

the Wald test show that addition of the interaction term to the model enhanced it by only 0.20 in the F statistic change. The change is not significant ($F = .20$, $p=.663$) as shown by the p value $> .05$. This shows that there was an insignificant contribution of foreign ownership as a moderator for board expertise and consequently the preceding model.

Additionally, the beta value of the moderation of foreign ownership on board expertise ($\beta = -.00039$, $p > .05$), shows that it is not significant as the p-value is greater than .05. This shows that foreign ownership as a moderator did not improve the effect of board expertise on CSR disclosure. The R^2 for the model ($R^2 = .486$) was marginally higher than for model 2 implying that the explanatory power of the model did not improve significantly. This means that the variation in the dependent variable explained by the controls, independent variables and the interaction term between board expertise and foreign ownership remained unchanged at approximately 48.6%.

H_{04b} stated that foreign ownership does not moderate the relationship between board expertise and CSR disclosure. The results of Model 4 in Table 4.18., indicate that foreign ownership has no significant effect on the relationship between board expertise ($\beta = -.00039$, $p > .05$) and CSR disclosure. The study thus failed to reject the null hypothesis and concluded that indeed there was no sufficient evidence in the study to determine that foreign ownership moderates the relationship between board expertise and CSR disclosure. The Wald test results ($F(9, 11) = 1207.09$), also confirms that foreign ownership did not moderate the relationship enough to produce a better model.

Table 4.18: The moderation of foreign ownership on board expertise and CSRD

Fixed-effects Regression						
CSRD	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Firm Age	.106	.034	3.10	0.010	.031	.182
Profitability	-.095	.028	-3.42	0.006	-.156	-.034
Firm Size	.029	.009	3.42	0.006	.011	.049
Board Size	.006	.001	6.29	0.000	.004	.009
Board Independence	.121	.049	2.43	0.033	.012	.231
Board Expertise	.071	.051	1.40	0.189	-.041	.183
Board Relations	.027	.004	6.52	0.000	.018	.036
Foreign Ownership	.001	.001	4.06	0.002	.001	.002
BE*FO(Interaction)	-.001	.001	-0.37	0.718	-.003	.002
_cons	-.197	.061	-3.25	0.008	-.331	-.064
<i>Number of observations.</i>	=	639		<i>F(9, 11)</i>	=	1207.09
<i>Number of groups</i>	=	56		<i>Prob. > F</i>	=	0.0000
				<i>within R-squared</i>	=	0.486

Legend: BE=Board Expertise FO=Foreign Ownership

Source: Research Data 2021

Moderation of foreign ownership on board relations; The interaction between board relations and foreign ownership was incorporated into the model to test the moderating effect of foreign ownership on the link between board relations and CSR disclosure in firms listed on the Nairobi Securities Exchange. The test results for this model (M5) are presented in Table 4.19. The F statistic demonstrates the value of including the interaction term in the model based on the findings ($F=203.30$, $p=.000$). Model (M2) which is the direct effects model is nested in model (M5) facilitating for testing for improvement or weakening of the subsequent model. The results of the Wald test show that addition of the interaction term to the model had a 39.52 change in the F statistic. The change is significant as shown by the p value (.000) which is less than .05. This shows that there was an improvement in the model from the direct model (M2).

With regard to the beta value of the moderation of foreign ownership on board relations ($\beta=.0001$, $p=.0210$), the results show significance as the p-value is less than .05. This shows that foreign ownership as a moderator enhanced the effect of relations

on CSR disclosure. In addition the R^2 for the model ($R^2=.487$) was also higher than for model 2 implying that the explanatory power of the model improved. This means that the variation in the dependent variable explained by the controls, independent variables and the interaction term was 48.72%.

H_{04c} stated that foreign ownership does not moderate the relationship between board relations and CSR disclosure. The results on Table 4.19, Model 5, show that foreign ownership has a significant effect on the relationship between board relations and CSR disclosure ($\beta=.0001$, $p<.05$). The study thus rejected the null hypothesis and concluded that indeed there is evidence that foreign ownership moderates the relationship between board relations and CSR disclosure. The Wald test results ($F(9, 11) = 203.3$), also confirms that foreign ownership moderates the relationship and hence produced a better model.

Table 4.19: The moderation of foreign ownership on board relations and CSR

Fixed-effects regression						
CSRD	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Firm Age	0.109	0.033	3.320	0.007	0.037	0.182
Profitability	-0.095	0.030	-3.130	0.010	-0.163	-0.028
Firm Size	0.031	0.008	3.830	0.003	0.013	0.049
Board Size	0.006	0.001	4.280	0.001	0.003	0.009
Board Independence	0.117	0.044	2.630	0.023	0.019	0.215
Board Expertise	0.063	0.037	1.720	0.113	-0.017	0.145
Board Relations	0.024	0.003	7.150	0.000	0.017	0.032
Foreign Ownership	0.000	0.000	3.470	0.005	0.000	0.001
BR*FO	0.001	0.000	2.680	0.021	0.000	0.000
_cons	-0.202	0.068	-2.960	0.013	-0.353	-0.052
Number of observations	=639			F(9,11)		=203.30
Number of groups	=56			Prob >F		=0.000
				Within R-squared		=0.487

Legend: BR=Board Relations FO=Foreign Ownership

Source: Research Data, 2021

The hierarchical summary on Table 4.19 shows that the results showed a significant effect on the relationship between board capital and CSR disclosure and moderation

by foreign ownership on all the independent variables except for board expertise. The first hierarchical step involved regressed the dependent variable, CSR disclosure on control variables. The second step introduced the three independent variables, board independence, and board expertise and board relations in addition to the control variables already introduced in step one. The next three stages involved adding the three interaction terms of foreign ownership with board independence, foreign ownership with board expertise and finally foreign ownership with board relations.

Table 4.20: Hierarchical Moderation Regression Summary

Variables	Model 1	Model 2	Model 3	Model 4	Model 5
Controls					
Firm Age	.246(.000)***	.109(.016)*	.107(.012)*	.106(.010)*	.109(.010)**
Profitability	-.106(.014)***	-.096(.006)***	-.096(.000)***	-.095(.006)***	-.096(.002)***
Firm Size	.030(.040)*	.031(.003)**	.029(.010)**	.029(.006)*	.0312(.008)*
Board Size	.0092(.019)*	.007(.000)***	.006(.000)***	.006(.000)***	.006(.000)***
Main Effects					
Board Independence		.121(.031)*	.085(.016)*	.121(.033)*	.117(.033)*
Board Expertise		.0571(.008)***	.061(.015)**	.071(.189)*	.0637(.014)**
Board Relations		.0271(.000)***	.0266(.000)***	.027(.000)***	.025(.000)***
Moderator					
Foreign Ownership			0.011(.800)	0.001(.002)**	0.011(.001)***
Interactions Terms					
BI*FO			.001(.049)*	.001(.049)	.001(.049)
BE*FO				-0.004(.718)	-0.004(.718)
BR*FO					.0001(.003)***
_cons/Intercept	-.209(.072)	-.1802(.012)	-.168(.021)	-.197(.011)	-.202(.015)
F Change	101.49	63.50	773.49	1042.1	38.31
N	639	639	639	639	639

Level of significance: * $p < .05$; ** $p < .01$; *** $p < .001$

Legend: BI=Board Independence, BE=Board Expertise, BR=Board Relations, FO=Foreign Ownership

Source: Research Data, 2021

Statistical change: the results on Table 4.21 presents a summary of statistical change depicting the improvement of one model from the preceding model. A notable change is the change R^2 from model 3 to model 4 (-0.11), which shows that there was no improvement in the model as shown by the p value and F change ($p=.6632$) which is $<.05$. Model 2, model3 and model 5 were all significant and also showed F change and R^2 change improvement. Specifically, Model 2 showed an F change of 63.50 from Model 1, Model 3 showed an F change of 773.49 from Model 2 , Model 4 showed an F change of 1042.1 from Model 3 and finally and F change of 38.31 for Model 5 from Model 4.

Table 4.21: Model Summary in terms of F change

Models	F change	Overall F Value	Model R^2	N
Model 1	101.49(.000) **	101.49	21.60	639
Model 2	63.50 (.000) **	164.99	47.93	639
Model 3	773.49(.038) *	938.48	48.69	639
Model 4	1042.1(.663)	1207.09	48.58	639
Model 5	38.31(0.003) *	203.30	48.72	639

*Level of significance*** $<.001$ ** $<.05$ * $<.10$*

Legend: Control Variables= Firm Age, Firm Size, Board Size and Profitability

Independent Variables=(Board Independence, Board Expertise and Board Relations

Model 1=Control Variables, Model 2=(Independent Variables and Control Variables),

Model3=Model2+Interaction term1, Model 4=Model3 +Interaction term2, Model5=Model4

+Interaction term 3

Source: Research Data, 2021

4.7.4 Moderation Graphs

Interaction plots tell us whether the moderator has any effect on the relationship between the predictor and the outcome variables (Aiken et al., 1991). On an interaction plot, parallel lines indicate that there is no interaction effect while different slopes suggest that an interaction might be present (Jose, 2008).

The moderation plot in Figure 4.2 shows the interaction effect of foreign ownership on the relationship between board independence and CSR disclosure. This is shown by the difference in slopes on the moderation plot indicating that at high levels of

foreign ownership the effect of board independence on CSR disclosure is enhanced. This implies that foreign shareholders exert some influence on board members who are independent to adopt CSR disclosure oriented policies.

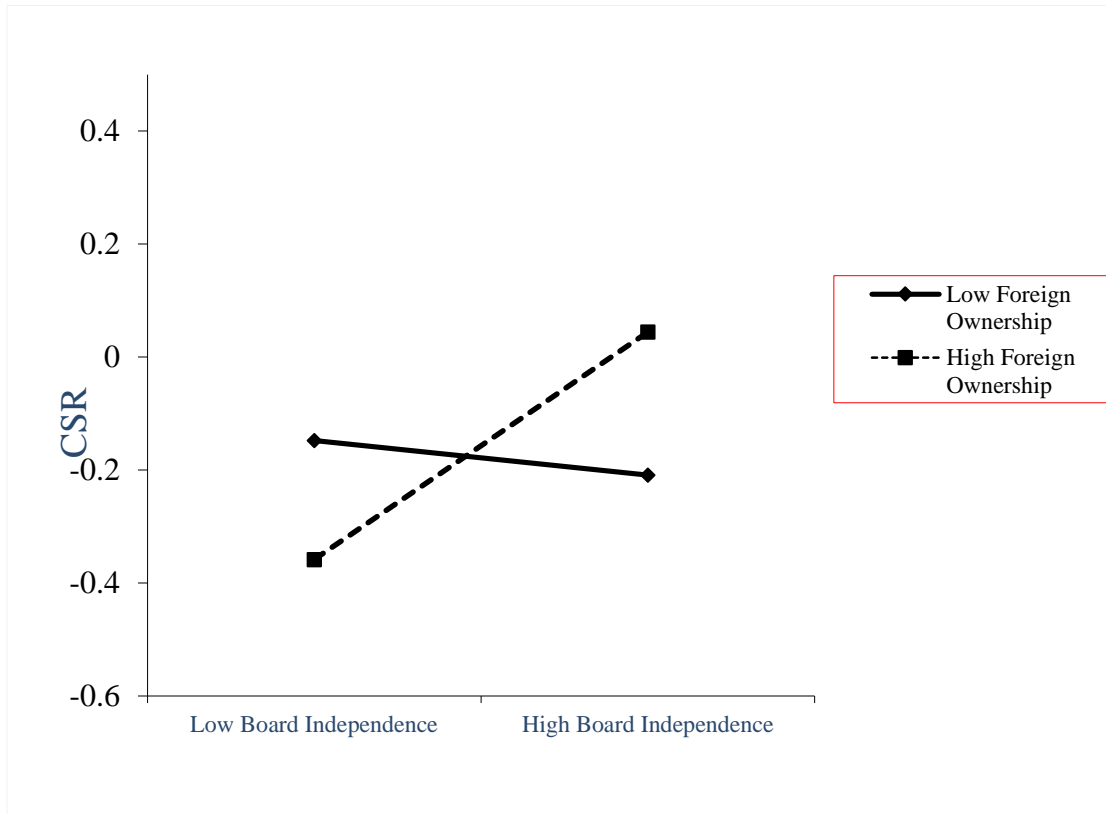


Figure 4.2: Mod graph showing the moderating effect of foreign ownership on the relationship between board independence and CSR

The moderation plot in Figure 4.3 shows the interaction effect of foreign ownership on the relationship between board expertise and CSR disclosure. The low and high foreign ownership plots show a slope that is close to parallel on the moderation plot indicating that at high levels of foreign ownership the effect of board expertise on CSR disclosure is almost the same as at high levels. This indicates that foreign shareholders exert little influence on board members who are already experts on adopting CSR disclosure directed policies.

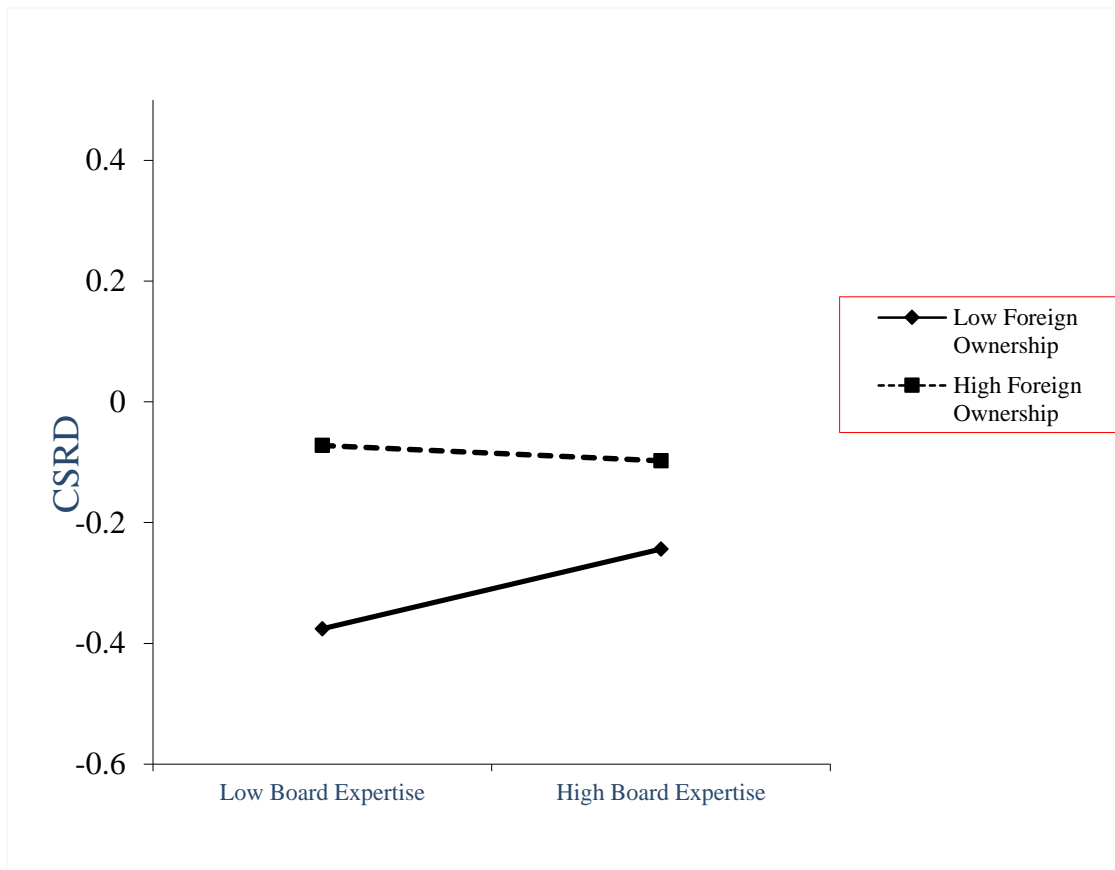


Figure 4.3: Mod graph showing the moderating effect of foreign ownership on the relationship between board expertise and CSR Disclosure

The moderation plot in Figure 4.4 shows the interaction effect of foreign ownership on the relationship between board relations and CSR disclosure. This is shown by the difference in slopes on the moderation plot indicating that at high levels of foreign ownership the effect of board relations on CSR disclosure is increased. This reinforces the notion that the presence of foreign shareholders in firms improves board relations among board members, which will lead to the board members making CSR-supporting decisions that include reporting their CSR activities in their publications.

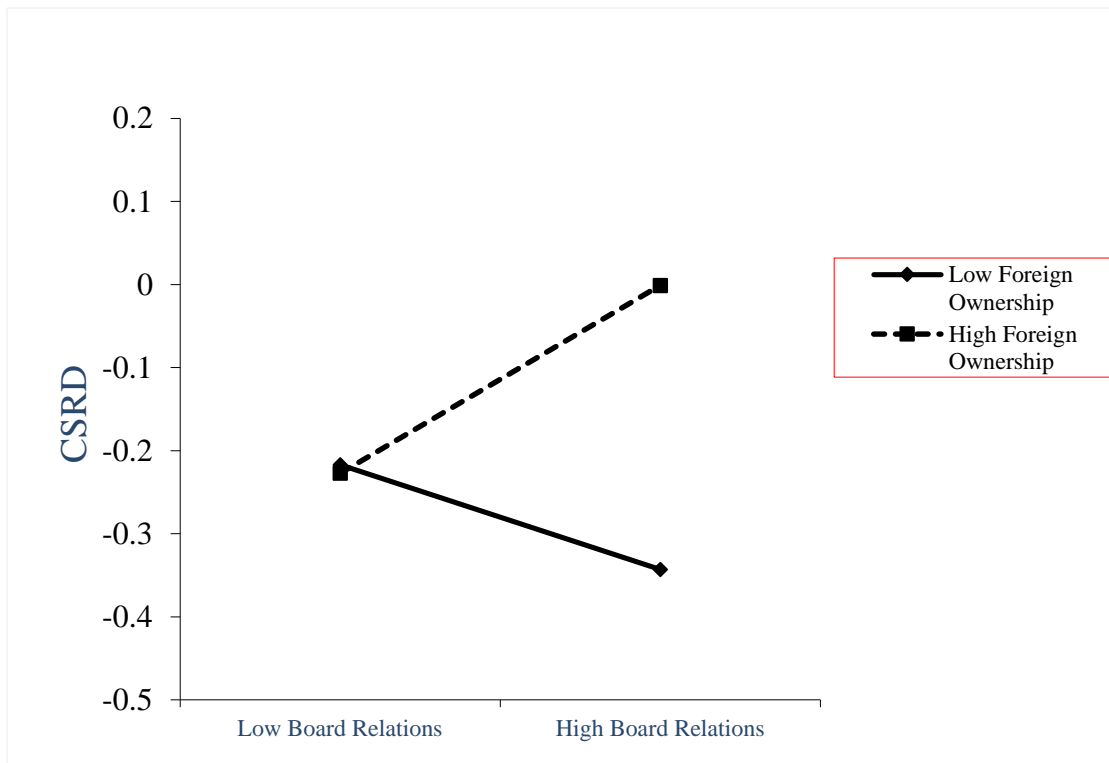


Figure 4.4: Mod graph showing the moderating effect of foreign ownership on the relationship between board relations and CSR

4.7.5 Robustness Test

Further robustness test were also carried out to ascertain how regression coefficients behave when subjected to other estimation methods. Coefficients that are plausible and robust are common interpreted as evidence of structural validity. The results from pooled OLS and Random effects regression demonstrated comparable results with little deviation, therefore suggesting that the results from the fixed effects regression employed for this study was appropriate. The results for the robustness tests are found in Appendix VIII.

4.7.6 Summary of hypotheses

The following section gives a summary of all the hypotheses tested and the coefficients, p values and decisions made on each hypothesis and are presented in table 4.22.

Table 4.22: Summary of Results for Test of Hypotheses

Hypothesis Formulated	Beta (β)	ρ – values	Decision
Main Effects R² (.479) [R²Δ (.263) from Controls]			
H₀₁: Board member's independence has no significant effect on CSR disclosure	.1214	.031*	Rejected
H₀₂: Board member's expertise has no significant effect on CSR disclosure.	.0571	.008*	Rejected
H₀₃: Board member's relations has no significant effect on CSR disclosure	.0277	.000*	Rejected
MODEL 5 – Foreign Ownership R² (.487) R²Δ (.080)			
H_{04a}: Foreign ownership does not moderate the relationship between board member's independence and CSR disclosure	.0012	.049*	Rejected (Moderated)
H_{04b}: Foreign ownership does not moderate the relationship between board member's expertise and CSR disclosure	-.0039	.718	Not Rejected (Not Moderated)
H_{04c}: Foreign ownership does not moderate the relationship between board member's relations and CSR disclosure	.001	.003*	Rejected (Moderated)
<i>Level of significance, *p < .05, CSR Disclosure = CSR Disclosure</i>			

Source: Research Data, (2021)

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary of the findings and how the results relate to both empirical evidence in the extant literature and the theory underpinning the study. Additionally, the chapter covers the conclusion, implications to both theory and practice, and suggestions for further research.

5.1 Summary of the Findings

The objective of the study was to examine the relationship between board capital and CSR disclosure and to also establish the moderating role of foreign ownership on this relationship among listed firms in the Nairobi Securities Exchange, Kenya. Panel regression approach was used to test the hypotheses formulated for the study. The resource dependence theory; legitimacy theory, social capital and human capital theories were utilized to guide the study. The study findings not only indicated that the board member's independence, expertise and relations influenced CSR disclosure in listed firms in Kenya, but that foreign ownership also played a significant role in this relationship except for expertise. The findings therefore supported the entire hypotheses except for hypothesis five. To corroborate the findings, mod graphs were employed to explain the moderating effect of foreign ownership on the relationship between board capital and CSR disclosure.

The overall prediction model as revealed by the results of the study had an explanatory power of 0.487 indicating that the predictor variables explained 48.72% of the variation in CSR disclosure. The results showed that board relations had the highest prediction power followed by board expertise with board independence having the least power of prediction on CSR disclosure. The study results also

established that foreign ownership was a moderator on the relationship between board member's independence and board member relations on CSR disclosure. However no moderation was established on the relationship between board expertise and the CSR disclosure among listed firms in Kenya.

As we find a significant positive correlation between the three hypothesized factors and CSR disclosure engagement in the hierarchical regression and also in the interactions, we conclude that the study provides adequate empirical evidence to support all but one hypothesis using the econometric estimation method applied. Based on the objectives and hypotheses formulated, the theoretical underpinnings and empirical results are deliberated in the subsequent discussion.

5.1.1 Effect of board independence on CSR Disclosure

Generally, scholars agree that board members independence is a crucial aspect of corporate governance. The results of the current study reported a positive and significant effect between the board member's independence and CSR disclosure ($\beta = .1214, p < .05$). The results suggest that increasing the number of independent directors would significantly improve the engagement in corporate social activity in listed firms. This is in line with resource dependence theory and human capital theories that argues that the board is a provider of professional networks, contacts, relations, knowledge, and resources to the firm (Pfeffer & Salancik, 1978). This also supports the assertions from prior studies which argue that a board with independent directors brings a neutral view and objectivity to the boardroom that is likely to positively influence CSR disclosure engagement. There are several reasons that support this argument.

First, this supports the findings of Shahbaz *et al.* (2020) which indicate that overall a stronger board is not only a significant driver of CSR disclosure commitment but that the deployment of corporate boards with a higher proportion of non-executive directors is more likely to be associated with higher CSR disclosure engagement. This augments the findings of Khan *et al.* (2013) and Gallego-Álvarez and Pucheta-Martínez (2022) who contended that the presence of independent directors on the board is a crucial governance mechanism and driver of CSR disclosure. The assertions made in these studies are similar and based on two arguments; De Andres and Vallelado (2008) who concluded that a board with more independent directors influences management to act responsibly and Rao *et al.* (2012) whose results showed that independent boards were crucial in fostering of board effectiveness in discharging their mandate.

Secondly, the results are in agreement with the findings of (Ibrahim & Hanefah, 2016) which show that coming from outside the firm, independent directors have closer relations with stakeholders, know their expectations better, and are more likely to meet their demands and are therefore more likely to motivate companies to engage in CSR disclosure activities in accordance with societal values. Other studies on CSR disclosure are also in support of this line of argument include (Mohan, 2001). In addition, the results support the related proposition that independent directors know the environment better and are often more efficient in controlling external contingencies. This is in support of the proposition of Fernández-Gago *et al.*, 2016 who found that the image and reputation of independent directors may be linked to the ethical and responsible behavior of their firms.

The results are also consistent with the findings of Zahra and Pearce (1989), which established that independent directors play a special role in ensuring they comply with

regulations and are more concerned about the socially responsible behavior of their companies. Consequently, independent directors are more likely to ensure that their companies behave in a more socially and environmentally responsible manner (Rao *et al.*, 2012).

Consistent with resource dependency theory, the results of this study support the resource providing role of independent directors. Arguably, outside directors are deemed to be independent and are providers of resources (Ferreira & Matos, 2008; Hillman & Dalziel, 2003). This supports the assertions of Yekini *et al.* (2015) that independent directors coming from communities and being leaders of large corporations have a responsibility to represent the interests of their community at the board level and to “maintain good relationships” between the corporation and its local community and the government.

Further to this and in support of resource dependence theory arguments that beside the board’s monitoring role, independent directors are providers of critical resources to the firm (Hillman & Dalziel, 2003). The results are in agreement with the notion that independent directors are able to secure collaboration and commitment of other institutions and partners on whom the firm depends on for its operation (Hillman *et al.*, 2000). These directors will tend to be the source of advice for other board members on the opportunities and challenges they may face, linking the firm to important stakeholders, aiding in formulation of strategy as well as being in a position to offer CSR disclosure related advice and facilitating access to any necessary resource or knowledge. Finally, the findings of this study reinforce that the significance of board independence in supporting CSR disclosure engagement is applicable to developing economies firms as it is to developed economies.

On the other hand however, some existing studies have interrogated and acknowledged the inherent mixed reactions from some scholars on the potential effects of board independence on CSR disclosure. For instance, Haniffa & Cooke, 2005 in their study of Malaysian companies found that boards dominated by non-executive directors played a limited role in influencing CSR disclosure practices because of indifference towards societal concerns by independent directors. This is inconsistent with the results of the current study.

5.1.2 Effect of Board Expertise on CSR Disclosure

The study results reported a positive and significant effect between board expertise and CSR disclosure ($\beta = .0571$, $\rho < .05$). This signifies that with an increased level of board expertise, there is also an increasing probability of CSR disclosure involvement in listed firms in Kenya. This is in agreement with the argument that a firm has to have the right mix of directors, particularly expert directors who can bring the diversity of knowledge, skills, experience and ties (Pfeffer & Salancik, 1978); as well a broader stakeholder orientation that can help develop an effective CSR disclosure strategy. Consistent with previous studies, this study finds an association between expertise of directors and CSR disclosure (Al-Mamun & Seamer, 2021; Rao & Tilt, 2015).

In relation to board expertise this study shows that a board's expertise has a positive effect on CSR disclosure engagement as board members with expertise in different areas inject their insights into firm CSR disclosure engagement strategic decisions. This is consistent with a resource dependency theory perspective which states board members are key resource access mechanisms for organizations. In relation to CSR disclosure engagement, board members with previous political and community influence or those that have previously held senior government and corporate

positions are more likely to be aware of the institutional and regulatory pressures which need to be taken into consideration while making strategic decisions. The findings of a positive link between a board's expertise and its CSR disclosure engagement are therefore consistent with previous empirical studies (Al-Mamun & Seamer, 2021; Shaukat et al., 2016).

This results also point to the assertions that board members with wide experience and expertise are more knowledgeable on business policies and practices, international standards, regulatory regimes, and overall institutional settings, hence are more likely to promote firm CSR disclosure engagement. Equally, the study results are consistent with our predictions, that those active or retired directors who come from other companies or with specific expertise positively affect CSR disclosure engagement and confirm the suggestion by extant studies that a more experienced board reflect greater CSR disclosure engagement and their skills and abilities in other companies play a positive, influential role in the level of CSR disclosure (Hanousek et al., 2019; Homroy & Slechten, 2017; Zhuang et al., 2018).

Consistent with Human Capital theory propositions, the current study reveals that board members with expertise in form of knowledge and skills creates an enabling environment for strategic decisions including those that encourage CSR disclosure activities. Therefore, the results are consistent with Haynes and Hillman (2010) hypothesis that collective expertise among members of the board not only influences firm outcomes positively but CSR disclosure engagement. The unique firm and industry expertise provide firms with valuable market information, resources leading to enhanced CSR disclosure (Barka & Dardour, 2015). Therefore, in listed firms, a board with members who have specialized expertise positively contributes to the value of the firm in terms of CSR disclosure.

5.1.3 Effect of board relations on CSR Disclosure

The study results presented evidence suggesting that board relations has a substantial effect on CSR disclosure engagement. The results showed that board relations positively and significantly affected CSR disclosure ($\beta = .0277$; $p < .05$). This is of particular significance with regard to the proposition that board members with particular information and knowledge that they gain through relationships is crucial in creating the necessary social capital to drive the CSR disclosure agenda of a firm (Coleman, 1988).

The results of the study are also consistent with the findings of Macus (2008) who contends that the interactions that occur within boards endow the group with task-solving potential which functions as an enabling factor for the potential of the board. It also agrees with the finding of psychological research that the availability of expertise in a group does not guarantee the use of that expertise but instead, the interactions that occur in the group determine to what extent a board's expertise is put to productive use (Jackson Jr, 2012).

Finally, in line with social capital theory, this study proposed that board members develop intra-organizational social capital by interactions amongst each other. The argument in the study is that this can be tapped into as sources of strategic advantage for benefiting the CSR disclosure agenda. The results of this study are consistent with social capital theory (Adler & Kwon, 2002) which provides the conceptual backdrop for this argument, having established that given a certain board task or problem, the board's interactions determine to what extent its problem-solving potential inherent in board relations is realized. The study therefore confirms the notion that as boards learn how to address various simultaneous tasks that change in relative importance over time, they can develop the ability to configure their various board resources

dynamically by adapting their patterns of interactions as a strategic resource to influence the firms CSR disclosure engagement goals.

5.1.4 Moderation of Foreign Ownership on Board Capital and CSR

The study postulated that foreign ownership does not moderate the relationship between board independence and CSR disclosure in listed firms in Kenya. However, the results of Model 3 on Table 4.18 showed that foreign ownership positively and significantly moderates the link between board independence and CSR disclosure ($\beta=.0854$, $p< .05$). This is demonstrated in the interaction graph in figure 4.2 which indicates that under high foreign ownership, the effect of board independence on CSR Disclosure is accelerated than at low levels of foreign ownership. This suggests that having the presence of foreign investors in listed firms provokes board members to deliberate on corporate social agenda which eventually leads to the undertaking of CSR Disclosure activities. This confirms the findings of Pangeran (2020) which reveal that foreign shareholders have the capacity to influence firm policies and decisions. This reiterates the argument of Ahmadjian and Robbins (2005) that foreign ownership positively influences directors by infusing best practices that have implications on CSR disclosure.

The study also posited that foreign ownership does not moderate the link between board expertise and CSR disclosure. The results showing the effect of the interaction term board expertise and foreign ownership ($\beta = -.0393$, $\rho> .05$) on CSR disclosure, affirms this null hypothesis and therefore fails to reject it. This is also confirmed by the mod graph in figure 4.3, which showed that the effect of the relationship is neither strengthened nor weakened by foreign ownership as it changes from low to high. This signifies that a higher level of foreign ownership does not contribute to improvement of board expertise with regard to its influence on CSR disclosure strategy. This is

contrary to the findings of some previous studies (Chien-Chiang et al., 2020; Yoshikawa et al., 2010) which asserted that firms with foreign ownership transfer know-how that augments the capabilities that are already possessed by directors.

Finally, the results pointed out that foreign ownership had a positive and significant moderating effect on the association between board relations and CSR disclosure ($\beta = .088, p < .05$). The interaction as shown on figure 4.4 indicates that the strength of the relationship between board member relations and CSR disclosure is improved as foreign ownership correspondingly increases. This signifies that foreign ownership enhances the effect of board relations on CSR disclosure. Foreign investors, especially institutional ones, have a long term vision and would be presumed to make an attempt to support building relationships among board members to achieve their long term goals (Shubita & Shubita, 2019). Thus, this influence plays a significant role in enhancing CSR disclosure objectives as a consequence of a more healthy working relationship among board members.

5.2 Conclusions of the Study

The main objective of this study was to examine the moderating role played by foreign ownership on the relationship between board capital and CSR disclosure in listed firms in Kenya. Although extant studies have found that boards affect CSR disclosure, yet, the theoretical explanation for the phenomena is not entirely unclear. In addition, the empirical evidence on the relationship between board capital and CSR disclosure also still remains unclear. Four of the hypotheses tested in this study were supported by the findings. These study findings have significant implications for both managerial practitioners and academic researchers. Based on the results of the study it can be concluded that not only does board capital have a significant impact on CSR disclosure, but that also foreign ownership has a key role in moderating this

relationship. The study incorporated foreign ownership as a probable factor that may moderate the relationship between board capital and CSR disclosure. By examining these relationships, the study contributes to existing knowledge on how board capital influence CSR disclosure engagement and whether foreign ownership play a significant role in the relationship.

First, the study provides evidence that board independence predicts CSR disclosure in listed firms in Kenya. The study findings indicate that for the CSR disclosure engagement agenda of a listed firm requires a board with members who do not have ties with the organization and who are keen to advice management using their best judgment and experience. These independent board members have the requisite abilities and are a critical resource channel for the firm to extend and fulfill their social contract to stakeholders. Independent directors also make decisions objectively and share their external perspectives which impacts positively on the decision making process of the board. Furthermore, due to the complexity of the decisions taken by the board including engaging in CSR disclosure, a diverse set of directors is required to navigate and apply their various perspectives , knowledge and approaches to this crucial strategic decision making process in listed firms.

From the moderated regression results, it can also be inferred from the results that these board independence-CSR disclosure nexus is stronger when the level of foreign ownership is high in the firm. This is because foreign owners are likely to exert their influence on the directors towards engaging in a socially responsible way. These findings not only extend the work of previous studies but also contribute to the resource dependence perspective.

Secondly, the study had predicted that firms would be more likely to engage with CSR disclosure where board members had greater levels of expertise derived from holding various previous positions. The findings confirm this and reinforce the contention that when a board appoints members with wide-ranging expertise they are more likely to be conscious of the importance of social and environmental activities because they view the firm's issues from a broader perspective and can provide alternative views on issues that may confront the board (Hillman et al., 2000). Such a board is therefore a key predictor of CSR disclosure because it has the required skills and competence through their previous role in government or other corporate bodies and is able to not only effectively handle stakeholder concerns, regulations and policy-related issues but also decipher opportunities and challenges related to CSR disclosure activities. In essence, board members who are experts have a better understanding on how social activities can benefit firms and therefore can, not only advise and effectively adapt to changing societal trends but are also able to pursue new strategies in line with stakeholder expectations and demands. This study therefore is confirmation that a knowledgeable board with regard to the external and industry dynamics is likely to pursue a CSR disclosure engagement agenda than one that is not.

On the contrary however, the moderated regression results provide insufficient evidence to conclude that foreign ownership increases the effect of board members expertise on CSR disclosure. In essence, the findings do not support the assertion that greater levels of foreign investors can enhance the already existing expertise within boards of listed companies. This would lead to the inference that board members who are already experts are either reluctant or averse to more input of knowledge, ideas and skills and feel that they are already sufficiently equipped to make decisions with

the expertise they already possess. This is contrary to some extant findings that foreign investors transfer their know-how to boards and consequently firms. The findings therefore add to the already mixed results from previous studies with regard to this line of argument.

Thirdly, it is clear from the findings that board relations affect the pursuance of CSR disclosure engagement in listed firms. It means that as the level of board relations increases, so does the rate of CSR disclosure engagement. This means that as the directors develop longer term relationships working together so does their likelihood of supporting CSR disclosure strategies. The findings therefore lead to the conclusion that board relations are a fundamental basis for the CSR disclosure engagement decision making process. This upholds the notion that as board members interact either during board meetings or working in committees they develop strong relations and cohesiveness and their goals align. Consequently they are able to put other capabilities like expertise to good use especially in pursuing strategies such as CSR disclosure as demonstrated by the findings.

Additionally, the moderated regression results showed that foreign ownership accelerates the effect of board relations on CSR disclosure. In this regard, as the level of relations increases among the board members, the rate of engagement in CSR disclosure also increases when foreign ownership is higher. Essentially, board members who relate well are receptive to input from the transfer of advice and know-how from foreign shareholders because they can easily agree on the critical role that this constituency of shareholder contribute to the long term survival of the firm. The findings therefore support the idea that the cohesiveness of the board members create conducive environment to engage in CSR disclosure activities.

5.3 Implications, limitations and recommendations for further research

Several contributions emerge from this research. This section covers the theoretical, methodological, and practical as well as policy implications together with limitations and recommendations for future research.

5.3.1 Theoretical Implications

From a theoretical perspective, the findings supported the following frameworks which underpinned the current study; resource dependency theory, social and human capital theory and stakeholder salience theory.

First, the study findings are consistent and support resource dependency theory perspective which states that board members are key resource access mechanisms for organizations. Many studies in corporate governance recognize resource dependence theory as a foundation of discourse on how boards contribute to strategic activities of the firm (Haynes & Hillman, 2010). The study extends this discourse through finding important theoretical justification for the role of the board in strategic activities of the firm through the RDT theoretical perspective. As the theory hypothesizes that the firm relies for its survival on resources accessed from the external environment (Pfeffer & Salancik, 1978), the results of the study showed that board members play a critical role as providers of resources to the firm in the form of expertise and independence thereby lending credence to, and justifying the propositions of RDT in explaining the board capital-CSR disclosure link. The findings therefore confirm the theory assertions which link the firm with its external environment through board members (Hillman *et al.*, 2000).

Secondly, the findings of this research support the human and social capital theories. The theories acknowledge that imparting skills and knowledge through training and

education either specific to the firm or general to all firms translates to better decision making and consequently firm outcomes (Levin & Kelley, 1994). As major decision making organ of any firm, board members require the right competencies in order for them to deliver on their mandate. In view of this theory, board members must possess the right mix of industry knowledge and skills in order for them to play their key role as advisors, consultants and resource mobilizers effectively and hence support the CSR disclosure objectives of the firm. The study therefore extends human capital theory by reaffirming that indeed the right expertise has implications for firm outcomes like CSR disclosure engagement.

Furthermore, the study findings reinforce the theoretical conclusions of Kim and Cannella relating to the recommendations on director internal networks (Kim & Cannella Jr, 2008). They stated that social capital is embodied in boards an argument which was conceptualized in this study as relations between directors as measures by their co-working experience. The study endorses their view that firms should seek directors who have network contacts that are within reach and not so far outside that the director will be unable to function as part of an effective team. More specifically, our results underscore the view that board configuration should be carried out to account for not only external networks but also internal ones. The study found that the longer a director interacts with other directors in a board the more significant the impact on CSR disclosure practices, therefore reinforcing the argument on the importance of these internal networks to board decisions. Both social capital theory (Adler and Kwon (2002) and resource dependency theory Pfeffer and Salancik's (1978) support the notion that the construction of social networks within and outside boards is one of the most relevant tasks for directors and therefore.

In addition to the understanding of boards operations, the study incorporates stakeholder salience theory to provide new insights on how foreign ownership moderates the relationship between board capital and CSR disclosure. The study provides the evidence to support the propositions of stakeholder salience by showing that although independent directors influence CSR disclosure; they tend to channel this support more when there are foreign investors present in the firm. While foreign ownership has been scrutinized as a moderator in diverse settings (Ahmadjian & Robbins, 2005; Pangeran, 2020) using other theories, stakeholder salience theory has not been utilized to explain the moderation of foreign ownership on the nexus between board capital and CSR disclosure, to the best knowledge of the researcher. Stakeholder salience theory proposes that given a choice between competing interests of stakeholders, corporate leaders show preference to those that have a longer term outlook on the firm (Mitchell et al., 1997). Therefore, by examining foreign ownership in light of board strategic decisions especially in paying attention to external voices, stakeholder salience theory provides a good backdrop on how boards respond when engaging in strategic activities such as CSR disclosure engagement.

5.3.2 Methodological Contribution

The study makes a methodological contribution to extant literature mainly in the area of corporate governance. First, the content analysis categories used in this study are unique to developing contexts, where social contribution needs differ from those in developed countries. This study addresses the major concern about the categorization adopted in previous studies in content analysis which ignored contextual variances, leading to results that were either skewed or incomplete. This suggests that more care and attention should be paid to relevant differences in content analysis categorization, since they may have a major bearing on the ultimate result.

Furthermore, because most previous studies used a cross-sectional design, they were unable to identify potential causality between board attributes and CSR disclosure. This resulted in a failure to sufficiently address endogeneity concerns such as reverse causality and latent variable bias. By using a longitudinal approach to examine sample firm annual reports over a number of years, this study aimed to reduce endogeneity issues, thereby strengthening methodology of existing literature in the area of corporate governance, by demonstrating causal inference between capital and CSR disclosure.

5.3.3 Implications for practice

In addition to its theoretical implications, the findings of this study also provide practical implications that can be implemented to steer the firm forward and enhance its outlook due to the current focus of investors shifting to firms that are good corporate citizens who invest in social good. First, it adds to the dialogue on whether the context in which board members function is significant and offers a better understanding of the overall board decision making process. Second, the results extend scholarly knowledge to the on-going discourse on corporate boards and CSR disclosure. In this regard therefore, it is imperative for listed firms to constitute boards with independent and skillful members with sufficient competencies to make decisions that are helpful to the firm in implementing strategies like CSR disclosure engagement.

The evidence provided in this study highlights the importance of resources which board members bring into the board which may be crucial in strategic decisions. The results therefore shed some light on the applicability of board capital in strategic decision-making including those related to CSR disclosure. The results also underscore the importance of board capital specifically , independence, expertise and

relations in the board decision-making process by proposing that there should be a balance in the proportion of executive and independent directors in the firms as the research has shown that board independence influences CSR disclosure. The empirical findings offer a roadmap for listed firms that wish to enhance their CSR disclosure commitment; that they should have board members who are independent, experts, and relate well amongst themselves to enable them make decisions on complex issues such as CSR disclosure engagement. Finally the study points out the importance of promoting foreign shareholding and allowing the input of these investors in advising the board in strategy decision making processes.

5.3.4 Policy Implications

This study has a number of policy implications; first the findings of this study add to the growing body of evidence on the importance of developing corporate governance regulatory frameworks that are applicable in developing economy contexts. The current guidelines for example require that the independent non-executive directors should form at least a third of the total board membership. The current study will be important if this ratio is to be revised to reflect the importance of non-executive board members in decision making.

Secondly, following the study findings it would be advisable for firms to seek to hire board members with relevant competence to achieve firm objectives and improve their competitiveness. Since the findings suggest that the boards role in crafting CSR disclosure policy is very critical firms should form organs like CSR disclosure committees within boards to enhance relationships among board members and to align the interests of firms and stakeholders in pursuing CSR disclosure goals. The outcomes of this study are therefore crucial for policymakers in drafting legislation in this area to enhance firms' long-term commitment to the environment and social good.

Finally, the study also provides evidence that foreign shareholders play a crucial role in the implementation of friendly policies and therefore the government should use this evidence to create policies that provide incentives to attract this group of investors to invest in firms of developing countries like Kenya. Additionally, Firms should also create policies that will allow these foreign investors to be directly involved in the transfer of their skills and competencies to assist domestic firms in making progressive decisions.

5.4 Limitations and Recommendations for Future Research

Although this study has delivered a comprehensive look at the relationship between board capital and CSR disclosure, it has several limitations which potentially represent opportunities for future investigation in future research.

A noteworthy limitation to this study lies in the different methods used to measure board independence and social responsibility in the literature. First, the term “independence” had a variety of meanings. The construct of board independence had different operational definitions in the literature. While most authors by independence referred to non-executive directors, others used it to refer to supervisory board members, members who did not represent block shareholders or external directors who did not have any participation in the ownership. In many studies, information on measurement was insufficient or not detailed enough, so the study considered that the term “board independence” commonly used in this literature referred to non-executive directors. Secondly, the proxy used by the study for CSR disclosure also presents a potential gray area. Although this measure is believed to be reliable following previous studies caution is called for about the possible bias it could include, because the practice and reporting of CSR disclosure may be conditioned on the reliability of

the reporting process of the specific firm. Nevertheless, by using data of listed firms the study results are believed to be robust to alternative proxies of CSR disclosure.

Another limitation of the study is that as much as it made significant improvements in terms of the categories used for CSR disclosure especially with regard to developing country context, it does not adequately address the complexity of the CSR disclosure categories particularly the separation of governance disclosure and CSR disclosure. Failure to identify governance disclosures may skew results, as seen in previous studies, and is a major concern about the content analysis as a methodology. It makes comparing studies difficult, potentially leading to inconclusive results, as was the case with previous disclosure-based studies. As a result, future studies should take more care and attention to specific differences in content analysis categorization because they can have a significant impact on the final result. This would entail expanding the number of categories to include other general social responsibility statements and general company ethical standards.

In addition, foreign ownership which was a moderator for the study considered both individual and institutional foreign investors as one group; it would be insightful to see the results if this would be split into two separate groups and applied in the interaction. Further to this, apart from foreign ownership other moderators that would be insightful in the board capital-CSR disclosure relationship are the different CEO attributes for example CEO power. Third, an in-depth analysis using primary data to engage board members to shed light especially for some of the more subjective items in the measurements could be useful to augment the reports and advance the understanding of the variables used in this study for future researchers. Finally, upcoming researchers should explore our evidence in international samples, as well as

with non-listed and small and medium-sized firms to expand the generalization of the findings.

REFERENCES

- Abadie, A., Athey, S., Imbens, G. W., & Wooldridge, J. (2017). *When should you adjust standard errors for clustering?* (No. w24003). National Bureau of Economic Research.
- Abaeian, V., Khong, K.W., Kyid-Yeoh, K. & McCabe, S. (2019). "Motivations of undertaking CSR initiatives by independent hotels: a holistic approach", *International Journal of Contemporary Hospitality Management*, Vol. 31 No. 6, pp. 2468-2487.
- Adams, R. B., & Ferreira, D. (2008). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, 94(2), 291-309.
- Adler, P. S., & Kwon, S. W. (2002). Social capital: Prospects for a new concept. *Academy of management review*, 27(1), 17-40.
- Aggarwal, P., & Singh, A. K. (2019). CSR and sustainability reporting practices in India: an in-depth content analysis of top-listed companies. *Social Responsibility Journal*.
- Ahmadjian, C. L., & Robbins, G. E. (2005). A clash of capitalisms: Foreign shareholders and corporate restructuring in 1990s Japan. *American Sociological Review*, 70(3), 451-471.
- Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*. Sage.
- Akhtar, S., Irfan, M., Sarwar, A., & Rashid, Q. U. A. (2019). Factors influencing individuals' intention to adopt mobile banking in China and Pakistan: The moderating role of cultural values. *Journal of Public Affairs*, 19(1), e1884.
- Al Fadli, A., Sands, J., Jones, G., Beattie, C., & Pensiero, D. (2019). Board gender diversity and CSR reporting: evidence from Jordan. *Australasian Accounting Business and Finance Journal*, 13(3-4), 29-52.
- Al Fadli, A., Sands, J., Jones, G., Beattie, C., & Pensiero, D. (2020). Board independence and CSR reporting: pre and post analysis of JCGC 2009. *International Journal of Law and Management*.
- Al-Dah, B. (2019). Director interlocks and the strategic pacing of CSR activities. *Management Decision*.
- Al-Gamrh, B., Al-dhamari, R., Jalan, A., Jahanshahi A.A. (2020). The impact of board independence and foreign ownership on financial and social performance of firms: Evidence from the UAE. *Journal of Applied Accounting Research*. 21. 201-229.
- Alin, A. (2010). Multicollinearity. *Wiley interdisciplinary reviews: computational statistics*, 2(3), 370-374.

- Al-Mamun, A., & Seamer, M. (2021). Board of director attributes and CSR engagement in emerging economy firms: Evidence from across Asia. *Emerging Markets Review*, 100749.
- Al-Tuwaijri, S.A., Christensen, T.E. & Hughes, K.E. (2004). The relations among environmental disclosure, environmental performance, and economic performance: A simultaneous equations approach. *Accounting, Organizations and Society*, 29(5-6), 447-471.
- Ansoff, I. *Corporate Strategy*. New York: McGraw-Hill, 1965.
- Arellano, M. (1987). "Computing robust standard errors for within-groups estimators." *Oxford bulletin of Economics and Statistics* 49.4 (1987): 431-434.
- Baloch, M. A., Meng, F., & Lodhi, R. N. (2019). Information systems capabilities and customer capital: A multiple mediation model. *International Journal of Innovation and Technology Management*, 16(03), 1950022.
- Baltagi, B. H., & Song, S. H. (2006). Unbalanced panel data: A survey. *Statistical Papers*, 47(4), 493-523.
- Baltagi, B.H., (2005). *Econometric analysis of panel data* (3rd ed.) Chichester; Hoboken, N.J.: John Wiley & Sons.
- Barako, D. G. & Brown, A. M. (2008). Corporate social reporting and board representation: evidence from the Kenyan banking sector. *Journal of Management and Governance*, 12, 309-324.
- Barako, D.G., Hancock, P., Izan, H.Y. (2006). Factors influencing voluntary corporate disclosure by Kenyan Companies. *Corporate Governance an International Review*, 14(2),107-125.
- Barbour, B., Bowman, S., & Bendall, J. (2019). Governance in practice: The role of boards in measuring and managing the culture of their organisation. *Governance Directions*, 71(10), 540.
- Barka, HB, & Dardour, A. (2015). Investigating the relationship between director's profile, board interlocks and corporate social responsibility. *Management Decision* .
- Barnett, V., & Lewis, T. (1984). Outliers in statistical data. *Wiley Series in Probability and Mathematical Statistics. Applied Probability and Statistics*.
- Barroso-Castro, C., Villegas-Periñan, M. D. M., & Casillas-Bueno, J. C. (2016). How boards' internal and external social capital interact to affect firm performance. *Strategic Organization*, 14(1), 6-31.
- Bear, S., Rahman, N.,& Post, C. (2010). The impact of board diversity and gender composition on corporate social responsibility and firm reputation. *Journal of Business Ethics* 97, 207–221.

- Beck, N., & Katz, J. N. (2007). Random coefficient models for time-series—cross-section data: Monte Carlo experiments. *Political Analysis*, 15(2), 182-195.
- Becker, G. S. (1993). Nobel lecture: The economic way of looking at behavior. *Journal of political economy*, 101(3), 385-409.
- Becker, W. C. (1964). Consequences of different kinds of parental discipline. *Review of child development research*, 1(4), 169-208.
- Beddewela, E., & Fairbrass, J. (2016). Seeking legitimacy through CSR: Institutional pressures and corporate responses of multinationals in Sri Lanka. *Journal of business ethics*, 136(3), 503-522.
- Beji, R., Yousfi, O., Loukil, N., & Omri, A. (2020). Board Diversity and Corporate Social Responsibility: Empirical Evidence from France. *Journal of Business Ethics*, 1-23.
- Bekaert, G., & Harvey, C. R. (2000). Foreign speculators and emerging equity markets. *The journal of finance*, 55(2), 565-613.
- Bekaert, G., Harvey, C.R., Lundblad, C., (2001). Emerging equity markets and economic development. *Journal of Development Economics* 66, 465–504.
- Bell, A., & Jones, K. (2015). Explaining fixed effects: Random effects modeling of time-series cross-sectional and panel data. *Political Science Research and Methods*, 3(1), 133-153.
- Bena, J., Ferreira, M. A., Matos, P., & Pires, P. (2017). Are foreign investors locusts? The long-term effects of foreign institutional ownership. *Journal of Financial Economics*, 126(1), 122-146.
- Ben-Hador, B. (2016). Coaching executives as tacit performance evaluation: a multiple case study. *Journal of Management Development*.
- Bergman, Z., Teschemacher, Y., Arora, B., Sengupta, R., Leisinger, K. M., & Bergman, M. M. (2019). Developing the business-society nexus through corporate responsibility expectations in India. *critical perspectives on international business*. 16(2), 143-164.
- Bewick, V., Cheek, L., & Ball, J. (2003). Statistics review 7: Correlation and regression. *Critical care*, 7(6), 1-9.
- Bhagat, S., & Black, B. (2001). The non-correlation between board independence and long-term firm performance. *J. Corp. l.*, 27, 231.
- Bhattacharyya, S. S. (2019). Exploratory study of international Corporate Social Responsibility initiatives of Indian firms. *Business Strategy & Development*, 2(1), 51-62.
- Bohlander, G., Snell, G., & Sherman, A. (2001). Human Resources Administration. *Thomson Learning*, 12^a Edição, México.

- Bradbury, T.N., Fincham, F.D. (1991). The Analysis of Sequence in Social Interaction. In: Gilbert, D.G., Connolly, J.J. (eds) *Personality, Social Skills, and Psychopathology. Perspectives on Individual Differences*. Springer, Boston, MA.
- Brammer, S. & Pavelin, S. (2008). Factors influencing the quality of corporate environmental disclosure. *Business Strategy and the Environment*, 17(2), 120–136.
- Braune, E., Charosky, P., & Hikkerova, L. (2019). Corporate social responsibility, financial performance and risk in times of economic instability. *Journal of Management and Governance*, 23(4), 1007-1021.
- Breiger, R. L., & Mohr, J. W. (2004). Institutional logics from the aggregation of organizational networks: Operational procedures for the analysis of counted data. *Computational & Mathematical Organization Theory*, 10(1), 17-43.
- Breusch, T. S., & Pagan, A. R. (1980). The Lagrange multiplier test and its applications to model specification in econometrics. *The review of economic studies*, 47(1), 239-253.
- Burt, R. S. (1997). A note on social capital and network content. *Social networks*, 19(4), 355-373.
- Campbell, J. L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of management Review*, 32(3), 946-967.
- Carpenter, M. A., Sanders, W. G., & Gregersen, H. B. (2001). Bundling human capital with organizational context: The impact of international assignment experience on multinational firm performance and CEO pay. *Academy of management journal*, 44(3), 493-511.
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review*, 4(4), 497–505.
- Carroll, G. R., & Harrison, J. R. (1998). Organizational demography and culture: Insights from a formal model and simulation. *Administrative Science Quarterly*, 637-667.
- CDSC Kenya: <https://www.cdsckenya.com/investor-education/listed-companies>
- Central Bank of Kenya: <http://www.centralbank.go.ke>
- Cerbioni, F., & Parbonetti, A. (2007). Corporate governance and intellectual capital disclosure: an analysis of European biotechnology companies, *European Accounting Review*, 16(4), 791–826.
- Certo, S. T. (2003). Influencing initial public offering investors with prestige: Signaling with board structures. *Academy of management review*, 28(3), 432-446.

- Chang, Y. K., Oh, W. Y., Park, J. H., & Jang, M. G. (2017). Exploring the relationship between board characteristics and CSR: Empirical evidence from Korea. *Journal of Business Ethics*, 140(2), 225-242.
- Chapple, W., & Moon, J. (2005). Corporate Social Responsibility (CSR) in Asia: A Seven Country Study of CSR Website Reporting, *Business and Society*, 44 (4), 415-441.
- Chau, G.K., & Gray, S.J (2002). Ownership structure and corporate voluntary disclosure in Hong Kong and Singapore. *The International Journal of Accounting*. 37, 247-65.
- Chen, H.L., (2014). Board capital, CEO power and R&D investment in electronics firms. *Corporate Governance*. 22, 422–436.
- Chen, S., Hermes, N., & Hooghiemstra, R. (2020). Corporate Social Responsibility and NGO Directors on Boards. *Journal of Business Ethics*, 1-25.
- Chen, Y., (2008). Corporate Governance and Cash Holdings: Listed New Economy Versus old Economy Firms. *Corporate Governance International Review*. 16, 430–442.
- Cheruiyot, T. K., & Tarus, D. K. (2016). Corporate Social Responsibility in Kenya: Reflections and Implications. In *Corporate Social Responsibility in Sub-Saharan Africa* (pp. 87-110). Springer International Publishing.
- Chien-Chiang L., Chih-Wei W., & Shan-Ju H., (2020). Family Management and Corporate Bond Spreads: Do Foreign and Government Ownerships Matter?, *Emerging Markets Finance and Trade*. 10,1080
- Chintrakarn, P., Jiraporn, P., & Treepongkaruna, S. (2020). How do independent directors view corporate social responsibility (CSR) during a stressful time? Evidence from the financial crisis. *International Review of Economics & Finance*, 71, 143-160.
- Choi, H. M., Sul, W., & Min, S. K. (2012). Foreign board membership and firm value in Korea. *Management Decision*.
- Choi, Y.M., & Park, K. (2019). Foreign Ownership, Agency Costs, and Long-Term Firm Growth: Evidence from Korea. *Sustainability*. 11,1599.
- Chowdhury, S., Schulz, E., Milner, M., & Van De Voort, D. (2014). Core employee based human capital and revenue productivity in small firms: An empirical investigation. *Journal of Business Research*, 67(11), 2473-2479.
- Chun, H., Kim, J. W., Morck, R., & Yeung, B. (2008). Creative destruction and firm-specific performance heterogeneity. *Journal of financial economics*, 89(1), 109-135.
- Clarkson, P.M., Li, Y., Richardson, G.D. & Vasvari, F.P. (2011). Does it really pay to be green? Determinants and consequences of proactive environmental strategies. *Journal of Accounting and Public Policy*, 30(2), 122–144.

Climate Change Act 2016, Section 13(8).

CMA Forum, A Quarterly Newsletter of Capital Markets Authority (Kenya). *1(1), June, 2005.*

cma.or.ke/index.php?option=com_phocadownload&view=category&download=140:cma-handbook-complete&id=45:information-for-investors&Itemid=222
(accessed on 13th November 2020).

Cohen, J., Cohen, P., & West, S. G. (1987). Aiken (2003) Applied multiple regression/correlation analysis for the behavioral sciences. *Hillsdale, NJ: Lawrence Erlbaum Associates.*

Coleman, J. S. (1988). Social capital in the creation of human capital. *American journal of sociology, 94*, S95-S120.

Collierand, J., & Esteban, R. (2007). Corporate social responsibility and employee commitment. *Business Ethics: A European Review* 161, 19–33.

Cook, R. D., & Weisberg, S. (1994). Transforming a response variable for linearity. *Biometrika, 81(4)*, 731-737.

Coulson-Thomas, C. (2020). Embedding CSR mandate into corporate business strategy.

Cox, P., Brammer, S., & Millington A. (2004). An empirical examination of institutional investor preferences for corporate social performance. *Journal of Business Ethics* 52(1), 27–43.

Cuadrado-Ballesteros, B., Martínez-Ferrero, J., García-Sánchez, I.M., (2017). Board structure to enhance social responsibility development: a qualitative comparative analysis of US companies. *Corporate Social Responsibility and Environmental Management* 24 (6), 524–542.

Cucari, N., Esposito De Falco, S., & Orlando, B. (2018). Diversity of board of directors and environmental social governance: Evidence from Italian listed companies. *Corporate Social Responsibility and Environmental Management, 25(3)*, 250-266.

Dahlquist, M., Pinkowitz, L., Stulz, R.M., & Williamson, R. (2003). Corporate Governance and the Home Bias, *Journal of Financial and Quantitative Analysis* 38(01), 87–110.

Dahlsrud, A. (2006). How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management* 151, 1–13.

Daily, C. M., Dalton, D. R., & Canella, A. A. (2003). Corporate Governance: Decades of Dialogue and Data. *Academy of Management Review, 28(3)*, 371–382.

- Dam, L., & Scholtes, B.(2012). Does Ownership Matter for Corporate Social Responsibility? *Corporate Governance: An International Review*, 20(3), 233–252.
- Dannels, S. A. (2018). Research design. In *The reviewer's guide to quantitative methods in the social sciences* (pp. 402-416). Routledge.
- Dawkins, J. (2004). Corporate responsibility: The communication challenge. *Journal of Communication Management* 92, 108–119.
- Dawson, J. F. (2014). Moderation in management research: What, why, when, and how. *Journal of business and psychology*, 29(1), 1-19.
- De Andres, P., & Vallelado, E. (2008). Corporate governance in banking: The role of the board of directors. *Journal of banking & finance*, 32(12), 2570-2580.
- Deegan, C. (2002). The legitimising effect of social and environmental disclosures—A theoretical foundation. *Accounting, Auditing & Accountability Journal*, 15(3), 281-311.
- Deegan, C. (2004). *Financial Accounting Theory*, NSW: McGraw-Hill Australia Pty Ltd.
- Deegan, C. (2010). Organizational legitimacy as a motive for sustainability reporting. In *Sustainability accounting and accountability* (pp. 146-168). Routledge.
- Dess, G. G., & Picken, J. C. (2000). Changing roles: Leadership in the 21st century. *Organizational dynamics*, 28(3), 18-34.
- Devinney, T.M. (2009). Is the socially responsible corporation a myth? The good, the bad and the ugly of corporate social responsibility. *Academy of Management Perspectives* 23(2), 44–56.
- Dhaliwal, D. S., Li, O. Z., Tsang, A., & Yang, Y. G. (2011). Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. *The accounting review*, 86(1), 59-100.
- Dickey, D. A., & Fuller, W. A. (1979). Distribution of the estimators for autoregressive time series with a unit root. *Journal of the American statistical association*, 74(366a), 427-431.
- Driscoll, J. C., & Kraay, A. C. (1998). Consistent covariance matrix estimation with spatially dependent panel data. *Review of economics and statistics*, 80(4), 549-560.
- Drukker, D. M. (2003). Testing for serial correlation in linear panel-data models. *The stata journal*, 3(2), 168-177.
- Easterby-Smith, M., Jaspersen, L. J., Thorpe, R., & Valizade, D. (2021). *Management and business research*. Sage.

- Endrikat, J., De Villiers, C., Guenther, T. W., & Guenther, E. M. (2020). Board characteristics and corporate social responsibility: A meta-analytic investigation. *Business & Society*, 0007650320930638.
- Eng, L. L., & Mak, Y. T. (2003). Corporate governance and voluntary disclosure. *Journal of accounting and public policy*, 22(4), 325-345.
- Fama, E. F., & French, K. R. (2004). The capital asset pricing model: Theory and evidence. *Journal of economic perspectives*, 18(3), 25-46.
- Fama, E., & Jensen, M. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(2), 301-325.
- Feder, M., & Weißenberger, B. E. (2019). Understanding the behavioral gap: Why would managers (not) engage in CSR-related activities?. *Journal of Management Control*, 30(1), 95-126.
- Feng, X., Groh, A., & Wang, Y. (2020). Board diversity and CSR. *Global Finance Journal*, 100578.
- Fernandez, W. D., & Thams, Y. (2019). Board diversity and stakeholder management: the moderating impact of boards' learning environment. *The Learning Organization*.
- Fernández-Gago, R., Cabeza-García, L., & Nieto, M. (2016). Corporate social responsibility, board of directors, and firm performance: an analysis of their relationships. *Review of Managerial Science*, 10(1), 85-104.
- Fernández-Gago, R., Cabeza-García, L., & Nieto, M. (2018). Independent directors' background and CSR disclosure. *Corporate Social Responsibility and Environmental Management*, 25(5), 991-1001.
- Ferreira, M.A. & Matos, P. (2008). The colors of investors' money: The role of institutional investors around the world. *Journal of Financial Economics*, 88, 499-533.
- Ferris, S., & Park, K. (2005). Foreign ownership and firm value: evidence from Japan. *Advances in Financial economics*, 11, 1-29.
- Francoeur, C., Labelle, R., Balti, S., & Bouzaidi, S. E. (2019). To what extent do gender diverse boards enhance corporate social performance?. *Journal of business ethics*, 155(2), 343-357.
- Fredette, C., & Bradshaw, P. (2012). Social capital and nonprofit governance effectiveness. *Nonprofit Management and Leadership*, 22(4), 391-409.
- Freeman, R. E., Wicks, C. A., & Parmar, B. (2004). Stakeholder Theory and The Corporate Objective Revisited. *Organization Science*, 15(3), 364-369.
- Freeman, R.E., (1984). *Strategic Management: a Stakeholder Approach*. Boston, MA: Pitman.

- Gallego-Álvarez, I., & Pucheta-Martínez, M. C. (2022). Sustainable development through the effect of board diversity and CEO duality on corporate risk: Does the state-owned enterprises matter?. *Sustainable Development*.
- Gamerschlag, R., Möller, K., & Verbeeten, F. (2010). Determinants of voluntary CSR disclosure: empirical evidence from Germany. *Review of Managerial Science*, 1-30.
- Gao, Y. (2011). CSR in an emerging country: a content analysis of CSR reports of listed companies. *Baltic Journal of management*.
- Garanina, T., & Aray, Y. (2020). Enhancing CSR disclosure through foreign ownership, foreign board members, and cross-listing: Does it work in Russian context?. *Emerging Markets Review*, 100754.
- García Martín, CJ, Herrero, B. (2020). Do board characteristics affect environmental performance? A study of EU firms. *Corporate Social Responsibility and Environmental Management*, 27: 74– 94.
- García-Sánchez, I. M., & Martínez-Ferrero, J. (2018). How do independent directors behave with respect to sustainability disclosure?. *Corporate Social Responsibility and Environmental Management*, 25(4), 609-627.
- García-Sánchez, I. M., & Martínez-Ferrero, J. (2019). Chief executive officer ability, corporate social responsibility, and financial performance: The moderating role of the environment. *business strategy and the environment*, 28(4), 542-555.
- García-Sánchez, I. M., Gómez-Miranda, M. E., David, F., & Rodríguez-Ariza, L. (2019). Board independence and GRI-IFC performance standards: The mediating effect of the CSR committee. *Journal of Cleaner Production*, 225, 554-562.
- Gardberg, N. A., & Fombrun, C. J. (2006). Corporate citizenship: Creating intangible assets across institutional environments. *Academy of management Review*, 31(2), 329-346.
- Gardberg, N. A., Zyglidopoulos, S. C., Symeou, P. C., & Schepers, D. H. (2019). The impact of corporate philanthropy on reputation for corporate social performance. *Business & society*, 58(6), 1177-1208.
- Gennari, F., & Salvioni, D. M. (2019). CSR committees on boards: The impact of the external country level factors. *Journal of Management and Governance*, 23(3), 759-785.
- Godos-Díez, J. L., Cabeza-García, L., Alonso-Martínez, D., & Fernández-Gago, R. (2018). Factors influencing board of directors' decision-making process as determinants of CSR engagement. *Review of Managerial Science*, 12(1), 229-253.

- Goncalves, A. F., Rossoni, L., & Mendes-Da-Silva, W. (2019). Board social capital reduces implied cost of capital for private companies but not of state-owned companies. *Management Decision*.
- Granovetter, M. S. (1973). The strength of weak ties. *American journal of sociology*, 78(6), 1360-1380.
- Gray, R., Owen, D., & Adams, C. (1995). *Accounting and Accountability. Changes and Challenges in Corporate Social Environmental Reporting*, Harlow: Prentice-Hall Europe.
- Greene, William, 1990. *Econometric Analysis*, Macmillian Publishing Company, New York.
- Gu, V. C., Cao, R. Q., & Wang, J. (2019). Foreign ownership and performance: mediating and moderating effects. *Review of International Business and Strategy*.
- Gujarati Damodar, N. (2013). *Basic Econometrics. 9th Edition*. The McGraw-Hill Companies
- Gujarati, D. N. (2003). *Basic Econometrics*” fourth edition McGraw-Hill. *New York*.
- Gul, F.A., and Leung, S. (2004). Board leadership, outside directors’ expertise and voluntary corporate disclosures. *Journal of Accounting and Public Policy*, 23, 1-29.
- Gulzar, M. A., Cherian, J., Hwang, J., Jiang, Y., & Sial, M. S. (2019). The impact of board gender diversity and foreign institutional investors on the corporate social responsibility (CSR) engagement of Chinese listed companies. *Sustainability*, 11(2), 307.
- Guney, Y., & Komba, G. (2016). Testing for the Weak-Form Market Efficiency of the Dar es Salaam Stock Exchange. In *Handbook of Frontier Markets* (pp. 3-26). Academic Press.
- Hadri, K. (2000). Testing for stationarity in heterogeneous panel data. *The Econometrics Journal*, 3(2), 148-161.
- Hair, J. F., Page, M., & Brunsveld, N. (2019). *Essentials of business research methods*. Routledge.
- Hamdan, A. (2018), Board interlocking and firm performance: the role of foreign ownership in Saudi Arabia, *International Journal of Managerial Finance*, 14 (3), 266-281.
- Han, H., Yu, J., & Kim, W. (2019). Environmental corporate social responsibility and the strategy to boost the airline’s image and customer loyalty intentions. *Journal of Travel & Tourism Marketing*, 36(3), 371-383.

- Haniffa, R. M., and Cooke, T. E. (2005). The impact of culture and governance on corporate social reporting. *Journal of Accounting and Public Policy*, 24(5), 391-430.
- Hanousek, J., Shamshur, A., & Tresl, J. (2019). Firm efficiency, foreign ownership and CEO gender in corrupt environments. *Journal of Corporate Finance*, 59, 344-360.
- Hansen, B. (1999). Testing for linearity. *Journal of economic surveys*, 13(5), 551-576.
- Harjoto, M., Laksmana, I., & Lee, R. (2015). Board diversity and corporate social responsibility. *Journal of business ethics*, 132(4), 641-660.
- Harris, E. E. (2014). The impact of board diversity and expertise on nonprofit performance. *Nonprofit Management and Leadership*, 25(2), 113-130.
- Harrison, J. R., Lin, Z., Carroll, G. R., & Carley, K. M. (2007). Simulation modeling in organizational and management research. *Academy of management review*, 32(4), 1229-1245.
- Hart, S.L. (1995). A natural resource based view of the firm. *Academy of Management Review*, 20(4), 986-1014.
- Harte, G., & Owen, D. (1991). Environmental disclosure in the annual reports of British companies: a research note. *Accounting, Auditing, & Accountability Journal*, 4 (3), 51-61.
- Hausman, J. A. (1978). Specification tests in econometrics. *Econometrica: Journal of the econometric society*, 1251-1271.
- Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis: Methodology in the Social Sciences. *Kindle Edition*, 193.
- Haynes, K.T., & Hillman, A., (2010). The effect of board capital and CEO power on strategic change. *Strategic Management Journal*, 31, 1145-1163.
- Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management review*, 28(3), 383-396.
- Hillman, A. J., Cannella Jr, A. A., & Harris, I. C. (2002). Women and racial minorities in the boardroom: How do directors differ?. *Journal of management*, 28(6), 747-763.
- Hillman, A. J., Shropshire, C., & Cannella Jr, A. A. (2007). Organizational predictors of women on corporate boards. *Academy of Management Journal*, 50(4), 941-952.
- Hillman, A. J., Withers, M. C., & Collins, B. J. (2009). Resource dependence theory: A review. *Journal of management*, 35(6), 1404-1427.

- Hillman, A. J., Zardkoohi, A., & Bierman, L. (1999). Corporate political strategies and firm performance: indications of firm-specific benefits from personal service in the US government. *Strategic Management Journal*, 20(1), 67-81.
- Hillman, A.J. & Keim, G.D. (2001). Shareholder value, stakeholder management and social issues: what's the bottom line? *Strategic Management Journal*, 22(2), 125-139.
- Hillman, A.J., Cannella, A.A. and Paetzold, R.L. (2000). The Resource Dependence Role of Corporate Directors: Strategic Adaptation of Board Composition in Response to Environmental Change. *Journal of Management Studies*, 37: 235-256.
- Hinson, R. E., & Ndhlovu, T. P. (2011). Conceptualizing corporate social responsibility (CSR) and corporate social investment (CSI): The South African context. *Social Responsibility Journal*, 7(3), 332–346.
- Ho, S. S.M., & Wong, K.S., (2001). A Study of the Relationship between corporate governance structures and the extent of voluntary disclosure, *International Journal of Accounting, Auditing and Taxation*, 10,139-56.
- Hoechle, D. (2007). Robust standard errors for panel regressions with cross-sectional dependence. *The stata journal*, 7(3), 281-312.
- Homroy, S.; Slechten, A., (2017). Do board expertise and networked boards affect environmental performance? *Journal of Business Ethics*, 1–24.
- Hsiao, C. (2014). *Analysis of panel data* (No. 54). Cambridge university press.
- Huang, C. J. (2010). Corporate governance, corporate social responsibility and corporate performance. *Journal of Management & Organization*, 16, 641-655.
- Hussain, N., Rigoni, U., & Orij, R. P. (2018). Corporate governance and sustainability performance: Analysis of triple bottom line performance. *Journal of business ethics*, 149(2), 411-432.
- Hymer, S. H. (1976). "The International operations of national firms: a study of direct foreign investment", Cambridge: MIT Press.
- Hyun, E., Yang, D., Jung, H., & Hong, K. (2016). Women on boards and corporate social responsibility. *Sustainability*, 8(4), 300.
- Ibrahim, A. H., & Hanefah, M. M. (2016). Board diversity and corporate social responsibility in Jordan. *Journal of Financial Reporting and Accounting*.
- Inkpen, A. C., & Tsang, E. W. (2005). Social capital, networks, and knowledge transfer. *Academy of management review*, 30(1), 146-165.
- Isaksson, L., & Mitra, N. (2019). To Legislate or Not: That Is the Question—Comparing CSR Intent and Effects in Economies with Voluntary CSR and Legislated CSR. In *International Dimensions of Sustainable Management* (pp. 35-51). Springer, Cham.

- Jaccard, J., Turrisi, R., & Jaccard, J. (2003). *Interaction effects in multiple regression* (No. 72). Sage.
- Jackson Jr, R. J. (2012). Private equity and executive compensation. *UCLA L. Rev.*, *60*, 638.
- Jain, T., & Jamali, D. (2016). Looking inside the black box: The effect of corporate governance on corporate social responsibility. *Corporate Governance: An International Review*, *24*(3), 253-273.
- Jaiswal, J. (2014). Environmental Impact on SMEs Growth and Sustainability Challenges and Opportunities. *Journal of Studies in Dynamics and Change (JSDC)*, *ISSN: 2348-7038*, *1*(2), 101-112.
- Jamali, D., & Karam, C. (2018). Corporate social responsibility in developing countries as an emerging field of study. *International Journal of Management Reviews*, *20*(1), 32-61.
- Jaskyte, K., & Holland, T. (2015). Nonprofit boards: Challenges and opportunities. *Human Service Organizations: Management, Leadership & Governance*, *39*(3), 163-166.
- Jauch, L. R., Osborn, R. N., & Martin, T. N. (1980). Structured content analysis of cases: A complementary method for organizational research. *Academy of management review*, *5*(4), 517-525.
- Jensen, M.C. (2002). Value maximization, stakeholder theory, and the corporate objective function. *Business Ethics Quarterly*, *12*, 235-247.
- Jeon, J. Q., & Ryou, J. (2013). How do foreign investors affect corporate policy?: Evidence from Korea. *International Review of Economics & Finance*, *25*, 52-65.
- Jiang, L., & Kim, J. B. (2004). Foreign equity ownership and information asymmetry: Evidence from Japan. *Journal of International Financial Management & Accounting*, *15*(3), 185-211.
- Jitaree, W. (2015). Corporate social responsibility disclosure and financial performance: Evidence from Thailand.
- Jizi, M. (2017). The influence of board composition on sustainable development disclosure. *Business Strategy and the Environment*, *26*(5), 640-655.
- Johnson, R.A. & Greening, D.W. (1999). The effects of corporate governance and institutional ownership types on corporate social performance. *Academy of Management Journal*, *42*(5), 564-576.
- Johnson, S. G., Schnatterley, K. & Hill, A.D. (2013). Board composition beyond independence: social capital, human capital, and demographics. *Journal of Management*, *39*(1), 232-261.

- Jose, P. E. (2008). Mediation and Moderation. *The Reviewer's Guide to Quantitative Methods in the Social Sciences*, 260-271.
- Judd, C. M. (2015). Moderator Variable: Methodology. *International Encyclopedia of the Social & Behavioral Sciences*: 2(15).
- Judge, W., Li, S., & Pinsker, R. (2010). National adoption of international accounting standards: An institutional perspective. *Corporate Governance: An International Review*, 18, 161-174.
- Kang, J., & Stulz, R.M. (1997). Why is there a Home Bias? An Analysis of Foreign Portfolio Equity Ownership in Japan. *Journal of Financial Economics*, 46, 3–28.
- Karim, S., Manab, N. A., & Ismail, R. B. (2019). The dynamic impact of board composition on CSR practices and their mutual effect on organizational returns. *Journal of Asia Business Studies*.
- Katidjan, P., Pawirosumarto, S., & Yuliani, T. (2018). The effect of competence, training, and compensation to employment performance.
- Khan, A., Muttakin, M. B., & Siddiqui, J. (2013). Corporate governance and corporate social responsibility disclosures: Evidence from an emerging economy. *Journal of business ethics*, 114(2), 207-223.
- Khan, M., Hassan, A., Harrison, C., & Tarbert, H. (2020). CSR reporting: A review of research and agenda for future research. *Management Research Review*.
- Khanna, T., & Palepu, K. (2000). The future of business groups in emerging markets: Long-run evidence from Chile. *Academy of Management Journal*, 43(3), 268-285.
- Kiel, G., & Nicholson, G. (2003). Board Composition and Corporate Performance: How the Australian experience informs contrasting theories of corporate governance. *Corporate Governance: An International Review*, 11(3), 189–205.
- Kim, Y., & Cannella Jr, A. A. (2008). Social capital among corporate upper echelons and its impacts on executive promotion in Korea. *Journal of World Business*, 43(1), 85-96.
- Kivuitu M, (2005). How can Corporate Social Responsibility Deliver in Africa? Insights from Kenya. *Perspectives on Corporate Responsibility and Development*; 3
- Kor, Y. Y. (2006). Direct and interaction effects of top management team and board compositions on R&D investment strategy. *Strategic management journal*, 27(11), 1081-1099.
- Kor, Y., Sundaramurthy, C. (2009). Experience-based human capital and social capital of outside directors. *Journal of Management*. 35 (4), 981–1006.

- Kruger, P. (2009). Corporate social responsibility and the board of directors. *Job Market Paper.Toulouse School of Economics, France.*
- Kuokkanen, H., & Sun, W. (2020). Companies, meet ethical consumers: Strategic CSR management to impact consumer choice. *Journal of Business Ethics, 166*(2), 403-423.
- Laghi, E., & Di Marcantonio, M. (2016). Beyond CAPM: estimating the cost of equity considering idiosyncratic risks. *Quantitative Finance, 16*(8), 1273-1296.
- Lau, C., Lu, Y., & Liang, Q. (2016). Corporate social responsibility in China: A corporate governance approach. *Journal of Business Ethics, 136*(1), 73-87.
- Lawrence, P., & Lorsch, J.(1967). Differentiation and Integration in Complex Organizations" *Administrative Science Quarterly, 12*, 1-30.
- Le, H. T. M., Kweh, Q. L., Ting, I. W. K., & Nourani, M. (2020). CEO power and earnings management: Dual roles of foreign shareholders in Vietnamese listed companies. *International Journal of Finance & Economics.*
- Le, HTM, Kweh, QL, Ting, IWK, Nourani, M (2020). CEO power and earnings management: Dual roles of foreign shareholders in Vietnamese listed companies. *International Journal of Finance & Economics, 1– 17.*
- Letendre, L. (2004). The dynamics of the boardroom. *Academy of Management Perspectives, 18*(1), 101-104.
- Levin, H. M., & Kelley, C. (1994). Can education do it alone?. *Economics of Education Review, 13*(2), 97-108.
- Lewa, P. M. (2020). CSR case studies of selected blue Chip companies in Kenya. In *Social entrepreneurship and corporate social responsibility* (pp. 373-388). Springer, Cham.
- Long, J. S., & Ervin, L. H. (2000). Using heteroscedasticity consistent standard errors in the linear regression model. *The American Statistician, 54*(3), 217-224.
- Loukopoulos, P., Zolkiewski, G., Bennett, I., Pilidis, P., Duan, F., & Mba, D. (2017). Dealing with missing data as it pertains of e-maintenance. *Journal of Quality in Maintenance Engineering.*
- Lu, J., & Wang, W. (2018). Managerial conservatism, board independence and corporate innovation. *Journal of Corporate Finance, 48*, 1-16.
- Mackenzie, C. (2007). Boards, incentives and corporate social responsibility: The case for a change of emphasis. *Corporate Governance: An International Review, 15*(5), 935-943.
- Macus, M. (2008). Board capability; An interactions perspective on boards of directors and firm performance. *International Studies of Management & Organization, 38*(3), 98-116.

- Maddala, G. S., & Wu, S. (1999). A comparative study of unit root tests with panel data and a new simple test. *Oxford Bulletin of Economics and statistics*, 61(S1), 631-652.
- Mallin, C. A. (2007). *Corporate Governance*, Oxford University Press.
- Mallin, C., Michelon, G. & Raggi, D. (2013). Monitoring intensity and stakeholders' orientation: How does governance affect social and environmental disclosure, *Journal of Business Ethics*, 114(1), 29-43.
- Mallin, C.A. & Michelon, G. (2011). Board reputation attributes and corporate social performance: An empirical investigation of the US Best Corporate Citizens. *Accounting and Business Research*, 41(2), 119-144.
- Mandaza, K., & Mirad, N. (2020). Institutional Investors and Board Independence: The case of Sweden.
- Mangena, M. & Taurigana, V. (2007). Disclosure, Corporate Governance and Foreign Share Ownership on the Zimbabwe Stock Exchange. *Journal of International Financial Management and Accounting* 18(2), 53-85.
- Markarian, G., Parbonetti, A. (2007). Firm complexity and board of director composition. *Corporate Governance an International Review*. 15, 1224-1243.
- Martínez-Ferrero, J., Garcia-Sanchez, I.M., Cuadrado-Ballesteros, B. (2015a). Effect of financial reporting quality on sustainability information disclosure. *Corporate Social Responsibility & Environmental Management* 22 (1), 45-64.
- Masud, M., Kaium, A., Bae, S. M., Manzanares, J., & Kim, J. D. (2019). Board directors' expertise and corporate corruption disclosure: The moderating role of political connections. *Sustainability*, 11(16), 4491.
- Matten, D., & Moon, J. (2004). Corporate social responsibility. *Journal of business Ethics*, 54(4), 323-337.
- Matten, D., & Moon, J. (2020). Reflections on the 2018 decade award: The meaning and dynamics of corporate social responsibility. *Academy of management Review*, 45(1), 7-28.
- Maxwell, J. A. (2005). Conceptual framework: What do you think is going on? *Qualitative research design: An interactive approach*, 41, 33-63.
- McGuinness, P. B., Vieito, P., & Wang, M. (2017). CSR performance in China: The role of board gender and foreign ownership. *Journal of Corporate Finance*, 42, 7299.
- Michelon, G., & Parbonetti, A. (2012). The effects of corporate governance on sustainability disclosure. *Journal of Management and Governance* 16, 477-509.
- Miguel, A. De, Pindado, J., Torre, C. De. (2005). How do Managerial Entrenchment and Expropriation Affect Control Mechanisms? 13, 1-30.

- Mion, G., & Adai, C. R. L. (2020). Understanding the purpose of benefit corporations: an empirical study on the Italian case. *International Journal of Corporate Social Responsibility*, 5(1), 1-15.
- Mishra A., & Ratti R. (2011). Governance, monitoring and foreign investment in China companies. *Emerging Market Review*; 12, 171-188.
- Mitchell, R., Agle, B., & Wood, D. (1997). Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts. *The Academy of Management Review*, 22(4), 853-886.
- Mohan, A. (2001). Corporate citizenship: perspectives from India. *Journal of Corporate Citizenship*, 2, 107–117.
- Moir, L. (2001). What do we mean by corporate social responsibility? *Corporate Governance*, 1(2), 16 – 22.
- Moran, P. (2005). Structural vs. relational embeddedness: Social capital and managerial performance. *Strategic management journal*, 26(12), 1129-1151.
- Morgan, D. L. (2007). Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research*, 1 (1), 48-76.
- Muthuri, J. & Gilbert , V. (2011). An Institutional Analysis of Corporate Social Responsibility in Kenya *Journal of Business Ethics*, 98, 467–483.\
- Muttakin, M. B., Khan, A., & Mihret, D. G. (2018). The effect of board capital and CEO power on corporate social responsibility disclosures. *Journal of Business Ethics*, 150(1), 41-56.
- Muttakin, M. B., Khan, A., & Subramaniam, N. (2015). Firm characteristics, board diversity and corporate social responsibility. *Pacific Accounting Review*.
- Mwaura, K. (2004). Corporate Citizenship: The Changing Legal Perspective in Kenya. Paper presented at the Interdisciplinary CSR Research Conference, Nottingham.
- Mzembe, A. N., & Downs, Y. (2014). Managerial and stakeholder perceptions of an Africa-based multinational mining company's Corporate Social Responsibility (CSR). *The Extractive Industries and Society*, 1(2), 225-236.
- Naciti, V. (2019). Corporate governance and board of directors: The effect of a board composition on firm sustainability performance. *Journal of Cleaner Production*, 237, 117727.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of management review*, 23(2), 242-266.
- Nelling, E., Webb, E. (2009). Corporate social responsibility and financial performance: the “virtuous circle” revisited. *Rev Quant FinanAcc* 32, 197–209

- Newey, W. K., & West, K. D. (1987). Hypothesis testing with efficient method of moments estimation. *International Economic Review*, 777-787.
- Newson, M. & Deegan, C. (2002). Global expectations and their association with corporate social disclosure practices in Australia, Singapore and South Korea, *The International Journal of accounting*, 37, 183 – 213.
- Ngau, P. M. (1987). Tensions in empowerment: The experience of the "harambee"(Self-Help) movement in Kenya. *Economic development and cultural change*, 35(3), 523-538.
- Nielsen, R. B., & Seay, M. C. (2014). Complex samples and regression-based inference: Considerations for consumer researchers. *Journal of Consumer Affairs*, 48(3), 603-619.
- Oh, W. Y., Chang, Y. K., & Jung, R. (2019). Board characteristics and corporate social responsibility: Does family involvement in management matter?. *Journal of Business Research*, 103, 23-33.
- Opondo, M. (2006). Emerging corporate social responsibility in Kenya's cut flower industry. Nairobi: *University of Nairobi Department of Geography and Environmental Studies*.
- Orazalin, N. (2019). Corporate governance and corporate social responsibility (CSR) disclosure in an emerging economy: evidence from commercial banks of Kazakhstan. *Corporate Governance: The International Journal of Business in Society*.
- Organization For Economic Co-operation And Development (2001). *OECD Principles of Corporate Governance*.
- Oxelheim L, & Randoy, T. (2003). The impact of foreign board membership on firm value. *Journal of Banking and Finance* 27(12), 2369-2392.
- Pan, Y., Huang, P., &Gopal, A. (2020). Is Board Capital a Double-Edged Sword? New Entry Threats and Firm Performance: On Examining the Moderating Role of Board Capital. *New Entry Threats and Firm Performance: On Examining the Moderating Role of Board Capital* (May 21, 2020).
- Pangeran, P. (2020). Family Control and Firm Financial Performance Listed on Indonesia Stock Exchange: The Moderating Role of Foreign Ownership. *JurnalManajemenBisnis*, 11(2), 121-134.
- Parker, L.D. (2005). Social and environmental accountability research: A view from the commentary box. *Accounting, Auditing & Accountability Journal*, 18: 842-60.
- Pérez-Calero, L., del Mar Villegas, M., &Barroso, C. (2016). A framework for board capital. *Corporate Governance*.
- Pesaran, M. H. (2021). General diagnostic tests for cross-sectional dependence in panels. *Empirical Economics*, 60, 13-50.

- Petersen, M. A. (2009). Estimating standard errors in finance panel data sets: Comparing approaches. *The Review of financial studies*, 22(1), 435-480.
- Pfeffer, J. (1972). Size and composition of corporate boards of directors: the organization and its environment, *Administrative Science Quarterly*, 17, 218-228.
- Pfeffer, J. and Salancik, G. R. (1978). *The External Control of Organizations: A Resource Dependence Perspective*, Harper & Row, New York.
- Porter, M.E., & Kramer, M. R. (2006). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84(12), 78– 92.
- Post, C., Rahman, N. & Rubow, E. (2011). Green Governance: Boards of Directors' Composition and Environmental Corporate Social Responsibility. *Business & Society*, 50, 189-223.
- Prado-Lorenzo, J. M., & Garcia-Sanchez, I. M. (2010). The role of the board of directors in disseminating relevant information on greenhouse gases. *Journal of business ethics*, 97(3), 391-424.
- Preston, D. S., & Karahanna, E. (2009). Antecedents of IS strategic alignment: a nomological network. *Information systems research*, 20(2), 159-179.
- Pucheta-Martínez, M. C., & Gallego-Álvarez, I. (2020). Corporate environmental disclosure practices in different national contexts: The influence of cultural dimensions. *Organization & Environment*, 33(4), 597-623.
- Punch, K. F. (2013). *Introduction to social research: Quantitative and qualitative approaches*. sage.
- Quinlan, C., Zikmund, W., Babin, B., Carr, J., & Griffin, M. (2015). *Business research methods*. South Western Cengage.
- Ramanathan, K. V. (1976). Towards a Theory of Corporate Social Accounting. *The Accounting Review*, 21(3), 516-28.
- Ramón-Llorens, M. C., Garcia-Meca, E., & Pucheta-Martínez, M. C. (2020). Female directors on boards. The impact of faultlines on CSR reporting. *Sustainability Accounting, Management and Policy Journal*.
- Ramón-Llorens, M. C., García-Meca, E., & Pucheta-Martínez, M. C. (2019). The role of human and social board capital in driving CSR reporting. *Long Range Planning*, 52(6), 101846.
- Rao, K. K., & Tilt, C. (2020). Gender and CSR decisions: perspectives from Australian boards. *Meditari Accountancy Research*.
- Rao, K. K., Tilt, C. A., & Lester, L. H. (2012). Corporate governance and environmental reporting: an Australian study. *Corporate Governance: The international journal of business in society*.

- Rao, K., & Tilt, C. (2016). Board diversity and CSR reporting: an Australian study. *Meditari Accountancy Research*.
- Rathert, N. (2016). Strategies of legitimation: MNEs and the adoption of CSR in response to host-country institutions. *Journal of International Business Studies*, 47(7), 858-879.
- Ravitch, S. M., & Riggan, M. (2016). *Reason & rigor: How conceptual frameworks guide research*. Sage Publications.
- Reeb, D. M., & Zhao, W. (2013). Director capital and corporate disclosure quality. *Journal of Accounting and Public Policy*, 32(4), 191-212.
- Russo, M. V., & Fouts, P. A. (1997). A resource-based perspective on corporate environmental performance and profitability. *Academy of management Journal*, 40(3), 534-559.
- Rustam, A., Wang, Y., & Zameer, H. (2019). Does foreign ownership affect corporate sustainability disclosure in Pakistan? A sequential mixed methods approach. *Environmental Science and Pollution Research*, 26(30), 31178-31197.
- Saidat, Z., Silva, M., & Seaman, C. (2019). The relationship between corporate governance and financial performance. *Journal of Family Business Management*.
- Saridakis, C., Angelidou, S., & Woodside, A. G. (2020). What type of CSR engagement suits my firm best? Evidence from an abductively-derived typology. *Journal of Business Research*, 108, 174-187.
- Saunders, M., & Lewis, P. (2017). *Doing research in business and management*. Pearson.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Shahbaz, M., Karaman, A. S., Kilic, M., & Uyar, A. (2020). Board attributes, CSR engagement, and corporate performance: What is the nexus in the energy sector?. *Energy Policy*, 143, 111582.
- Shaukat, A., Qiu, Y., & Trojanowski, G. (2016). Board attributes, corporate social responsibility strategy, and corporate environmental and social performance. *Journal of Business Ethics*, 135(3), 569-585.
- Shi, A. A., Concepcion, F. R., Laguinday, C. M. R., Huy, T. A. T. O. H., & Unite, A. A. (2020). An Analysis of the Effects of Foreign Ownership on the Level of Tax Avoidance Across Philippine Publicly Listed Firms. *DLSU Business & Economics Review*, 30(1), 1-14.
- Shubita, R., & Shubita, M. (2019). The impact of foreign ownership on corporate governance: evidence from an emerging market. *Investment Management and Financial Innovations*, 16(2), 101-115.

- Sidi, Y., & Harel, O. (2018). The treatment of incomplete data: reporting, analysis, reproducibility, and replicability. *Social Science & Medicine*, 209, 169-173.
- Sorenson, O., & Rogan, M. (2014). (When) do organizations have social capital?. *Annual Review of Sociology*, 40, 261-280.
- Squires, B., & Elnahla, N. (2020). The roles played by boards of directors: an integration of the agency and stakeholder theories. *Transnational Corporations Review*, 1-14.
- Stuart, H. (2006). Corporate Social Responsibility: How to Act and What to Communicate.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of management review*, 20(3), 571-610.
- Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2019). Using multivariate statistics (Seventh).
- Tarus, D. K. (2015). Corporate Social Responsibility Engagement in Kenya: Bottom Line or Rhetoric?, *Journal of African Business*, 16(3), 289-304.
- Tian, J., Haleblian, J., Rajagopalan, N., (2011). The effects of board human and social capital on investor reactions to new CEO selection. *Strategic Management Journal* 32 (7), 731-747.
- Transparency International Corruption Perception Index (TICPI) :Retrieved on: 3 August 2016. <http://www.transparency.org/cpi2014>.
- Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. *Academy of management Journal*, 41(4), 464-476.
- Unger, J. M., & Luetz, J. M. (2019). Engaging Employees in Corporate Social Responsibility Projects—A Case Study from the Lufthansa Group Showcasing Experiences and Lessons Gathered in Kenya, Rwanda, Nigeria and Columbia. In *Social Responsibility and Sustainability* (pp. 241-275). Springer, Cham.
- Vartanian, L. R., & Novak, S. A. (2011). Internalized societal attitudes moderate the impact of weight stigma on avoidance of exercise. *Obesity*, 19(4), 757-762.
- Viet, P. (2013). Foreign ownership and performance of listed firms: evidence from an emerging economy. *The Bulletin of the Graduate School of Commerce*, 77, 285-310.
- Vision 2030 Delivery Board. Towards 2030: <https://vison2030.go.ke/towards-2030/>.
- Visser, A. M. T. (2002). Sustainability reporting in South Africa. *Corporate Environmental Strategy*, 9(1), 79-85.
- Visser, W. (2008). Corporate social responsibility in developing countries. In *The Oxford handbook of corporate social responsibility*.

- Visser, W., & Tolhurst, N. (Eds.). (2017). *the world guide to CSR: A country-by-country analysis of corporate sustainability and responsibility*. Routledge.
- Vo, X. V., & Chu, T. K. H. (2019). Do foreign shareholders improve corporate earnings quality in emerging markets? Evidence from Vietnam. *Cogent Economics & Finance*, 7(1), 1698940.
- Waldman D, de Luque M, Washburn N, House R, Adetoun B, Barrasa A, Wilderom C. (2006b). Cultural and leadership predictors of corporate social responsibility values of top management: A globe study of 15 countries. *Journal of International Business Studies* 37, 823–837.
- Wallace, R.S.O., Naser, K., (1995). Firm-specific determinants of comprehensiveness of mandatory disclosure in the corporate annual reports of firms on the stock exchange of Hong Kong. *Journal of Accounting and Public Policy* 14, 311–368.
- Wallace, R.S.O., Naser, K., Mora, A., (1994). The relationship between comprehensiveness of corporate annual reports and firm characteristics in Spain. *Accounting and Business Research Journal*. 25 (97), 41–53.
- Wang, H., Tong, L., Takeuchi, R., & George, G. (2016). Corporate social responsibility: An overview and new research directions: Thematic issue on corporate social responsibility.
- Warner, R. M. (2020). *Applied statistics II: Multivariable and multivariate techniques*. Sage Publications.
- Waweru, N., Mangena, M., & Riro, G. (2019). Corporate governance and corporate internet reporting in sub-Saharan Africa: the case of Kenya and Tanzania. *Corporate Governance: The international journal of business in society*.
- Webb, E. (2004). An examination of socially responsible firms' board structure. *Journal of Management and Governance*, 8(3), 255–277.
- Webber, M. P., & Huxley, P. J. (2007). Measuring access to social capital: The validity and reliability of the Resource Generator-UK and its association with common mental disorder. *Social science & medicine*, 65(3), 481-492.
- Wellalage, N., Locke, S., & Acharya, S. (2018). Does the composition of boards of directors impact on CSR scores?. *Social Responsibility Journal*.
- Westphal, J.D., (1999). Collaboration in the boardroom: behavioral and performance consequences of CEO-board social ties. *Academy of Management Journal*. 42, 7–24.
- White, H. (1980). A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica: journal of the Econometric Society*, 817-838.

- Wincent, J., Anokhin, S., & Örtqvist, D. (2010). Does network board capital matter? A study of innovative performance in strategic SME networks. *Journal of Business Research*, 63(3), 265-275.
- Wiseman, J. (1982). An Evaluation of Environmental Disclosure Made in Corporate Annual Reports. *Accounting, Organizations and Society*. 7(1), 53-63.
- Wooldridge, J. M. (2002). Econometric analysis of cross section and panel data MIT press. *Cambridge, MA*, 108(2), 245-254.
- World Business Council of Sustainable Development. (2000, September). WBCSD-Corporate Social Responsibility. Retrieved July 18, 2018, from World Business Council for Sustainable Development (WBCSD).
- Wu, H., & Matteson, D. S. (2020). Adaptive Bayesian Changepoint Analysis and Local Outlier Scoring. *arXiv preprint arXiv:2011.09437*.
- Yang, Y., Bui, B., & Truong, T. P. (2017). Shareholder activism and CSR disclosure. In *8th Conference on Financial Markets and Corporate Governance (FMCG)*.
- Yekini, K. C., Adelopo, I., Andrikopoulos, P., & Yekini, S. (2015, December). Impact of board independence on the quality of community disclosures in annual reports. In *Accounting Forum* (Vol. 39, No. 4, pp. 249-267). No longer published by Elsevier.
- Yoshikawa, T., Rasheed, A. A., & Del Brio, E. B. (2010). The impact of firm strategy and foreign ownership on executive bonus compensation in Japanese firms. *Journal of Business Research*, 63(11), 1254-1260.
- Young, R., & Johnson, D. R. (2015). Handling missing values in longitudinal panel data with multiple imputation. *Journal of Marriage and Family*, 77(1), 277-294.
- Zahra, S.A., Pearce, J.A., (1989). Boards of directors and corporate financial performance: a review and integrative model. *Journal of Management*. 15, 291-334.
- Zattoni, A. & Cuomo, F. (2008) Why adopt codes of good governance? A comparison of institutional and efficiency perspectives, *Corporate Governance: An International Review*, 16, 1-5.
- Zhuang, Y., Chang, X., & Lee, Y. (2018). Board composition and corporate social responsibility performance: Evidence from Chinese public firms. *Sustainability*, 10(8), 2752.
- Zyguła, A. (2017). Impact of foreign ownership on dividend policy in Poland. *e-Finanse: Financial Internet Quarterly*, 13(4), 76-88.

APPENDICES

Appendix I: Introduction Letter

Jacob Kimutai Yego

P.O Box 9150-30100

Eldoret

Date:

Name of Respondent: _____

Company Name and Address: _____

Dear Sir/Madam,

RE: REQUEST FOR REASEARCH DATA

I am a doctor of Philosophy student at Moi University undertaking a research study on; **“Board Capital, Foreign Ownership and CSR Disclosure”**. The research is being carried out as part of the requirements of obtaining the degree. You have been selected to form part of this study and are kindly requested to assist in data collection by responding to questions in the accompanying document check index. Kindly note we shall be also extracting CSR Disclosure information from your company annual report by method of content analysis for use in the study. The information you provide will exclusively be used for academic purposes only and will be treated with utmost confidence. As a participant, you are free to request for a soft copy which can be sent to you via email. Your cooperation and assistance will be highly appreciated.

Yours faithfully,

Jacob Kimutai Yego

Phd Student

Appendix I (I): University Research Authorization



**MOI UNIVERSITY
POSTGRADUATE OFFICE
SCHOOL OF BUSINESS AND ECONOMICS**

**Tel: 0790940508
0771336914
0736138770
Fax No: (053) 43047
Telex No. MOIVARSITY 35047**

**P.O. Box 3900
Eldoret.
Kenya**

RE: SBE/PGR/REC/11

DATE: 13th April, 2021

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: JACOB KIMUTAI YEGO - SBE/DPHIL/BM/10/12

The above named is a bonafide student of Moi University School of Business and Economics, undertaking a Doctor of Philosophy in Business Management, specializing in **Finance**. He has completed coursework and defended proposal at School level. Currently he is proceeding to the field to collect data for his research topic titled: **"Board Capital, Foreign Ownership and Corporate Social Responsibility in Listed Firms on the Nairobi Securities Exchange, Kenya."**

Any assistance accorded to him will be highly appreciated.

Yours faithfully,




**DR. RONALD BONUKE
ASSOCIATE DEAN, SCHOOL OF BUSINESS AND ECONOMICS**


RB/ms



(ISO 9001:2015 Certified Institution)


Appendix I (Ii): NACOSTI Research Authorization Letter


REPUBLIC OF KENYA


**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION**

RefNo: 324482 Date of Issue: 17/November/2021


RESEARCH LICENSE




This is to Certify that Mr.. Jacob Kimutai Yego of Moi University, has been licensed to conduct research in Nairobi on the topic: Board Capital, Foreign Ownership and Corporate Social Responsibility in Listed Firms on the Nairobi Securities Exchange, Kenya for the period ending : 17/November/2022.

License No: NACOSTI/P/21/14429

324482
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.**

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013
The Grant of Research Licenses is guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014

CONDITIONS

1. The License is valid for the proposed research, location and specified period
2. The License any rights thereunder are non-transferable
3. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before Commencement of the research
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies
5. The License does not give authority to transfer research materials
6. NACOSTI may monitor and evaluate the licensed research project
7. The Licensee shall submit one hard copy and upload a soft copy of their final report (thesis) within one year of completion of the research
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice

National Commission for Science, Technology and Innovation
off Waiyaki Way, Upper Kabete,
P. O. Box 30623, 00100 Nairobi, KENYA
Land line: 020 4007000, 020 2241349, 020 3310571, 020 8001077
Mobile: 0713 788 787 / 0735 404 245
E-mail: dg@nacosti.go.ke / registry@nacosti.go.ke
Website: www.nacosti.go.ke

Appendix III (I): CSRD Score Sheet

Rating Scale: 1 if item is disclosed 0 if item not disclosed

NAME OF COMPANY:

Dimension of CSR	Disclosure Category	Disclosed(1) Not disclosed(0)
Environment and Product Safety (11 Items)	EN1. Pollution control	
	EN2. Tree Plantation	
	EN3. Conservation of natural resources	
	EN5. Energy efficiency of products	
	EN6. Water discharge or management information	
	EN7. Solid waste disposal information	
	EN8. Recycling plant of waste products	
	EN9. Installation of biomass processing plants	
	EN10. Product Quality Disclosure	
	EN11. Product Safety	
	Human Resource (12 Items)	HR1.Employee Diversity
HR2.Employment for the afflicted areas		
HR3. Hiring Discrimination rights/Non HIV Screening etc.		
HR4.Employee health and safety		
HR5.Employee training and education		
HR7. Employee benefits		
HR8.Employee/Staff Welfare/Maternity etc./Funeral		
HR9. Award program for employee or scholarship for child of workers		
HR10. Employee Recreation/Teambuilding etc.		
HR11. Employee and management relation		
HR12.Charity program		
Community Development (11 Items)		COM1. HIV/TB/COVID19 assistance related activities
	COM2. Education facilities for needy areas/or related school	

	programs	
	COM3. Support to organization working with physically challenged children/persons	
	COM4. Sponsor for Sport, Art & Cultural program	
	COM5. Cash donation program for disaster people by calamities such as floods, post-election violence, terror attack, pandemics	
	COM6. Beautification activities	
	COM7. Information pertaining to school fees programs for needy students	
	COM8. Information in establishment and management of children' s homes	
	COM9. Information pertaining to accommodation for the slum-dwellers	
	COM10. Disclosure relating to women' s rights and anti FGM practices	
	COM11. Grants to Public Universities/other institutions	
TOTAL SCORE FOR FIRM (34 Items=Max Score is 34)		

Appendix III (II): Decision Rule for CSR Disclosure

(Adapted from Kathy Rao, 2016)

- CSR disclosure includes any disclosures about social and environmental activities.
- Consider both pecuniary and non-pecuniary sentences. Presence of a monetary value is treated as a single word.
- Sentences that fall into multiple groupings must be codified into the most highlighted group. Where the most prominent event is un-recognized, it is treated under broad CSR statements.
- If a reporting sentence includes at least two categories, the combined disclosure in that sentence is equally shared among the respective sections. Total disclosures for a 'Health & Safety, Community, and Environment' paragraph, for example, are equally divided among all three categories.
- Tables containing checklist information should be interpreted similarly to other disclosures. Thus every phrase inside the table is considered a separate word, as is each monetary item (for example, "Ksh1000" = 1 word).
- Both the details in the table and the caption to the table are included if it falls into any of the CSR categories.
- Every time a recurring disclosure is made, it needs to be documented as a CSR sentence..
- Other than text that shows up on the image(s), captions, photographs, charts, pictures, or images of social or environmental activities are excluded.
- Any mandatory social and environmental disclosures about compliance with environmental regulation required by the Companies Act are included.
- Financial statements and notes to financial statements not included.
- All disclosures made under the Employee category should only concern employees of the firm. Examples include disclosures regarding diversity, safety, and employee health.
- Only information that is relevant to the environment or society is taken into consideration when discussing sustainability or sustainable development. General sustainability statements ought to be disregarded.
- Only information on energy that is relevant to the environment is taken into account.
- Product statements are only taken into consideration if they mention improvements, developments, safety, awards, or quality.
- Long sentences that contain one or two keywords associated with social and environmental issues but are not specifically related to any of the categories are disqualified.

Appendix IV: Companies Listed In NSE) As At December 2019

	Agricultural	NSE SYMBOL	Included in Sample
1	Williamson Tea Kenya Ltd.		√
2	Kakuzi		√
3	Kapchorua Tea		√
4	Eaagads Ltd		√
5	Limuru Tea		√
6	Sasini Tea		√
	Banking		
7	Absa		√
8	Diamond Trust		√
9	Equity Bank		√
10	Housing Finance Co. Kenya Ltd.		√
11	Kenya Commercial Bank Ltd		√
12	National Bank of Kenya Ltd.		√
13	NCBA		√
14	Standard Chartered Bank Kenya Ltd.		√
15	The Cooperative Bank of Kenya		√
16	CFC		√
17	I & M Holdings		×
	Commercial & Services		
18	Eveready East Africa Ltd.		√
19	Express Kenya		√
20	Nation Media Group		√
21	Longhorn Publishers		√
22	Sameer Africa Ltd.		√

23	Scan Group		√
24	TPS East Africa Ltd.		√
25	Uchumi Supermarket Ltd.		√
26	Standard Group		√
27	Car & General		√
28	Kenya Airways		√
29	Nairobi Business Ventures		×
30	Deacons(East Africa)		×
	Construction & Allied		
28	ARM Cement Ltd.		√
29	Bamburi Cement		√
30	Crown Paints		√
31	E.A Cables Ltd.		√
32	E.A. Portland Cement Ltd.		√
	Energy & Petroleum		
33	Kengen Co. Ltd.		√
34	Kenya Power and Lighting Co. Ltd		√
35	Total Kenya Ltd.		√
36	Umeme Ltd		√
	Insurance		
37	Britam Holdings		√
38	CIC Insurance Group Ltd.		√
39	Sanlam Kenya Ltd.		√
40	Jubilee Holdings Ltd.		√
41	Kenya Re-Insurance Corporation Ltd.		√
42	Liberty Kenya Holdings		√

	Investment		
43	Centum Investment Co. Ltd.		√
44	Olympia Capital Holdings Ltd.		√
45	Home Africa Ltd.		√
46	Trans-century Ltd.		√
47	Kurwitu ventures		√
48	Home Africa Ltd.		√
	Investment Services		
49	Nairobi Securities Exchange Ltd		√
50	Stanlib Fahari I-REIT		×
51	Barclays New Gold ETF		×
	Manufacturing & Allied		√
52	British American Tobacco Kenya Ltd.		√
53	Carbacid Investments Ltd.		√
54	East African Breweries Ltd.		√
55	Mumias Sugar Co. Ltd.		√
56	Unga Group Ltd.		√
57	Flame Tree Group Holdings		√
58	BOC		√
59	Kenya Orchards		√
	Telecommunications & Technology		
60	Safaricom Ltd.		√

Source: (CMA, 2019)

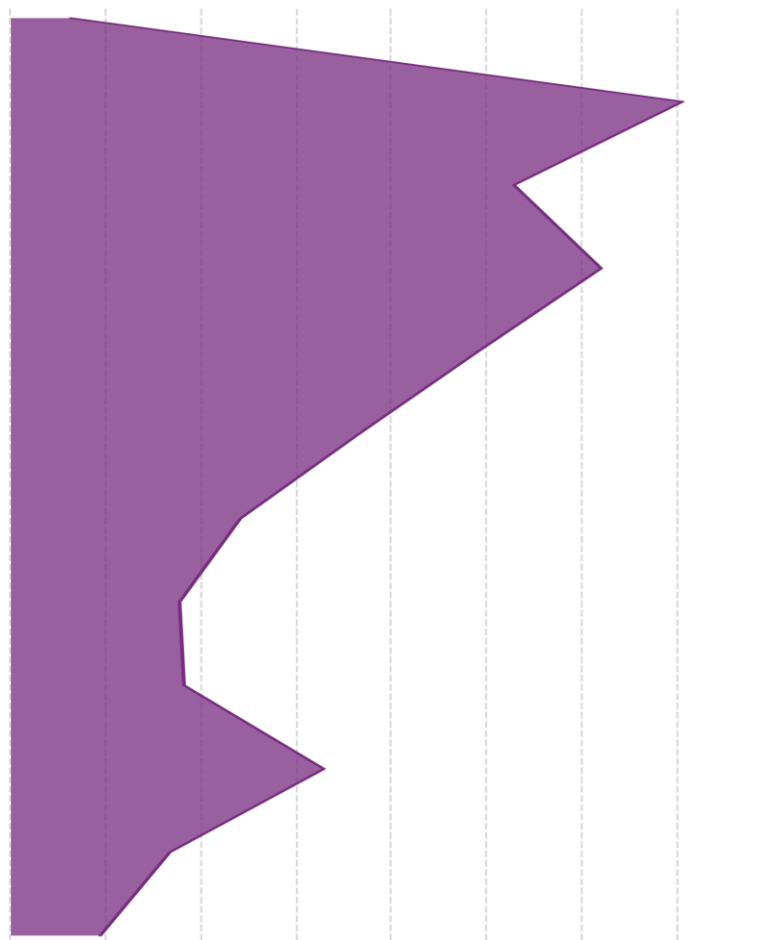
Appendix V: Cross-Tab for Computing Board Relations (Board Network Experience)

Company Name:				
	Director 1	Director 2	Director3	Director 4
Director 1	*Min(Dir1Ten,Dir1Ten)	Min(Dir2Ten*,Dir1Ten)	Min(Dir3Ten,Dir1Ten)	Min(Dir4Ten,Dir1Ten)
Director 2	Min(Dir1Ten,Dir2Ten)	Min(Dir2Ten,Dir2Ten)	Min(Dir3Ten,Dir2Ten)	Min(Dir4Ten,Dir2Ten)
Director 3	Min(Dir1Ten,Dir3Ten)	Min(Dir2Ten,Dir3Ten)	Min(Dir3Ten,Dir3Ten)	Min(Dir4Ten,Dir3Ten)
Director 4	Min(Dir1Ten,Dir4Ten)	Min(Dir2Ten,Dir4Ten)	Min(Dir3Ten,Dir4Ten)	Min(Dir4Ten,Dir4Ten)
Director 1 Tenure	Director 5 Tenure			
Director 2 Tenure	Director 6 Tenure			
Director 3 Tenure	Director 7 Tenure			
Director 4 Tenure	Director 8 Tenure			

*Number of independent directors will differ as per company

*Min is the minimum of the two independent director tenures

*Ten=Tenure

Appendix V(I): Foreign Direct Investment 2008-2019

Source: CeicData.com

Appendix VI (I): Variable Descriptive Tabulations

Table 4.10.0: Firm Size by Year ('000) (before transformation)

Variable: Firm Size (Total Assets)			
YEAR	Obs.	Mean	Standard Deviation
2008	49	25941758	39236714
2009	50	29262992	43393015
2010	51	35520241	54418425
2011	52	42006406	66102678
2012	53	46786076	74336475
2013	54	54532539	83435199
2014	56	78357106	141491873
2015	56	93574455	177587487
2016	56	100211743	192190124
2017	55	109573967	202124248
2018	54	109228507	278672108
2019	53	134327262	346310560
Total	639	72674269	174422768

Table 4.11.0: Panel Data Summary of Firm Age in Years (before transformation)

Variable: Firm Age					
	Mean	Std. Dev.	Min	Max	Observations
overall	29.37	17.66	1	69	N = 639
between		17.67	3.5	63.5	n = 56
within		3.363	23.87	34.87	T-bar = 11.41

Table 4.13.0: Panel Data Summary of Firm Size(log transformed)

Variable: Firm Size					
	Mean	Std. Dev.	Min	Max	Observations
Overall	7.105	0.930	4.049	9.358	N = 639
Between		0.867	5.346	9.111	n = 56
Within		0.389	4.186	9.312	T-bar = 11.41

Table 4.14.0: Panel Data Summary of Firm Age(log transformed)

Variable: Firm Age					
	Mean	Std. Dev.	Min	Max	Observations
Overall	1.337	0.402	0.000	1.839	N = 639
Between		0.393	0.476	1.802	n = 56
Within		0.143	0.613	1.692	T-bar = 11.41

Table 4.15.0: Panel Data Summary of Board Size

Variable: Board Size					
	Mean	Std. Dev.	Min	Max	Observations
Overall	8.540	2.744	3.000	16.000	N = 639
Between		2.564	3.000	14.583	n = 56
Within		1.002	5.290	12.707	T-bar = 11.41

Table 4.16.0: Board Independence by year

Year	Mean	Std. Dev.
2009	0.68550	0.1671
2010	0.67685	0.1730
2011	0.69327	0.1662
2012	0.71882	0.1747
2013	0.72026	0.1739
2014	0.72275	0.1747
2015	0.72006	0.1664
2016	0.72512	0.1668
2017	0.72431	0.1719
2018	0.72297	0.1778
2019	0.70933	0.1857

Table 4.16.1: Panel Data Summary of Board Independence

Variable: Board Independence					
	Mean	Std. Dev.	Min	Max	Observations
Overall	0.709	0.1718	0.2	0.933	N = 639
Between		0.1476	0.333	0.920	n = 56
Within		0.0914	0.276	1.078	T-bar = 11.41

Table 4.17.0: Board Expertise by year

Year	Mean	Std. Dev.
2009	0.311378	0.123293
2010	0.317787	0.127264
2011	0.326414	0.134856
2012	0.308197	0.125659
2013	0.325932	0.141712
2014	0.321251	0.122438
2015	0.319737	0.120469
2016	0.320542	0.125236
2017	0.319941	0.128077
2018	0.343743	0.138179
2019	0.335098	0.137061
Overall	0.32273	0.12948

Table 4.17.1: Panel Data Summary of Board Expertise

Variable: Board Expertise					
	Mean	Std. Dev.	Min	Max	Observations
Overall	0.323	0.129	0.031	0.659	N = 639
Between		0.110	0.063	0.545	n = 56
Within		0.068	0.045	0.682	T-bar = 11.41

Table 4.18.0: Board Relations by year

Year	Mean	Std. Dev.
2009	1.731	2.556
2010	1.776	2.542
2011	1.904	2.559
2012	2.185	2.950
2013	2.099	2.636
2014	2.526	3.223
2015	2.869	3.757
2016	2.718	3.506
2017	2.881	3.408
2018	3.452	3.763
2019	3.753	4.435
Overall	2.536	3.212

Table 4.18.1: Panel Data Summary of Board Relations

Variable: Board Relations					
	Mean	Std. Dev.	Min	Max	Observations
Overall	2.419	3.232	0.000	22.009	N = 639
Between		2.643	0.006	12.205	n = 56
Within		1.828	-7.107	13.283	T-bar = 11.41

Table 4.19.0: Panel Data Summary of Foreign Ownership

Variable: Foreign Ownership					
	Mean	Std. Dev.	Min	Max	Observations
Overall	28.070	28.221	0	94.530	N = 639
Between		27.163	0.032	91.334	n = 56
Within		7.501	-5.543	97.178	T-bar = 11.41

Appendix VI (II): Model Specification Output

Table 4.20.0: Hausman test decomposed into single variables

Hausman test for model specification						
<i>Test: Ho: difference in coefficients not systematic</i>						
Predictor	(b)	(B)	(b-B)	S.E.	chi2(1)	Model Choice
			Difference		(Prob>chi2)*	
Firm Age	.269141	.2314513	.0376896	.0076291	24.41 (.0000)	Fixed-effect
ROA	-.1471006	-.1379648	-.0091359	.0072682	1.58 (.2088)	Random-effect
Firm Size	.0443858	.0483613	-.0039755	.0032007	1.54 (.2142)	Random-effect
Board Size	.0129213	.0181651	-.0052439	.0015398	11.60 (.0007)	Fixed - effect
Board Independence	.1934137	.2003756	-.0069619	.009855	0.50 (.4799)	Random-effect
Board Expertise	.027999	.0705967	-.0425978	.013013	10.72 (.0011)	Fixed-effect
Board Relations	.031294	.0329535	-.0016595	.0003632	20.88 (.000)	Fixed-effect
Foreign Ownership	.0020147	.0018379	.0001769	.0002411	0.54 (.4632)	Random-effect
Overall					30.56 (.0002)	Fixed-effect

*level of significance in parenthesis

Source: Research Data, 2021

Table 4.21.0: standard cluster robust errors and Driskol Kraay standard errors

Variable	Fixed Effects (robust errors)	Fixed Effects (Driskol Kraay errors)
Firm Age	.0106 .0018 5.81 0.0000	.0106 .0013 7.99 0.0000
ROA	-.0388 .0398 -0.97 0.334	-.0388 .0220 -1.76 0.106
Firm Size	.0185 .0096 1.92 0.060	.0185 .0043 4.29 0.0013
Board Size	.0054 .0033 1.60 0.115	.0054 .0008 6.49 0.000
Board Independence	.0957 .0363 2.64 0.010	.0957 .0445 2.15 0.054
Board Expertise	.0319 .0453 0.71 0.483	.0319 .0263 1.21 0.250
Board Relations	.0220 .0041 5.38 0.0000	.0220 .0042 5.17 0.000
_cons	-.2164 .0827 -2.62 0.0115	-.2164 .0496 -4.36 0.001

Source: Research Data, 2021

Appendix VI (III): Detailed Tabulation of Diagnostic Tests

Table 4.30.0: Confirmation of Cross-Sectional dependence using Pesaran test

Pesaran (2015) test for weak cross-sectional dependence.

Unbalanced panel detected, test adjusted.

H0: errors are weakly cross-sectional dependent.

CD = 0.333

p-value = 0.739

Source: Research Data, 2021

Table 4.31.0: Unit Root Test by Dickey-Fuller Method, Details

Fisher-type unit-root test: All Variables

Based on augmented Dickey-Fuller

tests

Ho: All panels contain unit roots

Number of panels = 56

Ha: At least one panel is stationary

Avg. number of periods = 11.41

AR parameter: Panel-specific

Asymptotics: T → Infinity

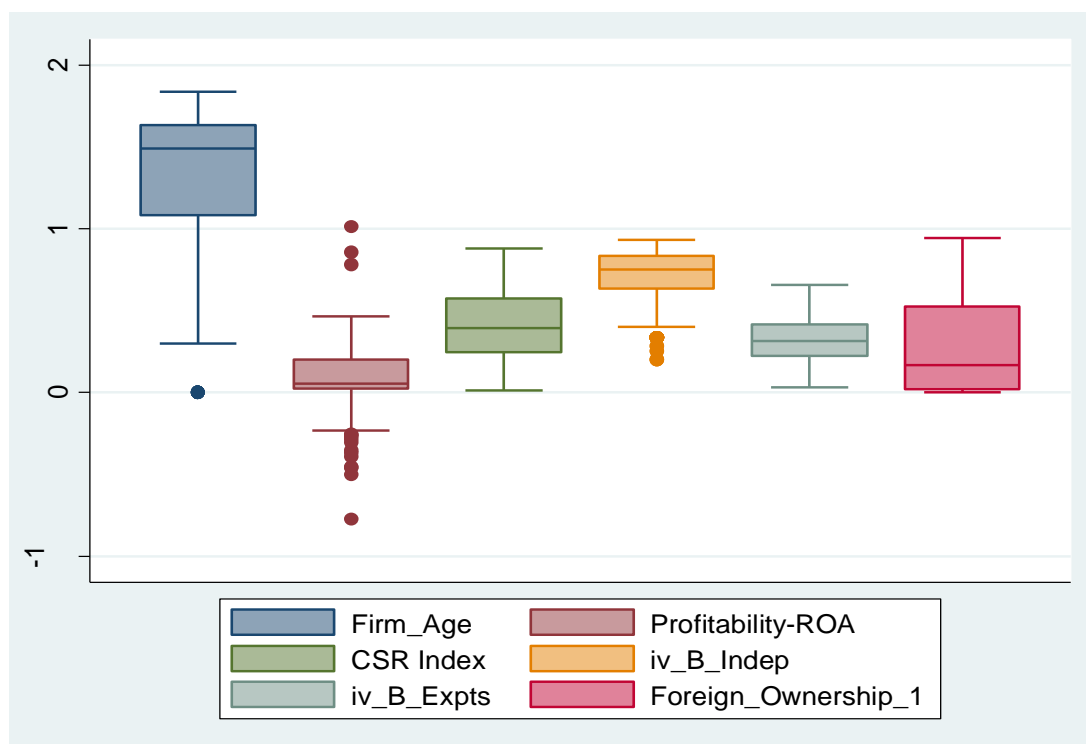
			Statistic	p-value
Firm Age	Inverse chi-squared(112)	P	540.03	0.0000
	Inverse normal	Z	-14.48	0.0000
	Inverse logit t(284)	L*	-19.38	0.0000
	Modified inv. chi-squared	Pm	28.59	0.0000
ROA	Inverse chi-squared(112)	P	401.36	0.0000
	Inverse normal	Z	-13.57	0.0000
	Inverse logit t(284)	L*	-14.52	0.0000
	Modified inv. chi-squared	Pm	19.33	0.0000
Firm Size	Inverse chi-squared(112)	P	271.99	0.0000
	Inverse normal	Z	-8.48	0.0000
	Inverse logit t(284)	L*	-8.75	0.0000
	Modified inv. chi-squared	Pm	10.68	0.0000
Board Size	Inverse chi-squared(112)	P	237.06	0.0000
	Inverse normal	Z	-8.30	0.0000
	Inverse logit t(284)	L*	-7.92	0.0000
	Modified inv. chi-squared	Pm	8.35	0.0000
Board	Inverse chi-squared(112)	P	425.42	0.0000
	Inverse normal	Z	-13.51	0.0000
	Inverse logit t(284)	L*	-15.23	0.0000
	Modified inv. chi-squared	Pm	20.94	0.0000
Board	Inverse chi-squared	P	250.70	0.0000

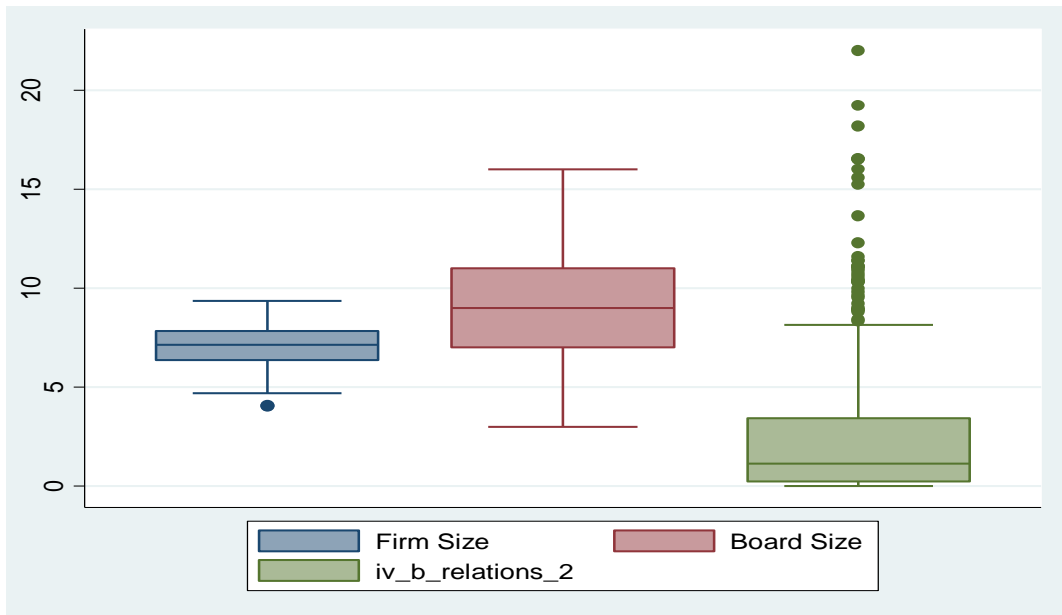
Independence	squared(112)			
	Inverse normal	Z	-8.11	0.0000
	Inverse logit t(284)	L*	-8.29	0.0000
	Modified inv. chi-squared	Pm	9.26	0.0000
Board Expertise	Inverse chi-squared(112)	P	368.80	0.0000
	Inverse normal	Z	-12.32	0.0000
	Inverse logit t(284)	L*	-13.15	0.0000
	Modified inv. chi-squared	Pm	17.15	0.0000
Board Relations	Inverse chi-squared(112)	P	353.22	0.0000
	Inverse normal	Z	-11.61	0.0000
	Inverse logit t(284)	L*	-12.29	0.0000
	Modified inv. chi-squared	Pm	16.11	0.0000

#P statistic requires number of panels to be finite. Other statistics are suitable for finite or infinite number of panels.

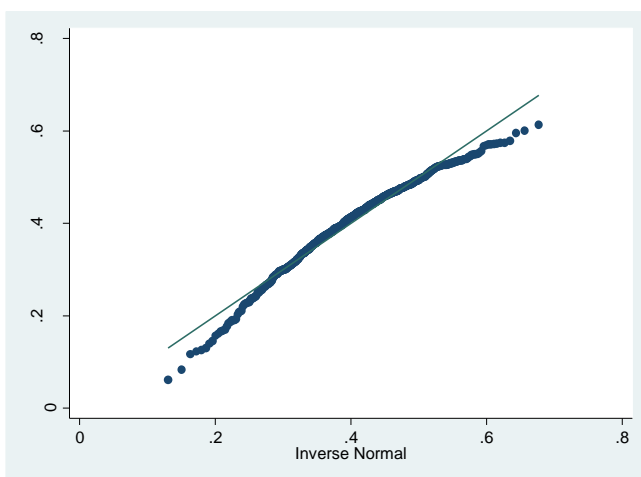
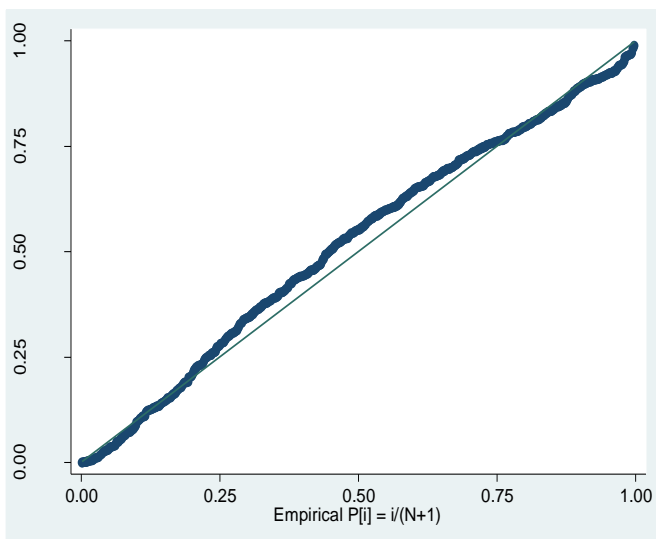
Source: Research Data, 2021

Table 4.32.0: Box Plots of Variables after Transformation





4.3.3 pnorm plot and qnorm plot on predic (shows no indication of non-normality)



Further Confirmatory Tests for Heteroscedasticity

Table 4.3.4: Modified Wald test for group-wise Heteroscedasticity

Ho: Constant variance ($\sigma(i)^2 = \sigma^2$ for all i)

Test: Modified Wald for fixed effects

chi2 (56) = 11114.05

Prob>chi2 = 0.0000

Source: Research Data, 2021

Table 4.3.5: White's test for Heteroscedasticity

Ho: homoskedasticity

chi2(44) = 245.84

Prob > chi2 = 0.0000

Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	p
Heteroskedasticity	245.84	44	0.0000
Skewness	62.37	8	0.0000
Kurtosis	0.15	1	0.6986
Total	308.35	53	0.0000

Source: Research Data, 2021

Table 4.3.6: Specific variable Heteroscedasticity tests

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of CSRI

Predictor	Statistics	Conclusion
Firm Age	chi2(1) = 0.08 Prob > chi2 = 0.7760	Not violated
ROA	chi2(1) = 1.46 Prob > chi2 = 0.2263	Not violated
Firm Size	chi2(1) = 21.48 Prob > chi2 = 0.0000	Violated
Board Size	chi2(1) = 7.44 Prob > chi2 = 0.0064	Violated
Board Independence	chi2(1) = 0.95 Prob > chi2 = 0.3298	Not violated
Board Expertise	chi2(1) = 6.13 Prob > chi2 = 0.0133	Not violated
Board Relations	chi2(1) = 60.88 Prob > chi2 = 0.0000	violated
Foreign Ownership	chi2(1) = 3.43 Prob > chi2 = 0.0640	Not violated

Table 4.4.3: Pesaran's test of cross sectional independence

Correlation matrix of residuals:

	c1	c2	c3	c4	c5	c6	c7	c8	c9	c10	c11	c12	c13	c14	c15	c16	c17	c18
r1	1.000																	
r2	0.107	1.000																
r3	-0.018	-0.284	1.000															
r4	0.217	-0.236	0.554	1.000														
r5	0.388	-0.546	0.536	0.650	1.000													
r6	-0.222	0.270	0.511	0.259	0.195	1.000												
r7	0.366	-0.372	0.197	0.469	0.777	-0.191	1.000											
r8	-0.137	-0.396	0.532	0.571	0.462	0.352	0.303	1.000										
r9	-0.620	0.182	0.214	0.143	-0.157	0.448	-0.411	0.231	1.000									
r10	0.152	-0.596	0.228	0.275	0.657	-0.295	0.613	0.567	-0.144	1.000								
r11	-0.057	0.480	-0.655	-0.901	-0.777	-0.338	-0.541	-0.721	-0.231	-0.456	1.000							
r12	0.190	0.417	-0.322	-0.318	-0.571	-0.217	-0.197	-0.381	-0.538	-0.523	0.551	1.000						
r13	-0.123	-0.130	0.545	0.729	0.624	0.329	0.479	0.752	0.483	0.535	-0.854	-0.585	1.000					
r14	0.138	-0.451	0.407	0.804	0.721	0.009	0.682	0.611	0.146	0.591	-0.891	-0.458	0.866	1.000				
r15	-0.399	-0.506	0.231	0.173	0.095	0.203	-0.332	0.249	0.685	0.128	-0.334	-0.780	0.278	0.168	1.000			
r16	0.565	-0.585	0.461	0.204	0.648	-0.197	0.464	0.279	-0.340	0.666	-0.362	-0.328	0.230	0.407	0.090	1.000		
r17	0.289	-0.323	0.439	0.553	0.591	0.370	0.528	0.794	-0.181	0.409	-0.652	-0.101	0.540	0.575	-0.109	0.421	1.000	
r18	0.264	-0.370	0.463	0.608	0.883	0.271	0.599	0.240	0.103	0.391	-0.760	-0.678	0.600	0.699	0.302	0.486	0.352	1.000
r19	-0.203	0.137	0.252	-0.437	-0.180	0.096	-0.107	-0.342	-0.075	-0.228	0.422	0.155	-0.382	-0.554	-0.159	-0.010	-0.313	-0.243
r20	0.233	-0.347	0.598	0.873	0.827	0.380	0.588	0.581	0.167	0.379	-0.954	-0.501	0.812	0.885	0.223	0.406	0.659	0.855
r19	c19	c20	c21	c22	c23	c24	c25	c26	c27	c28	c29	c30	c31	c32	c33	c34	c35	c36
r19	1.000																	
r20	-0.441	1.000																
r21	-0.593	0.765	1.000															
r22	-0.581	0.842	0.812	1.000														
r23	0.132	-0.786	-0.247	-0.630	1.000													
r24	-0.567	0.653	0.953	0.830	-0.299	1.000												
r25	-0.187	0.745	0.349	0.701	-0.962	0.428	1.000											
r26	-0.076	0.458	0.745	0.668	-0.594	0.634	0.654	1.000										
r27	0.227	-0.435	-0.591	-0.650	0.765	-0.678	-0.707	-0.706	1.000									
r28	-0.295	0.012	-0.706	0.034	0.784	0.025	-0.460	-0.552	0.381	1.000								
r29	-0.491	0.604	0.943	0.710	-0.504	0.846	0.588	0.744	-0.754	-0.391	1.000							
r30	0.147	-0.368	-0.553	-0.419	0.761	-0.497	-0.560	-0.530	0.708	0.526	-0.569	1.000						
r31	-0.137	-0.143	0.628	0.154	0.415	0.215	-0.351	0.278	0.101	0.292	0.027	0.337	1.000					
r32	-0.098	0.869	0.227	0.634	-0.970	0.336	0.950	0.508	-0.632	-0.767	0.533	-0.740	-0.662	1.000				
r33	0.370	-0.556	-0.521	-0.488	0.351	-0.372	-0.403	-0.219	0.327	0.219	-0.439	0.653	0.322	-0.451	1.000			
r34	-0.018	0.180	0.722	0.340	-0.488	0.318	0.535	0.673	-0.582	-0.819	0.554	-0.573	-0.084	0.533	-0.359	1.000		
r35	-0.060	-0.615	0.211	-0.366	0.845	-0.237	-0.671	-0.042	0.450	-0.149	-0.231	0.348	0.419	-0.712	0.268	0.347	1.000	
r36	-0.252	0.824	0.520	-0.790	0.672	0.672	0.900	0.620	-0.815	-0.304	0.729	-0.624	-0.337	0.902	-0.501	0.493	-0.678	1.000
r37	-0.087	0.701	0.466	0.618	-0.578	0.396	0.756	0.576	-0.383	-0.479	0.445	-0.529	-0.280	0.722	-0.534	0.658	-0.070	0.716
r38	0.540	-0.645	0.133	-0.625	0.507	-0.297	-0.591	-0.119	0.187	-0.180	-0.124	0.230	0.211	-0.623	0.306	-0.084	0.167	-0.490

	c37	c38	c39	c40	c41	c42	c43	c44	c45	c46	c47	c48	c49	c50	c51	c52	c53	c54	C55	C56
r37	1.000																			
r38	-0.592	1.000																		
r39	0.733	-0.423	1.000																	
r40	0.560	-0.490	-0.234	1.000																
r41	-0.402	0.562	-0.708	-0.168	1.000															
r42	0.458	-0.470	0.504	0.569	-0.453	1.000														
r43	-0.196	-0.157	0.241	0.283	-0.218	0.364	1.000													
r44	0.087	0.268	0.002	-0.041	0.107	-0.662	-0.204	1.000												
r45	-0.074	0.163	-0.521	0.237	0.429	0.541	0.131	-0.642	1.000											
r46	-0.161	-0.343	-0.464	0.336	-0.081	0.226	0.465	-0.389	0.043	1.000										
r47	0.111	0.153	0.536	-0.140	0.292	0.215	-0.060	-0.276	0.471	-0.253	1.000									
r48	0.060	-0.427	0.129	0.289	0.108	0.325	0.390	-0.323	0.353	0.364	0.267	1.000								
r49	0.663	-0.694	-0.616	0.790	-0.403	0.605	-0.069	-0.203	0.087	0.317	-0.334	0.212	1.000							
r50	-0.227	-0.201	0.522	0.029	-0.363	0.475	0.702	-0.599	0.254	0.411	0.194	0.129	-0.143	1.000						
r51	0.706	-0.519	0.425	0.307	-0.027	0.390	-0.267	-0.262	0.164	0.101	0.482	0.443	0.466	-0.207	1.000					
r52	-0.062	0.394	-0.161	-0.219	0.562	-0.091	-0.291	-0.524	0.681	-0.622	0.660	0.116	-0.392	-0.232	0.220	1.000				
r53	0.278	-0.822	-0.290	0.692	-0.137	0.365	0.502	-0.288	-0.211	0.260	-0.583	0.238	0.409	0.282	-0.106	-0.206	1.000			
r54	-0.235	-0.307	-0.236	-0.423	-0.399	-0.247	0.070	-0.027	-0.535	-0.203	-0.657	-0.508	-0.104	0.336	-0.572	-0.603	0.686	1.000		
r55	0.238	-0.611	-0.874	0.450	-0.314	0.524	0.126	-0.462	0.240	0.565	-0.389	0.453	0.736	0.133	0.243	-0.629	0.421	0.167	1.000	
r56	-0.344	0.626	0.317	-0.459	0.433	-0.796	-0.125	0.717	-0.365	-0.501	0.162	-0.319	-0.772	-0.298	-0.392	0.609	-0.350	-0.183	-0.866	1.000

Pesaran's test of cross sectional independence = 8.215, Pr = 0.0000

Appendix VII: Correlation and Regression Output

Table 4.3.5 Serial Correlation

Foreign Ownership										1							
B_Relations										1	0.048						
B_Expertise										1	0.168***	0.155***					
B_Independence									1	0.244***	0.229***	0.009					
Board Size									1	0.508***	0.430***	0.446***	0.142***				
Firm Size									1	0.423***	0.306***	0.242***	0.0015				
Profitability									1	0.039**	0.128**	-0.0394	-0.013	0.095*	-0.105**		
Firm Age									1	-0.029	0.129 ^{u,v}	0.212 ^{u,v,w}	-0.241***	0.038	0.117**		
CSR									1	-0.009	0.006	0.348***	0.507***	0.237***	0.316***	0.733***	0.185***
	CS	Firm Age	Profitability	Firm Size	Board Size	B_Independence	B_Expertise	B_Relations	Foreign Ownership								

*Level of significance: * p < 0.05, ** p < 0.01, *** p < 0.001*

Source: Researcher 2021

Appendix VIII: Robustness Test Output

Robustness Test Outputs

Table 4.4.1: Robustness Comparison of Pooled OLS, random-effects and fixed effects regression models: Board Independence and CSR

Method: Pooled OLS						Number of obs = 639
Group variable (i): Company_id						Number of groups = 56
maximum lag: 2						F(1, 11) = 37.94
						Prob > F = 0.0001
						R-squared = 0.0559
						Root MSE = 0.2034
CSRI	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Board	.2879742	.0467518	6.16	0.000	.1850741	.3908744
Independence						
_cons	.196617	.021169	9.29	0.000	.1500244	.2432096
Method: Random-effects GLS regression						Number of obs = 639
Group variable (i): Company_id						Number of groups = 56
maximum lag: 2						Wald chi2(1) = 14.57
corr(u_i, Xb) = 0 (assumed)						Prob > chi2 = 0.0001
						overall R-squared = 0.0559
CSRI	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Board	.2003756	.0524989	3.82	0.003	.0848263	.3159249
Independence						
_cons	.2566739	.1542811	1.66	0.124	-.0828965	.5962444
sigma_u	.18075312					
sigma_e	.0948167					
rho	.78421034 (fraction of variance due to u_i)					
Method: Fixed-effects regression						Number of obs = 639
Group variable (i): Company_id						Number of groups = 56
maximum lag: 2						F(1, 11) = 7.57
						Prob > F = 0.0188
						within R-squared = 0.0367
CSRI	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Board	.1934137	.0702954	2.75	0.019	.0386946	.3481329
Independence						
_cons	.2637231	.061165	4.31	0.001	.1290999	.3983463

Table 4.4.2: Robustness Comparison of Pooled OLS, random-effects and fixed effects regression models: Expertise and CSR

Method: Pooled OLS		Number of obs =639				
Group variable (i): Company_id		Number of groups =56				
maximum lag: 2		F(1, 11) =138.95				
		Prob > F =0.0000				
		R-squared =0.1000				
		Root MSE =0.1986				
CSRI	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Board Expertise	.514795	.0436	11.79	0.000	.4186731	.6109169
_cons	.2346534	.0212447	11.05	0.000	.1878941	.2814128
Method: Random-effects GLS regression		Number of obs =639				
Group variable (i): Company_id		Number of groups =56				
maximum lag: 2		Wald chi2(1) =1.90				
corr(u_i, Xb) = 0 (assumed)		Prob > chi2 =0.1682				
		overall R-squared =0.1000				
CSRI	Coef	Std. Err.	t	P> t	[95% Conf. Interval]	
Board Expertise	.0705967	.0512325	1.38	0.196	-	.1833587
_cons	.3753296	.1472753	2.55	0.027	.0511789	.6994804
sigma_u		.1707732				
sigma_e		.09658524				
rho		.75764676 (fraction of variance due to u_i)				

Method: Fixed-effects regression		Number of obs = 63				
Group variable (i): Company_id		Number of groups = 56				
maximum lag: 2		F(1, 11) = 0.64				
		Prob > F = 0.4400				
		within R-squared = 0.0004				
CSRI	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Board	.027999	.0349507	0.80	0.440	-.048927	.104925
Expertise						
_cons	.3919353	.0281732	13.91	0.000	.3299265	.4539441

Table 4.4.3: Robustness Comparison of Pooled OLS, random-effects and fixed effects regression models: Board Relations and CSR


Method: Pooled OLS		Number of obs = 639				
Group variable (i): Company_id		Number of groups = 56				
maximum lag: 2		F(1, 11) = 130.16				
		Prob > F = 0.0000				
		R-squared = 0.5379				
		Root MSE = 0.1423				
CSRI	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Board Relations	.047478	.00416	11.41	0.000	.038318	.056637
_cons	.286115	.01917	14.93	0.000	.243922	.328308
Method: Random-effects GLS regression		Number of obs = 639				
Group variable (i): Company_id		Number of groups = 56				
maximum lag: 2		Wald chi2(1) = 65.88				
corr(u_i, Xb) = 0 (assumed)		Prob > chi2 = 0.0000				
		overall R-squared = 0.5379				
CSRI	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Board Relations	.032954	.00406	8.12	0.000	.0240174	.041889
_cons	.320551	.08129	3.94	0.002	.1416236	.499478
sigma_u	.115869					
sigma_e	.075787					
rho	.700374	(fraction of variance due to u_i)				
Method: Fixed-effects regression		Number of obs = 639				
Group variable (i): Company_id		Number of groups = 56				
maximum lag: 2		F(1, 11) = 41.34				
		Prob > F = 0.0000				
		within R-squared = 0.384				
CSRI	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Board Relations	.031294	.004867	6.43	0.000	.020581	.04201
_cons	.325270	.024038	13.53	0.000	.272362	.37818

Appendix IX: Turnitin Originality Report

Turnitin Originality Report

- Processed on: 08-Oct-2022 00:19 KST
- ID: 1919227032
- Word Count: 50250
- Submitted: 1

Thesis By Jacob Kimutai Yego



Similarity Index

19%

Similarity by Source

Internet Sources:

19%

Publications:

5%

Student Papers:

13%