INFLUENCE OF CORPORATE GOVERNANCE PRACTICES ON FINANCIAL DISTRESS OF FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE, KENYA.

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A Thesis Submitted in Partial Fulfillment of the Requirements of the Degree of Doctor of Philosophy in Business Management of the Department of Business Studies, Rongo University.

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DECLARATION

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DEDICATION

To my wonderful family, my wife Joyce; my children, Joshua and Eliud, for their support and patience while writing this thesis. To my father Joseph Manduku and mother Rael Nyaboke who taught me from early life the value of education. Thanks for your encouragement and prayers.

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ABSTRACT

Interest on corporate governance has been stimulated by a number of factors, including the collapse of major corporations in the world. Financial distress precedes corporate failure and when prolonged it results in loss of wealth of shareholders, diminishes the confidence of investors in the economy and also creates socio-economic problems. This study was based on the agency theory, the resource dependence theory and the stewardship theory. It sought to establish the influence of corporate governance practices on financial distress of companies listed at the Nairobi Securities Exchange. To achieve this overall objective, the study analyzed the influence of board structure, board composition and ownership structure on financial distress of firms listed at the Nairobi Securities Exchange. Additionally, the study sought to investigate the moderating influence of financial leverage on the relationship between corporate governance practices and financial distress. The study used secondary data derived from the audited financial statements and annual reports of companies for a ten year period from 2008 to 2017. This study was undertaken using an *ex-post facto* explanatory research design. A census of all the 65 firms listed at the Nairobi Securities Exchange provided the data for the study. Panel regression analysis techniques and descriptive statistics were used to analyze data. The t-test was used to determine the significance of the model and also test hypothesis. The study found out that board composition, in terms of board independence, had an inverse but important influence on financial distress, whereas in terms of board diversity it had a direct but significant influence on financial distress. The study established that board structure had a direct but significant influence on financial distress when measured in terms of board activity. The findings also indicated that board structure, in terms of board tenure, had an insignificant influence on financial distress, whereas in terms of board size it had an inverse but significant effect on financial distress. Further, the regression results established that the ownership structure had an inverse and important influence on financial distress when measured in terms of institutional ownership, managerial ownership and block ownership. Besides, the study found out that financial leverage had an important moderating influence on the relationship between board independence, board diversity, board size, board tenure, board activity, block ownership, institutional ownership and financial distress. However, regarding the relationship between managerial ownership and financial distress, the moderating influence of financial leverage is not important. Based on these findings, this study recommends among other things, the need to institute board compositions that reflect high levels of independence and gender diversity. Moreover, corporate stakeholders should ensure that board structures reflect large boards in terms of size. Additionally, corporations should put in place ownership structures characterized by high proportions of block, managerial and institutional shareholding. Since financial leverage was an important moderator, there is need for corporate stakeholders to take account this factor when setting their corporate governance practices parameters.

TABLE OF CONTENTS

DECLARATION ..... **ii**
DEDICATION ..... **iii**
ACKNOWLEDGMENT ..... **iv**
ABSTRACT ..... **v**
TABLE OF CONTENTS ..... **vi**
LIST OF TABLES ..... **ix**
LIST OF FIGURES ..... **x**
ABBREVIATIONS AND ACRONYMS ..... **xi**
OPERATIONAL DEFINITION OF KEY TERMS ..... **xii**
CHAPTER ONE :INTRODUCTION **1**
1.1 Overview 1
1.2 Background of the Study 1
1.2.1 The Status of Financial Distress in Kenya 6
1.3 Problem Statement 9
1.4 Research Objectives 11
1.4.1 General Objective 11
1.5 Hypothesis of the Study 12
1.6 Scope of the Study 14
1.7 Significance of the Study 14
CHAPTER TWO :LITERATURE REVIEW **16**
2.1 Overview 16
2.2 Theoretical Foundation 16
2.2.1 The Agency Theory 21
2.2.2 The Stewardship Theory 24
2.2.3 Resource Dependency Theory 26
2.3 Empirical Review 30
2.3.1 Board Composition and Financial Distress 30
2.3.2 Board Structure and Financial Distress 49
2. 3.3 Ownership Structure and Financial Distress 63
2.3.4 Moderating Influence of Financial Leverage 78
2.3.5 The Influence of Firm Size on Financial Distress 83

2.4 Research Gap....85
2.5 The Conceptual Framework....88
CHAPTER THREE:RESEARCH METHODOLOGY....98
3.1 Overview....98
3.2 The Philosophical Foundation....98
3.3 Model Specification....99
3.4 Model Assumptions....101
3.4.1 Test of Panel Multicollinearity....101
3.4.2 Normality of Errors Test....102
3.4.3 Stationarity in Data....103
3.4.3.1 Levin, Levin, Chu Test....104
3.4.3.2 Im Pesaran and Shin Test....104
3.5 Data Types and Measurements....106
3.5.1 Reliability and Validity....106
3.5.2 Data Types....106
3.5.3 Measurement of Variables....107
3.5.3.1 Financial Distress....107
3.5.3.2 Financial Leverage....108
3.5.3.3 Firm Size....108
3.5.3.4 Ownership Structure....108
3.5.3.5 Board Structure....109
3.5.3.6 Board Composition....109
3.6 Research Design, Population and Data Collection Procedure....112
3.6.1 Research Design....112
3.6.2 Target Population....113
3.6.3 Sample of the Study....113
3.6.4 Data Collection Procedures....114
3.7 Data Analysis and Presentation....115
3.7.1 Panel Regression Model Estimations....115
3.7.2 Testing of Hypothesis....117

CHAPTER FOUR :RESEARCH FINDINGS AND DISCUSSION 119
4.1 Overview 119
4.2 Background Information 119
4. 3 Model Assumptions Tests Result 121
4.3.1 Normality of Errors Test 121
4.3.2 Test for Stationarity in Data 122
4.3.3Test of Multicollinearity Results 123
4.4 Choice of Appropriate Model 125
4.5 Panel Regression Analysis 126
4.5.1 The Influence of Board Composition on Financial Distress 127
4.5.2 The Influence of Board Structure on Financial Distress 131
4.5.3 The Influence of Ownership Structure on Financial Distress 136
4.5.4 The Moderating Influence of Financial Leverage 143
4.5.5 The Influence of Firm Size on Financial Distress 149
CHAPTER FIVE :SUMMARY, CONCLUSIONS AND RECOMMENDATIONS 152
5.1 Overview 152
5.2 Summary of Findings 152
5.2.1 The Influence of Board Composition on Financial Distress 152
5.2.2 The Influence of Board Structure on Financial Distress 153
5.2.3 The Influence of Ownership Structure on Financial Distress 153
5.2.4 The Moderating Influence of Financial Leverage 153
5.3 Conclusion of the Study 154
5.4 Recommendations of the Study 155
5.5 Areas for Further Research 157
REFERENCES 159
APPENDICES 191
Appendix 1: Companies Listed at the Nairobi Securities Exchange. 191
Appendix 2: Data Collection Document 194
Appendix 3: Research Authorization 195
Appendix 4 : Institutional Letter 196

LIST OF TABLES

Table 2. 1: Comparisons of Corporate Governance Theories 29

Table 3. 1: Summary of Variable Definition and Measurement 111

Table 3. 2: Summary of the Study Objectives, Hypotheses, Analytical Model, Analytical Technique and the Decision Rule 118

Table 4. 1: Descriptive Statistics of Variables 121

Table 4. 2: Panel Unit Root Test Results 122

Table 4. 3: Pairwise Correlation Analysis Results 124

Table 4. 4: Hausman Test Results for Difference in Coefficients 126

Table 4. 5: Panel Regression Results 151

LIST OF FIGURES

Figure 2. 1: Conceptual Framework…… ...97

ABBREVIATIONS AND ACRONYMS

ADF	Augmented Dickey- Fuller
CEO	Chief Executive Officer
CAR	Capital Asset Ratio
CMA	Capital Markets Authority
NSE	Nairobi Securities Exchange
IPS	Im Pesaran and Shin IPS test
LLC	Levin, Levin, Chu Test
OECD	Organization for Economic Co-operation and Development
ROE	Return on Equity
σ (ROE)	Standard deviation of return on equity

OPERATIONAL DEFINITION OF KEY TERMS

Corporate governance	This is the process and structure used to direct and manage the business and affairs of a firm.
Financial distress	Refers to a situation where a firm is unable to meet its financial obligations as and when they fall due or does so with difficulties.
Financial leverage	The level of debt employed by a firm in financing its assets.
Board composition	The board configuration in terms of independence, diversity and the chief executive officer duality.
Board structure	Refers to attributes of the board of directors such as size, tenure and activities.
Ownership structure	Refers to the proportion of shares held by block, institutional and management relative to the total shareholding of the firm.
Board size	Number of persons serving in the board of directors of a corporation at a specific period of time.
Board tenure	The average number of years a director serves as a member of the board of directors.
Board diversity	Proportion of female directors to the size of the board.
Block ownership	Proportion of shares held by the largest five shareholders in a corporation.
Managerial ownership	Shareholding ownership held by a company's management.
Institutional ownership	Proportion of shares held by commercial banks, insurance companies, pension funds and investment funds, mutual funds and endowments.

Firm size	Refers to high big or small a firm is in terms of assets.
Board independence	The proportion of the number of independent non – executive directors to the total number of directors.

CHAPTER ONE

INTRODUCTION

1.1 Overview

This section contains the background of the study, statement of the problem, objectives, hypothesis, scope and significance of the study.

1.2 Background of the Study

Corporate governance is an issue that has attracted the attention of investors, governments, corporate managers, creditors, shareholders, scholars, among others. This is because of ineffective corporate governance that has led to economic destruction when corporations fail, (Aduda, Chogii and Obara, 2013). Further, corporate governance was a key factor in the Asian financial crisis of 1997, (Wang and Deng, 2006) and the global collapse of reputable corporations in the 2000's, (Xavier, 2014: Charbel and Nehme, 2012). Besides it has come to the forefront of academic research due to the critical role it plays in the overall health of economic systems, (Rezart, 2016).Since the 1990's the issue has been the subject of major policy decisions and a much hyped issue in the media across all countries because of its potential role in enhancing the value of shareholders and firm performance, (Wanke, Barros and Faria, 2015). The spate of frequent instances of mismanagement, corporate scandals, self-benefiting managerial activities and the resulting decline of faith in the existing corporate systems have seen regulators, corporates and stakeholders re-emphasize the need for stringent corporate norms and practices, (Rekha, 2018).

Corporate governance is the process and structure used to direct and manage the business and affairs of a firm towards enhancing prosperity and corporate

accountability with the ultimate objective of realizing the long term value of shareholders while taking into account the interest of other stakeholders, (Capital Markets Authority, 2017). It encompasses the framework for monitoring, regulating and controlling of corporations which permit the exercise of external and internal mechanisms for achieving the firm's goals, (David, Frank, Betty and Simpson, 2010). The internal mechanisms consist of managerial ownership, board structure, board composition, individual shareholders and institutional investors. On the other hand, external audits, market for corporate control, stock markets, laws and regulations constitute the external mechanisms, (Belev, 2003).

A good system of corporate governance guarantees that corporate activities and management policies are in line with the interest of shareholders and all stakeholders in general, (Bernard, 2003). It concerns itself with the appropriate board structure, processes and values to cope with the ever increasing demands of stakeholders, (Alexandru and Iulia, 2011). Effective corporate governance is an ideal way to protect the interest of all stakeholders as well as ensure maximization of the wealth of the firm, (Aduda and Musyoka, 2011).The main concern in the corporate governance framework is the accountability of key persons in corporations, (Abdullah, Muhammad and Karren, 2016). Essentially, all firms need good governance to ensure that they are run well and that their managers are not only responsible but also accountable, (Bernard, 2003).

According to Manzaneque, Priego and Merino (2016) weak corporate governance systems and practices increase the probability of opportunistic behavior of management to pursue their interest, thus increasing the chances of financial distress. Coleman (2006) argues that poor governance systems increase fraudulent activities,

agency conflicts and insider trading which weaken the firm financially. Okiro, Aduda and Omoro (2015) posit that inadequate corporate governance can increase the probability of corporate failure even for firms with good financial performance. Most of the fraud related cases that have led to the failure of renown corporations have been attributed to the members of the board and management, raising the question on the ability of the board to monitor management, (Mandala, Kaijage and Aduda, 2017).

Financial distress is a broad concept that describes several circumstances in which firms face some degree of financial difficulty. These situations includes failure, insolvency, default and bankruptcy, (Thakor, 2014). It may occur when a firm's rate of return is less than the cost of capital, (Lakshan and Wijekoon, 2012). The concept can also be used to describe a state of affairs whena company's cash flows are not sufficient to repay principal and interest of debt and may occur when the firm's equity becomes negative, (Lee and Yeh, 2004). Agrawal (2015) describe financial distress as the inability of an entity to meet its financial obligations as and when they fall due or does so with difficulties. Ching-Chun, Wen-Xin, Guan-Hua, Yu-Wen, Miao-Lin and Ching-Yi (2017) argue that financial distress is not limited to a firm's ability to repay its debt obligations but a sequence of other events that may occur before a firm defaults. Such events reduce performance and eventually eat into the equity of a firm to the extent that it's not able to service debt obligations. Wu, Liang and Yang (2008) view financial distress as a condition when the firm is faced with negative cumulative earnings for at least few consecutive years. Financial distress encompasses severe liquidity problems that can't be resolved without a sizeable rescaling of the entities structure or operations, (Odhiambo and Ochieng, 2018).

Adeyemi (2011) contends that during periods of distress, distressed firms could incur various direct and indirect costs which often affect its ability to generate returns and ultimately reduce its value. Direct costs could be incurred by a distressed firm in an effort to salvage its precarious situation. Such costs include the cost of restructuring, auditor's fees, consultancy fees, management and expert compensation,(Charitou, Neophytou and Charalambous, 2004). On the other hand, indirect costs comprise of the costs incurred by a firm primarily to react to the actions undertaken by itsstakeholders such as employees, suppliers, investors, shareholders and creditors, (Tinoco and Nick, 2013). Moreover, Geng, Bose and Chen (2015) explains that a corporation in distress may incur costs related to the situation such as expensive financing, less productive employees and opportunity costs of projects. According to Tinoco and Nick (2013) managers of distressed firms become more risk averse and consequently short-term decisions and interests are given prominence as opposed to long term decisions that may sustain the firm in the long run. Muranda (2016) asserts that suppliers of distressed firms could become less forbearing and may reduce or stop their supplies for fear of losing their funds should the firm become liquidated. Further, capital providers shy away from providing the much needed capital injection to the entity or could provide the funds at more stringent and costly terms, (Memba and Nyanumba, 2013).

The study is grounded on the agency theory, (Jensen and Meckling, 1976), the stewardship theory, (Freeman, 1984) and the resource dependency theory, (Pfeffer, 1972). The agency theory advocates for a clear separation of management and control. This separation creates a conflict of interest between the principal (shareholders) and management (agent), (Fama and Jensen, 1983). The theory

assumes that management is self-interested and therefore cannot be trusted to always act in the best interest of shareholders, (Filatotcher and Wright, 2011), thus forming the basis for the adoption of stringent governance mechanisms, (Aguilera, Filatotchev, Gospel and Jackson, 2008). The stewardship theory hypothesizes that there is no conflict of interest between corporate owners and corporate managers and the latter always act in good faith. On the other hand, the resource dependency theory posits that corporations attempt to control their environment by co-opting the resources needed to survive, (Pfeffer and Salancik, 1978). Besides the immediate shareholders, the theory recognizes the strategic importance of other stakeholders such as board of directors in guaranteeing access to resources critical to the firm's survival, (Lawal, 2012).

Literature on the studies of the relationship between corporate governance practicesand financial distress reveal mixed results. For instance, Fathi and Jean-Pierre (2001), Mwengei and Kosgei (2017), Lakshan and Wijekoon (2012), Charbel and Nehme (2012) show an inverse relationship between board composition and financial distress while Bilal, Faudziah and Syed (2014), Carter, Simkins and Simpson (2003) reported a direct relationship. Salloum and Azoury (2012) and David *et al*. (2010) did not record any relationship. Further, prior empirical studies suggest an inverse influence of board structure on financial distress, (Xavier, 2014; Charbel and Nehme, 2012; Mwengei and Kosgei, 2018; Charbel and Nehme, 2012) whereas other studies indicate a direct relationship, (Mangena and Tauringana, 2008; Bilal, Faudziah and Syed, 2014). Similar works by Mwengei and Kosgei (2017) and Xavier (2014) did not find any relationship between board structure and financial distress. Empirical analysis by Susan, Peters and Howard (2002), Bilal, Faudziah and Syed

(2014) support a direct influence of ownership structure on financial distress, contrary to the findings of Martin (2017), Reza, Yadollah and Najmeh (2016) and Ching-Chun *et al*. (2017) whose studies designate an inverse relationship. Comparable studies by Matanda, Oyugi and Lisiolo (2015) did not find evidence of any relationship between ownership structure and the risk of financial distress. The aforesaid studies provide evidence that the influence of corporate governance practices on financial distress has been inconclusive and thus still open to further empirical inquiry.

From the theoretical perspective, the different theories prescribe mixed outcomes on the influence of corporate governance practices on financial distress. In particular, the agency theory argues that because of the separation of ownership and control, management will pursue self-serving interests that may result in financial distress. On the contrary, the stewardship theory perceives managers as good stewards who always act in good faith and endeavors to maximize the interest of the owners and other stakeholders and consequently may not lead the firm to the trajectory of financial distress. Similarly, the resource dependency theory opines that corporations are able to mitigate against financial distress through appropriate ownership structure and board structure. The study therefore seeks to explore these theoretical and empirical gaps by investigating the influence of corporate governance practices on financial distress of firms listed at the Nairobi Securities Exchange for the period 2008-2017.

1.2.1 The Status of Financial Distress in Kenya

Financial distress is a global problem that has afflicted both developed and developing economies, (Baimwera and Muriuki, 2014). Since the year 2000, the

world economy has witnessed numerous cases of corporate failures among some of the globally reputed firms such as the Pacific Gas and Electric Ltd (2001), Delta Airlines (2005), Parmalat (2003), Enron (2001), World com Ltd (2002), Wirecard Ltd (2020-Germany), Dick Smith holdings Ltd (Australia, 2016), among others. According to Alexandru and Iulia (2011) most corporations in the world have collapsed because of poor governance practices such as inflated earnings, expenses booked as capital expenditure, looting by management and improper share deals.

Kenyan has also witnessed a number of corporate collapses. These include Lonhro East Africa Ltd in 2009, Uchumi Super Markets Ltd in 2006, Kenya Planters Cooperative Union in 2006, East African Packaging Company in 2003 and Dunlop Kenya in 2001, (Capital Markets Authority, Statistical Bulletins, 2000-2019). Further, corporations in Kenya continue to experience financial distress as verified by the delisting of some firms and the placement of some under statutory management, (Odhiambo and Ochieng, 2018). A case in point of those firms that have experienced financial distress is Kenya Airways Ltd, which after thirteen years of stead profitability, has reported billions of losses since the year 2013. The company reported losses of Kshs. 25.7 billion, Kshs. 26.2 billion, Kshs. 10.2 billion Kshs. 7.5 billion and Kshs. 12.9 billion for the financial years ended 2015, 2016, 2017, 2018 and 2019 respectively, (Capital Markets Authority, 2017). Other companies such as Mumias Sugar Company Ltd, Uchumi Supermarket Ltd, National Bank Ltd continue to be plagued by operational and cash flow challenges.

To safeguard public interest and protect shareholders, the Capital Market Authority has on a number of occasions delisted or suspended firms owing to their state of financial distress and/or non-adherence to appropriate governance practices, (Maina,

Gachunga, Muturi and Ogutu, 2017). The Cooper Motor Corporation, whose stock had been suspended in 2011, was eventually delisted in 2015 due to continued poor performance arising from ineffective corporate governance practices. The shares of Athi River Mining Company (2018 to 2019), Atlas African Industries Ltd (2016 to 2019), Deacons (East Africa) Ltd (2018 to 2020), Mumias Sugar Company Ltd (2019 to 2020), National Bank of Kenya (2020) and Kenya Airways Ltd (2020)were suspended from trading by the regulator due to sustained conditionsof financial distress.Similarly, the following companies were delisted because of non-compliance to the laid down governance practices Marshall East Africa Ltd (2017 to 2020), Hutchings Biemer and A. Baumann (2017 to 2020) and Kenol Kobil Ltd (2019 to (2020), (Capital Markets Authority Statistical Bulletins, 2016 - 2020).

The numerous cases of corporate distress are an indictment of the effectiveness of the existing corporate governance structures, (Baimwera and Muriuki, 2014). As matter of fact, the continued failure of Kenyan corporations has led stakeholders to question the credibility of existing governancestructures. Further and in spite of the numerous financial restructuring strategies that have been put in place by the government, some companies such as Kenya Airways Ltd, Mumias Sugar Company and Uchumi Ltd have been in financial distress for over a decade, strongly suggesting that more is required than just financial restructuring, (Ayako, Kungu and Githui, 2015). Resulting from the dismal performance and financial distress of some firms listed at the NSE, the debate on corporate performance has shifted to the effective of internal corporate mechanisms like management composition and the effectiveness of the board of directors, (Maina, Gachunga, Muturi and Ogutu, 2017).

The board of directors is the heart of corporate governance, (Joseph, 2019: Kajola, 2018), and as more firms collapse or continue to experience financial distress their role has come under serious scrutiny. The board is a critical decision making organ in a corporation, (Thomsen and Conyon, 2012) and when firms experience financial distress, it's partly a reflection of its ineptness, (Chang, 2009).Additionally, the traditional approach to corporate governance (focus on the role of board of directors) has ignored the unique influence that owners exert on the board and management, (Gaur, Bathula and Singh, 2015; Hanaa, 2019).Corporate owners' preferences, investment choices and risk preferences greatly influence the decisions of the board of directors and consequently their role in influencing financial distress cannot be ignored. Thus, the study seeks to determine the influence of corporate governance practices that include the board structure, board composition and ownership structure on financial distress of firms listed at the Nairobi Securities Exchange.

1.3 Problem Statement

Good corporate governance can improve firm performance and benefit not only shareholders but also other stakeholders through more access to capital, reduction in the cost of capital and free cash flows, (Wang and Deng, 2006: Atty, Moustafasoliman and Youssef, 2018). Besides, it promotes the ethical values of accountability, responsibility, transparency and fairness, (Rezart, 2016), thereby stabilizing capital markets. However, when firms fail to institute effective corporate governance, they often experience financial distress.

The financial distress phenomenon continues to plague the corporate sector as more and more firms collapse due to governance challenges. Specifically, owing to financial challenges and/or ineffective governance practices a total of 24 listed firms

have been placed under receivership, delisted, suspended or undertaken restructuring in the Kenyan economy since the year 2005,(CMA, Quarterly Statistical Bulletin- Q2, 2020). According to Montserrat, Alba and Elena (2016) financial distress situations adversely impacts on shareholders, creditors, management, employees and the government. Equity and claims of shareholders and creditors are not guaranteed as distressed firms may not honor their financial obligations. The government collects less in taxes and sometimes spends billions in bailouts plans, (Hafiz and Desi, 2007). Many firms in financial distress downsize their work force, resulting to households losing income vital for livelihood.

The results of empirical analysis of the influence of corporate governance practices on financial distress are equivocal and have not yet produced conclusive results, implying that more studies are required on this area. Besides, in some prior studies financial distress has been indicated using the interest coverage ratio, return on equity, negative earnings per share, (Khalida, *et al.*, 2018; Manzaneque, Priego and Merino, 2016) and the Altman's Z-score. Such financial measures provide limited assessment of the overall financial health of a firm, (Hoque, Hossain and Hossain, 2014), whereas the Altman's Z-score has been used to measure financial distress of non-financial firms, (Muigai, Muhanji and Nasieku, 2015; Mwengei, and Kosgei, 2017 and Ahmed and Syed, 2017).

Further, in the Kenyan situation not much has been done in investigating the influence of corporate governance practices on financial distress. In particular, studies by Matanda, Oyugi and Lisiolo (2015) and Letting, Aosa and Machuki (2012) focused on selected indicators of corporate governance and did not consider the ownership structure; which is a critical indicator of corporate governance. Studies by

Mwengei and Kosgei (2017) focused on listed commercial banks. The current study addresses these gaps by not only incorporating more indicators of corporate governance but also focuses on the entire population of firms listed on the Nairobi Securities Exchange. Additionally, the study assessed financial distress using the distance to default Z score which is applicable to financial and non- financial distress.

1.4 Research Objectives

In carrying out the study, the objectives were categorized into general objective and specific objectives.

1.4.1 General Objective

The general objective of the study was to investigate the influence of corporate governance practices on financial distress of firms listed at the Nairobi Securities Exchange.

1.4.2 Specific Objectives

In fulfilling the general objective, the study was guided by the following specific objectives:

i. To examine the influence of board composition on financial distress of firms listed at the Nairobi Securities Exchange.
ii. To determine the influence of board structure on financial distress of firms listed at the Nairobi Securities Exchange.
iii. To establish the influence of ownership structure on financial distress of firms listed at the Nairobi Securities Exchange.

iv. To evaluate the moderating influence of financial leverage on the relationship between corporate governance practices and financial distress of firms listedat the Nairobi Securities Exchange.

1.5 Hypothesis of the Study

The study was guided by the following hypotheses:

H_{01}: There is no significant influence of board independence on financial distress of firms listed at the Nairobi Securities Exchange.

H_{02}: There is no significant influence of board diversity on financial distress of firms listed at the Nairobi Securities Exchange.

H_{03}: There is no significant influence of board size on financial distress of firms listed at the Nairobi Securities Exchange.

H_{04}: There is no significant influence of board tenure on financial distress of firms listed at the Nairobi Securities Exchange.

H_{05}: There is no significant influence of board activity on financial distress of firms listed at the Nairobi Securities Exchange.

H_{06}: There is no significant influence of block ownership on financial distress of firms listed at the Nairobi Securities Exchange.

H_{07}: There is no significant influence of managerial ownership on financial distress of firms listed at the Nairobi Securities Exchange.

H_{08}: There is no significant influence of institutional ownership on financial distress of firms listed at the Nairobi Securities Exchange.

H_{9}: There is no significant moderating influence of financial leverage on the relationship between board diversity and financial distress of firms listed at the Nairobi Securities Exchange.

H_{10}: There is no significant moderating influence of financial leverage on the relationship between board independence and financial distress of firms listed at the Nairobi Securities Exchange.

H_{11}: There is no significant moderating influence of financial leverage on the relationship between board size and financial distress of firms listed at the Nairobi Securities Exchange.

H_{12}: There is no significant moderating influence of financial leverage on the relationship between board tenure and financial distress of firms listed at the Nairobi Securities Exchange.

H_{13}: There is no significant moderating influence of financial leverage on the relationship between board activities and financial distress of firms listed at the Nairobi Securities Exchange.

H_{14}: There is no significant moderating influence of financial leverage on the relationship between block ownership and financial distress of firms listed at the Nairobi Securities Exchange.

H_{15}: There is no significant moderating influence of financial leverage on the relationship between managerial ownership and financial distress of firms listed at the Nairobi Securities Exchange.

H_{16}: There is no significant moderating influence of financial leverage on the relationship between institutional ownership and financial distress of firms listed at the Nairobi Securities Exchange.

H_{17}: There is no significant influence of financial leverage on financial distress of firms listed at the Nairobi Securities Exchange.

H_{18}: There is no significant influence of firm size on financial distress of firms listed at the Nairobi Securities Exchange.

1.6 Scope of the Study

The study investigated the influence of corporate governance practices on financial distress of firms listed at the Nairobi Securities Exchange for the period 2008 to 2017. The study was limited to only firms listed at the Nairobi Securities Exchange because of the potential reliable and consistent data. These companies are subjected to oversight by the Capital Market Authority and are required by law to publish on a yearly basis audited financial statements and consequently, they are likely to provide easily accessible and reliable data. Further, the interest of the study was on a sample of companies that existed and published complete financial statements for the period of study.

1.7 Significance of the Study

The findings of the study provide useful insight on the influence of corporate governance practices on financial distress. The findings make significant contribution to policy and practice by improving the understanding of the mechanisms through which corporate governance influence the likelihood of financial distress. Financial distress is dynamic phenomenon and on the basis of the study findings, the regulatory authorities can develop regulations which may reduce occurrence of financial distress. The regulatory authorities, especially the Capital Markets Authority, are charged with the formulation of policy and may greatly benefit from the findings of the study.

Corporate managers are charged with the responsibility of implementing the various governance practices and the findings of the study may enable them enhance responsible governance which may lead to robust firm performance and reduced cases of financial distress. Additionally, the study may equip managers with skills of

analyzing the impact of their governance practices on financial soundness and thus implement remedial measures. Shareholders and other investors significantly contribute to the firm's capital and they expect a return on their investments. From the findings, they could obtain informed knowledge on how the various governance practices adopted influence financial soundness and thus be able to implement an appropriate mix. Further, the study may equip them with the necessary tools on analyzing how the firm- specific governance practices may be able to impact on their investments. The findings may also enable shareholders to assess the competence of the board of directors and management board in utilizing the resources provided to them.

The knowledge derivedfrom the study could be of significant scholarlycontribution because it sets pace for future studies on the area of corporate governance and financial distress. Scholars may enrich the study through identification of research gaps that could be filled through further empirical analysis.The findings make contribution to theory by empirically analyzing the influence of corporate governance practices on financial distress. In particular, it may help resolve the conflicts in the agency, stewardship and the resource dependence theories that record contradictory propositions on the influence of corporate governance on the probability of financial distress. Most critically, the study will add to the existing body of knowledge, specifically from a developing economy.

CHAPTER TWO

LITERATURE REVIEW

2.1 Overview

This chapter explores the theoretical foundation of the study and examines the supporting literature on the variables of the study, followed by a critique of the existing literature, leading to the identification of the research gaps pertinent to the study. Further, the chapter presents the conceptual framework explaining the presumed association among the study variables.

2.2 Theoretical Foundation

Corporate governance is a topical issue in the management of corporations worldwide. The subject rose to the global business limelight from obscurity following a string of high profile collapses of blue chip companies. The collapse of Enron, Houston, and Worldcom shocked the business world with the depth and scale of their illegal and unethical operations, (La porta, Lopez, Shieffer and Vishny, 1999). The other corporate tragedies include the large and trusted corporations like Parmalat in Italy, Global Crossing Limited, Tyco International Limited, Adelphia Communication Ltd and many others. These collapses exposed deep rooted problems in their corporate governance structures, (Victor, 2014; Julio and Luis, 2005). Olayiwola (2010) contends that such a prolonged history of collapse of corporations created renewed interest in corporate governance and according to Martin (2017) corporate and systemic failures have been the dominant driver of the evolution of corporate governance. Shareholders and corporate managers are distinct and similarly their interest, hence there is need for a moderator (corporate governance) to fill this gap and become a bridge between the two, (Suresh, 2018).

Most of the definitions of corporate governance until the late 1990s emphasized the importance of the monitoring and control aspects of the relationship concerning corporate managers and board of corporations, (Adeemi 2011). According to Cadbury (1997) corporate governance is a system by which companies are directed and controlled. Shleifer and Vishny (1997) define corporate governance as a means by which various stakeholders exert control over a corporation by exercising certain rights as established in the existing legal and regulatory frameworks as well as corporate law. It serves as a foundation for effective monitoring, regulation and control of a corporation to achieve a set of predetermined objectives.Relative to the definition by Cabury (1997), Shleifer and Vishny (1997) conceives corporate governance as being broader; the purpose of which is to enable various stakeholders exert control within the legal and regulatory framework.

After the turn of the 20th century, scholars begun to explore the involvement of the board of directors in the value creation process in corporations, on the assumption that it's involvement could lead to the achievement of objectives. In this context, the often widely accepted definition was by the Organization for Economic Co-operation and Development (2004) which defined corporate governance as not only a set of relations between management, the board of directors, capital providers and other interested groups but also the basis through which a corporation sets its objectives and the necessary means to achieve them. This definition perceives corporate governances as a set of relations between several parties, providing a structure through which some activities occur. It also mentions objectives and the means by which they are set and monitored.

According to Bairathi (2009) corporate governance is not just corporate management. It's much broader to include fair, efficient and transparent administration to meet certain well-predetermined objectives. It includes a system of structuring, operating and controlling a corporation with a view to achieving long term strategic goals so as to satisfy a wide range of stakeholders and also complywith the legal and regulatory requirements as well as meeting environmental and immediate community needs.Juliet, Aduda, Gituro and Mwangi, (2016) opines that corporate governance entails forming a balance between socioeconomic, individual and communal goals at the same time encouraging the efficient use of resources, use of power, accountability and stewardship while aligning the interest of corporations, individuals and the society in general. Rezart (2016) perceive corporate governance as a set of rule-based processes of laws, accountability and policies that define the relationship between shareholders and corporate managers. It comprises of formal and informal, public and private institutions which collectively oversee the relationship between the people who manage corporations and all the others who invest resources across the various corporations.

In spite of the various understanding of what constitutes corporate governance, scholars have built consensus on three main components of corporate governance, (Mazudmer, 2013). The first component is the corporate governance philosophy which outlines the goal for which a corporation is governed. The roles and relationships among the board of directors, management, shareholders and other stakeholders constitutes the second component. The third component comprises of the company's domicile regulatory and market mechanisms, (Gill, Mand, Biger and Shah, 2012).

Good corporate governance practices can improve the economic development of a country, (Montserrat, Alba and Elena, 2015). Embracing sound corporate governance is significant not only in protecting investors but also in strengthening and stabilizing capital markets. Further, investors are more likely to be attracted to corporations with sound corporate governance systems, because they are assured of positive returns from their investment, (Adegbite, 2012; Youssef and Bayoumi, 2015). It also enables management to achieve corporate objectives, meet legal requirements, protect shareholders and demonstrate to the stakeholders how the business is running, (Rezaee, Zhang, Dou and Gao, 2016). A good corporate governance system can enable a firm to attract investments and lay down a foundation for improved performance, (Ahmed and Syed, 2017). However, with the increasing number of corporate scandals and failures, there is doubt as to whether the current corporate governance structures have been effective in preventing financial distress, (Ahmed and Syed, 2017). Salloum and Azoury (2012) opine that the most prominent reason for the occurrence of financial distress is inept corporate governance practices across the globe. These scholars assert that in the absence of a strong corporate governance structures, many well performing companies have experienced financial distress and insolvency across the world.

In responseto the collapse of corporations across the world, various principles, guidelines and codes have been developed worldwide. The most notable one is the Organization for Economic Co-operation and Development (OECD) principles which were promulgated in 1999 and later revised in the year 2004. The revised principles have been widely adopted in many economies and include the grounds of an effective corporate governance framework, the roles and rights of shareholders and the

guidelines for ensuring accountable and transparent disclosure. According to Gakeri (2013) the desire to institutionalize corporate governance in Kenya led to the promulgation of the guidelines on principles of corporate governance for public listed companies in 2016 by the Capital Markets Authority. The code is based on an "apply or explain approach", an improvement from 'the comply or explain approach' that was adopted in the 2012 guidelines. The code recognizes that a satisfactory explanation for any non-compliance is acceptable in certain circumstances. However, the code requires boards to fully disclose any non-compliance to all relevant stakeholders, including the Capital Markets Authority, with a firm commitment to move to full compliance.

As the issue of corporate governance took a critical role in the management of modern corporations so is the schism of theoretical perspectives, (Kirkbride, Sun and Letza, 2004). Nevertheless, the lack of consensus in the definition and understanding of the concept of corporate governance has resulted in multiple research from different disciplines, (Psychology, Economics, Finance and Sociology), culminating in their corresponding theoretical models, all aimed at a proper understanding of the concept of corporate governance, (Abid, Khan, Rafiq and Ahmad, 2014; Zalewska, 2014). The most widely used theories include the agency theory, the stewardship theory, the resource dependency theory, entrenchment theory, convergence theory, transaction theory, political theory and the stakeholders theory, (Salloum and Azour, (2012); Charbel and Nehme (2012); Donker, Santen and Zahir (2009); Ayoola and Obokoh (2018). Nevertheless, the current study is anchored on three theories, namely: the agency theory, the stewardship theory and the resource dependency theory.

2.2.1 The Agency Theory

Adam Smith (1776) in his seminal paper on the wealth of nations submitted that problems arise when the control of a firm is separated from ownership. Smith arguesthat managers of money belonging to other people cannot be anticipated to look after it with similar anxious vigilance one would expect from owners and consequently negligence and profusion must always prevail, more or less, in the management of the activities of such a company. Smith postulates that if an economic entity is controlled by another person other than the owner, there are high chances that the interest of the owner is more likely to be diminished than realized. The same concept was later emphasized by Berle and Means (1932) who reasons that top management are in fact hired hands who are interested in their own benefit, rather than the interest of the shareholders.

Building on the assertions of Smith (1776) and Berle and Means (1932), Jensen and Meckling (1976) formulatedthe agency theory. The theory is based on the notion that in a modern corporation there is separation of ownership and control, resulting in agency costs associated with resolving conflicts between the owners and agents. The theory perceives the firm as a set of contracts between different agents, who have self- interest and at the same time depend on each other in order to perform better and survive in the market. A principal agent relationship arises when a principal contracts an agent to perform some tasks on behalf of the principal and involves delegating some decision making authority to the agent. In executing the tasks, the agent chooses an action. The action in turn has certain consequences, that is, an outcome and the outcome affects the welfare of both the principal and the agent, (Trond, 1993). Jensen and Meckling (1976) explain that if both parties to the relationship intend to

maximize their utility, then it's more likely that the agent will not endeavor to uphold the interest of the principal. Theoretically and practically, perfect alignment of interest between the parties is impossible and therefore each party will always try to maximize his own interest to the disadvantage of the other party.

According to the theory, the principal can decide to control divergence from his interest by incurring agency costs, which are the sum of monitoring and bonding costs. However, despite incurring these agency costs, there will still be a residual loss caused by the divergence of interest between the agent and principal. Williamson (1988) suggests that the residual loss is the main cost element the principal should strive to reduce, because it's the irreducible of the three. The theory puts the issue of financial distress into perspective in that the separation of ownership and control motivates managers to pursue self-serving interest, (sub-optimal allocation of resources, corruption, fraud, misrepresentation of financial information), that may culminate in financial distress. Based on the theory, the study hypothesizedthat those corporations with managers who pursue self-serving interests, contrary to the shareholders expectations, have a high probability of experiencing financial distress. Conversely, firms with corporate managers whose interests have been aligned with the shareholders wealth maximization objective are not likely to experience financial distress. The theory has been widely used in prior studies such as Elloumi and Gueyie(2001), Hui Hu(2011), Chacharat (2008), Bilal, Faudziah and Syed (2014), Susan, Gary and Howard (2002), Wang and Deng (2006)and Baimwera and Muriuki (2014).

Though the agency theory is very popular, it still suffers from various limitations which have been ably documented by various scholars. Beyond the classical conflict

between the shareholders and managers, the agency theory today is challenged by many other conflicts, (Panda and Leepsa, 2017). The corporate world is nowadays experiencing conflicts such as the one between majority shareholders and minority shareholders and even between managing shareholders and minority shareholders, (Felix, 2017). Nevertheless, it's the shareholders versus the creditors conflict that seem to be the main axis of a new orientation of the agency theory. Creditors have the main claim on a share of the firm's income that comes in form of interest and the principal re- payments of debt and have the first claim against the firm in case of bankruptcy, (Panda and Leepsa, 2017). On the other hand, Pepper and Gore (2012) criticize the agency theory on the grounds that it focuses on the agent side of the principal-agent problem and in their opinion the agency problem may also arise from the principal side. The authors opine that the theory is not concerned with the principals, who deceive, shirk and exploit the agents. Moreover, the agents are unknowingly dragged into work in risky environments where principals act as opportunists.

The agency theory has also been criticized by sociologists who argue that the theory assumes that the actors in the corporate world are self-interested and invisible and that markets are in no ways influenced by social relations. It further assumes that behavior is motivated solely by personal financial interests. However, sociologistsopines that some of the actions of managers could be rooted in the social structures and is not entirely determined by economic incentives and information asymmetry, (Zogning, 2017).

The agency theory is revolutionary and a powerful foundation predominantly used not only to explain but also predict phenomena in corporate governance.

Nevertheless, it does not address any clear problem, is restrictive and hence lacks practicality. The theory only offers restricted view of governance that somehow is effective. Moreover, it neglects the intricacy and complexity of the firm and therefore additional theoretical perspectives should be considered to explain the complexity of the firm, (Abid, Khan, Rafiq and Ahmad, 2014). Nonetheless, in spite of the shortcomings, the agency theory is a very pragmatic and applied theory with many roots in many different academic fields and its usefulness is very extensive and prominent, (Panda and Leepsa, 2017).

2.2.2 The Stewardship Theory

Emerging from the psychology and sociology literature, (Donaldson and Davis, 1991), the stewardship theory describes a convergent relationship between the shareholders (and their proxies such as the board of directors) and management. The theory, developed by Freeman (1984), takes the view that there is no conflict of interest between corporate owners and corporate managers. It suggests that managers will act in good faith, since they realize that they are active players. Thus, managers are not opportunistic agents, but good stewards, who will act in the best interest of the owners. According to Donaldson and Preston, (1995) the theory is based on a model of man where a steward perceives greater utility in cooperative, pro-organizational behavior than is self-serving behavior. It assumes a strong relationship between organizational success and a principal's satisfaction and hence, a steward overcomes the trade-off by believing that working towards organizational collective ends meet personal needs.

The stewardship theory could be presented as an alternative and/or a complimentary to the agency theory. Contrary to the agency theory which focuses on control and

conflict, the stewardship theory focuses on cooperation and collaboration, (Sundaramuthy and Lewis, 2003). The directors acting as stewards are concerned with acting honorably and doing the right things. The gist of the theory is service for others and not self-interest, (Stout, 2003).The theory holds that managers, if left on their own, will act as responsible stewards of the assets of the firm they control. In theory, the model of the agent is grounded on a steward whose behavior is pro-organizational and collectivistic. The reasoning behind is that the stewards main goal is to achieve the objectives of the organization. This behavior ultimately benefits the principal in terms of increased share prices and return on shares, (Davis, Schoorman and Donaldson, 1997). The proponents of the theory argue that the board of directors and management are a single, collective stewardship team. The board (stewards) basically supports management. Unlike the agency theory where the agent focuses on self-interest, the agent in the stewardship theory is self-actualizing and focused on higher needs. They place the organization ahead of their personal needs and are trusty, (Keay, 2017).

Contrary to the principal-agent theory, the stewardship theory indicate that managers are motivated to pursue the interest of the firm rather their own. The theory suggests that in the long run management will perceive the firm as an extension of themselves rather than utilize the corporation for their own benefit and consequently will strive to ensure continued sustainability of the firm. The relationship between the board of directors and top management is thus one of principle and steward, not principle and agent, (Freeman, 1984). Underlying the stewardship theory perspective is the proposition that since managers are naturally trustworthy there will be no major agency costs. Proponents of the theory argue that managers will not put shareholders

at a disadvantaged position for fear of jeopardizing their reputation, (Muth and Donaldson, 1998). The implication of the theory to the study is that since there is no conflict of interest between shareholders and managers, shareholders are not expected to suffer losses arising from management actions. Management will always uphold the interest of shareholders, leading to a firm that is strongly financially. On the basis of this theory, the study hypothesizes that managers will always align their interests with those of shareholders and thus minimizes the likelihood of financial distress.

2.2.3 Resource Dependency Theory

The resource dependency theory originated from the open systems theory and was advanced by Pfeffer (1972). The theory postulates that organizations have a varying degree of dependence on the environment, especially for the resources they need to operate. Uncertainty and dependence propel an organization to proactively manage its environment. The theory views the board of directors as the means to manage external dependency (Pfeffer and Salancik, 1978), reduce external uncertainty, (Pfeffer, 1972) and reduce the transactional costs associated with environmental interdependency (William, 1984). According to Pfeffer (1972) ownership structure and board size are not random or interdependent factors but are rational organizational responses to the conditions of the environment. The theory concentrates on the external role and linkages of members of the board of directors who come from diverse independent organizations and are supposed to play a critical role in securing essential resources for the firm, (Abdullah and Valentine, 2009).

The theory explains how the external resources affect the behavior of the firm and assumes the strategic view of corporate governance. It asserts that the acquisition of external resources is vital for strategic management of any organization. The resource

dependency theory strongly emphasizes the role of the board of directors in providing the much needed resources relevant for the survival of the firm. It further recognizes the importance of the administrative arm as a link between the organization and the resources required to realize its goals, (Tricker, 2012). These resources emanate from the environment that consists of other firms and actually the resources are in the hands of other firms. Therefore, firms depend on each other and exchange resources. This is why resources are the power of firms because they are valuable, costly to imitate, rare and cannot be substituted. Resources and power are thus interlinked and firms with more resources are considered more powerful, (Hitt, Ireland and Hoskisson, 2012). The scarcity of resources leads to uncertainty for firms and therefore organizations seeks to exploit resources for the safeguard of its own long term survival, (Pfeffer and Salancik, 1978).

Within the perspectives of this theory, corporations are viewed as coalitions aligning their structure and pattern of behavior to acquire and maintain requisite external resources, (Pfeffer, 1972).The implication of this theory is that corporate boards will reflect the environment of the firm and that corporate directors will be chosen to maximize the provision of critical resources needed by the firm. Each director is expected to bring in different linkages and resources to the entity, (Hillman, Canella and Partzold, 2000). Corporations are thus expected to adapt to the changing environment and avoid situation of financial distress. Based on this theory, the study hypothesizes that corporations are not likely to experience financial distress because any symptom of financial distress will be matched with appropriate response measures.

The three theories of corporate governance are diverse in terms of focus, interest of principal and agent, behavior, roots and motivation. However, risk attitude is common across all the theories indicating that they are all geared towards shareholders wealth maximization. The objective of corporate governance is wealth maximization, thus showing their relevance in explaining corporate governance, (Abid, Khan, Rafiq and Ahmad, 2014).The distinction, convergences and relevance in the main theories that have shaped the development of corporate governance in the study are summarized in Table 2.1

Table 2. 1: Comparisons of Corporate Governance Theories

Basis	Agency theory	Stewardship theory	Resources dependency theory
Focus	Self-interest	Shareholders interest	Firm resources and power
Objective	Reduce agency cost	Maximize productivity	Acquire and exploit resources
Rooted	Economics	Law	Sociology and management
Model	Individualistic	Collectivistic	Collectivistic
Behavior	Opportunistic	Pro-organizational	Pro-organizational
Risk attitude	Risk aversion	Risk aversion	Risk aversion
Motivation	Extrinsic	Intrinsic	Extrinsic as well as intrinsic
Principal and agent interest	Diverge	Converge	Converge

Source: Abid, Khan, Rafiq and Ahmad (2014)

2.3 Empirical Review

The study reviewedrelevant prior studies based on the relationship between board composition and financial distress, board structure and financial distress, ownership structure and financial distress and the moderating influence of financial leverage on the association between corporate governance practices and financial distress.

2.3.1 Board Composition and Financial Distress

Board composition encompasses issues related to independence of the board, diversity of the board (gender representation, firm and industry experience, functional backgrounds) and duality of the chief executive officer.The board is the main corporate governance mechanism;it is considered as a cornerstone of corporate governance and plays a key governance function on behalf of shareholders, (Xavier, 2014).It is a major driving force of governance in a firm and primarily determines whether a company's governance system is sound or not, (Thomsen and Conyon, 2012).

Board of directors exists because corporations have a large number of shareholders who individually do not have the ability to monitor and evaluate corporate managers. Further, some of the shareholders do not have sufficient incentives to meet their expected roles; they therefore delegate those roles to a group of elected directors, (Donald and Davis, 2001). The most critical function of corporate boards is to monitor and advise management, (Raheja, 2005; Sanyaolu, Adesanmi, Imeokparia and Alimi, 2017). The advisory function includes the provision of expert advice to the chief executive officer and the access of critical resources and information. Also it's the responsibility of the board to monitor, discipline and get rid of ineffective

management teams as well as ensuring that managers uphold the interest of shareholders, (Adams and Ferriera, 2007).

Effective corporate governance requires a board composed of qualified and competent members capable of exercising objective and independent judgment, and focused on guiding strategy development and monitoring management, (Sanyaolu *et al.,* 2017). A proper understanding of the role and responsibilities of the board must be shared not only by members of the board, but also by the company executives and external stakeholders, so as to ensure that the board has appropriate autonomy, authority and accountability in exercising its functions and that it can be held accountable by stakeholders, (CMA, 2017). However, owing to the continued collapse of corporations, investors have become increasingly skeptical on how well boards are running corporations, (Ongore and K'Obonyo, 2011).

The board of directors of a company can either be executive or non-executive. Executive directors are usually full-time employees of the company and are usually recruited by the board of directors, (Simpson and Gleason, 1999). They work for the firm in senior capacity and are usually concerned with policy or are in charge of functional areas with high strategic importance such as finance and strategy, (Harris and Raviv, 2008). On the other hand, the non-executive directors are not employees of the firm and are not involved in day to day running of the firm. The majority of non-executive directors should be independent, (Chang, 2009). In assessing the independence of a director, some of the factors to be considered include their business activities, other shareholdings and directorships, financial and other commitments and involvement in businesses related to the activities of the company, (Abdullah, 2006).

The Capital Markets Act (2016) defines an independent director as a member of the board of directors who does not have peculiarly relationship with the company or related parties, is compensated through sitting allowances, does not own shares in the company and after nine years of service, a continuing independent director ceases to be one and assumes the position of non- executive director. Board independence refers to the proportion of the number of independent non –executive directors to the total number of directors, (Prabowo and Simpson, 2011). The level of board independence is determined by the degree to which the board consists of members who are not affiliated with the company through employment or economic exchange relations, (Gordon, 2007). A board is considered to have a high level of independence if it has more outside members and if the chair of the board is not the same as the chief executive officer, (Gaur, Bathula and Singh, 2015).

The theories of corporate governance support different views in regard to the independence of the board. According to the agency theory, the monitoring function will be better off with a board dominated by outsiders. Such a board is more likely to act in the best interest of shareholders against corporate managers inclined to serve their own interest to the detriment of the owners, (Jensen, 1993). Independent directors may bring independence into the board and add diversity of expertise, skills and experience. They are able to alleviate agency problems and limit self-interest, (Abdullah, 2006). On the contrary, the stewardship theory suggests that managers are good stewards and cannot undertake decisions that can negatively influence the financial performance of the firm and therefore supports the view that the board should have a significant proportion of inside directors to ensure more efficient and effective decision making. This is because of the proposition that inside directors

understand the business better than outside directors, (Schooley, Renner and Allen, 2010).

On the other hand, the resource dependency theory argues that independent directors bring knowledge and expertise which minimizes the uncertainty of the external environment, (Pfeiffer, 1972). It advocates for more outside directors on the board. The underlying support of the negative relationship between board independence and financial distress is that an independent directors' dominated board is more likely to act in the best interest of the shareholders as compared to an inside dominated board. In an effort to safeguard the interest of stakeholders, such board could implement measures that steers the firm from the trajectory of financial distress, (Bilal, Faudziah and Syed, 2014).

According to Bektas and Kaymak (2009) the presence of independent directors results in the development of efficient activities that will detect and monitor the possibility of emergence of opportunistic behaviors by corporate managers. Outside directors reduce possibility of existence of information asymmetry and agency costs between management and shareholders, and on this basis they represent the interest of shareholders better than inside directors, (Fich and Slezak, 2008). The responsibility of independent directors is to control against opportunism and control the selfishness of managers so that the decisions they implement are consistent with the expectations of shareholders, (Gueyie and Ellumi, 2001). Lack of adequate board independence creates a power imbalance between the executive and non-executive members that can potentially lead to collapse of board effectiveness, (Muranda, 2016). According to Fich and Shivdasani (2007) outside board members are concerned with their reputation, since their performance can be seen as one of the main factors to reach

membership of other boards. Thus, on this basis outside board members have more incentives to perform better.

Harris and Raviv (2008) argue that corporations may prefer insider-controlled boards because of the information that is available to insiders relative to outsiders. If the cost of losing information is higher than the agency costs associated with inside control, the insider-controlled board is preferred. These authors suggest that outsiders bring value to the company by providing better expertise. However, increasing the number of outsiders could generate free-rider problems, their importance of contribution may be reduced and consequently they will contribute less and put in less effort. Schooley *et al*. (2010) support the idea of inside controlled boards because independent directors do not have enough knowledge about the company and this leads to poor decision making.

A review of empirical studies provides evidence that board independence has a positive influence on the likelihood of financial distress. Bilal, Faudziah and Syed (2014) examined the relationship between corporate governance mechanisms and going concern for firms listed on the Amman Stock Exchange for the period 2000 to 2011. Using multiple regression analysis the study found a positive relationship between board independence and going-concern evaluation. On the same note, Ayoola and Obokoh (2018) explored the effect of corporate governance on financial distress in the Nigerian banking industry for the period 2005 to 2015. The result of analysis of secondary data using generalized quantile regression model showed that board independence is positively and significantly related with the likelihood of financial distress. The study attributed the findings to a large number of non-

executive directors who may lack in-depth knowledge of the internal workings of the banks on whose boards they sit.

In their examination of the association between board independence and financial distress for a group of 350 Indian listed companies for the period of 2010-2014, Shridev, Suprabha and Krishnaprasad (2016) established that the relationship between board independence and financial distress is positive, meaning that the likelihood to suffer financial distress is high for companies having a high proportion of independent directors to total directors in the board. Similar findings were reported by Abdullah (2006) who carried out a study on sample of Malaysian companies over the period 1999-2001. The results showed that board independence was positively associated with the possibility of financial distress. Khalida, Muhammad, Sadaf, Umar and Imtiaz (2018) compared financially health and financially distressed companies on the basis of board independence for a sample of manufacturing companies in Pakistan over the period 2006-2010. The logistic regression results revealed that the number of outside directors of distressed firms is low compared to the health companies and therefore concluded that board independence is positively related with financial distress.

In another study of the relationship between board independence and financial distress for sample of 171 financially distressed and 106 non-financially distressed Australian companies over a period of 5 years between 2010- 2014, Miglan, Ahmed and Henry, (2015) reveal that board independence does not lead to lower levels of financial distress. Equally, Muhammad *et al.* (2018) examined the influence of board independence on financial distress using a sample of Pakistan listed firms over the period 2009 to 2016. Secondary data was analyzed using logistic regression analysis.

Financial distress was measured by the emerging markets score, an updated version of the Altman's Z-score, whereas board independence was measured by the proportion of independent non-executive directors to the total board numbers. The study revealed a positive role of board independence in influencing the likelihood of financial distress. Huang and Zhao (2008) analyzed the relationship between percentage of independent directors on the board and the possibility of financial distress using a panel data of 193 financially distressed companies in China from 2000 to 2006. The study revealed that board independence increased the indirect costs of financial distress.

Hana (2018) examined the relationship between board independence and the likelihood of financial distress for a sample of 8774 USA firms over the period 2007 to 2016. Using logistic regression analysis the study established that firms with a higher proportion of independent members of the board are likely to experience financial distress. Amira and Tulia (2014) explored the relationship between board independence and financial distress for sample of 118 companies drawn from Denmark and Sweden. The multiple and binary regression results showed that board independence has a significant and positive relationship with the probability of financial distress. Similarly, Ma and Tian (2009) analyzed the effect of board independence on financial performance for a sample of firms listed on the Shanghai and Shenzhen Stock Exchanges over the period 2003 to 2004. The study found out that the board independence is positively related with financial performance.

Joseph (2019) examined the relationship between board independence and financial distress for sample of 100 financially distressed and 100 non-financially distress firms listed on the London Stock Exchange for the period 2009-2016. The results of the

study indicate that board independence is positively and significantly related to the degree of financial distress. Similar findings were posted by Isaiah and Michael (2017) who examined the effect of board independence on financial performance. The relationship was assessed using a sample selected from the Johannesburg Stock Exchange over the period 2010 to 2015. Based on a panel data analysis, the study found out a positive correlation between board independence and financial performance. Based on an analysis of 82 companies listed on the Tehran Stock Exchange during the period 2010-2014, Reza and Mahdi (2016) found out that board independence has a positive and significant influence on financial distress.

Some studies support an inverse association between board independence and financial distress. In respect to board independence, Fathi and Jean-Pierre (2001) observed that the composition of the board of directors differs between financially distressed and healthy firms. Boards of financially distressed firms have significantly fewer outside members. Further, the relationship between financial distress and outside directors is negative and statistically significant. The study utilized a pooled cross sectional logit regression to analyze sample of 92 Canadian listed firms, 46 of which were in financial distress because they had experienced a negative earnings per share during the years 1994-1998. Similarly, Manzaneque *et al.* (2016) conducted an empirical study on the effect of independent directors on financial distress for a sample of firms drawn from Spain for the period 2007 to 2012. The study used a matched –pairs research design consisting of 308 observations. Results of the study show that board independence decreases the chances of financial distress. Moreover, Luqman, Masood, Tabasum, Maria and Irshad (2018) examined the link between board independence and the likelihood of financial distress. The sample of the study

consisted of 52 firms listed on the Karachi Stock Exchange during the period 2006 to 2015. The logistic regression results indicated that board independence was inversely and significantly related to financial distress.

Ahmed and Syed (2017) sought to assess how board independence affects the likelihood of financial distress using a sample of 53 non-financial companies listed on the Karachi Stock Exchange over the period 2010 to 2014. Board independence was measured by the proportionate number of non- executive directors compared to the total board members whereas financial distress was indicated by the Altman's Z-score. Regression analysis was used to estimate the empirical results of the study. The study found out that board independence was inversely related to the level of financial distress. In another similar study Li, Wang and Deng (2008) analyzed the relationship between board independence and financial distress for a sample of 404 Chinese listed companies over the period 1998 to 2008. The study revealed that board independence has a negative influence on the probability of financial distress for Chinese listed companies, implying that firms with a higher proportion of independent directors have lesser probability of financial distress.

Mwengei and Kosgei (2017) examined the influence of board independence on financial distress on sample of 39 firms listed at the Nairobi Securities Exchange over the period 2004-2013. Board independence was measured by the percentage of membership held by the independent directors, while financial distress was measured by the Altman's Z-score. Guided by an exploratory researchdesign and using panel regression analysis, the study established that independence of the board is inversely and significantly related with financial distress. Correspondingly, Lakshan and Wijekoon (2012) in their study of firms listed on the Colombo Stock Market reported

that the outside director ratio, representing independence of the board, was negatively associated with the probability of corporate failure.

Charbel and Nehme (2012) analyzed the relationship between corporate governance and financial distress for a sample of 276 Lebanese non-listed and family owned firms. The study was carried over the period 2007-2010 using multiple logistic regression model. The authors established that a high proportion of outside directors on the board is negatively associated with financial distress. On the same token, Hong-xia, Zong-jun and Xiao-ian(2008) examined the role of board independence in influencing financial distress using a sample of 404 financially distressed firms that were matched with a similar number of non-financially distressed firms listed on the Chinese Stock Markets. The study period was from 1998 to 2005. The study showed that independence of the board is negatively related with financial distress. Further, Qasim, Javid and Rahimi (2011) studied the effect of board independence on financial distress of companies listed on the Tehran Stock Exchange. The results indicated a negative and significant association between the percentage of independent board members and financial distress.

Wang and Deng (2006) conducted a study on the relationship between corporate governance characteristics and the risk of financial distress for a sample of Chinese companies that experienced financial distress in the year 2002 and 2003.Using binary logistic regression, the study established that the proportion of independent directors are negatively related with the probability of financial distress. In their analysis of the association between board independence and financial performance for agricultural listed companies on the Nairobi Securities Exchange over the period 2012- 2016, Ngwenze and Irungu (2017) found out that board independence was negatively

related with financial performance. Chang (2009) evaluated the relationship between board independence and financial distress in Taiwan and concluded that companies with a high proportion of non-executive board members are less affected by financial distress as compared to companies with low percentage of board independence. Ahmadu, Aminu and Tukur, (2005) conducted a study on the effect of board independence on financial performance of a sample of 93 firms quoted on the Nigerian Stock Exchange over the period 1996-1999. Using pooled regression analysis, the study found no evidence to show that corporate boards with high proportion of outside directors outperform others.

Some studies provide evidence that board independence does not statistically influence financial distress. For instance, Hafiz and Desi (2007) sought to determine whether the proportion of independent directors influence the likelihood of financial distress. The study was based on a sample of 190 companies listed on the Indonesia Stock Exchange over the period 2011-2015. The study revealed that board independence has no effect on the possibility of companies experiencing financial distress. Correspondingly, Atty, Moustafasoliman and Youssef (2018) examined the impact of board independence on financial performance, using a sample of 50 active companies listed on the Egyptian Stock Exchange covering the period 2012 to 2017. The study supported an insignificant effect of board independence on financial distress.

The finding by Xavier (2014) avers that the association between board independence and financial distress is not significant. This assertion was centered on a study conducted on sample of 312 USA firms for the period 2007 to 2009. Equally, Dissanayke, Somathilake, Madushanka, Wickramasinghe and Cooray (2017)

examined the impact of board independence on financial distress of manufacturing firms listed on the Colombo Stock Exchange over the period 2012 to 2016. Based on a correlational analysis of secondary data, the study showed an insignificant relationship between board independence and financial distress. On the contrary, Werner, Felicia and Bertha (2008) sought to analyze the influence of board independence on financial distress. The study adopted logistic regression to analyze historical data from 337 non-financial companies listed on the Indonesian Stock Exchange over the period 2011 to 2015. The findings of the study indicated that the proportion of independent directors on the board was a significant predictor of financial distress.

Currently gender diversity is one of the most contentious governance issues facing managers and shareholders across the world. Gender diversity is an intriguing issue that has become more important because of changes in the labormarket and the legislation of legal changes that champion for the inclusion of women on board positions, (Tomislava, Ana and Mirjana, 2018). In this context, Rose (2007) argues that corporations, just like other organizations, should reflect the diversity of the society as a whole and thus diversity on boards of directors and in top management should thus be a logical consequence. The advocacy for greater representation of females on corporate boards usually relies on two lines of argument; the ethical or the business case for diversity. The proponents for the ethical line argue that women should be appointed into corporate boards for equality reasons. In this case, the aim is not related to increasing performance but rather greater female representation is considered positive and just, (Robinson and Dechant, 1997). The business case for gender diversity holds that if a corporate board comprises of heterogeneous directors,

diversity may spur financial growth and success, indicating that a higher proportion of females board members may be related with better performance, (Fondas and Sassalos, 2000).

The agency theory opines that a more diverse board may entail better monitoring of corporate managers as it increases the independence of the board. An increase in the boardroom level of independence and better monitoring of managers could ensue as a result of higher gender diversity and therefore diversity may strengthen existing control mechanisms over corporate managers, (Carter *et al*., 2003). Further, a board comprising of representation from diverse gender groups enables a more balanced board that is likely to prevent a small group of persons or individuals from controlling the decision making process and this is likely to lead to more robust decisions.

On the other hand, the resource dependence theory views board diversity as one of the instruments that corporate managers may use to facilitate access to resources that are important to the success of the firm. Stiles (2001) specifically suggests that board diversity may boost access to critical resources which indicates that diversity, insofar as it relates to either gender, age or nationality can have a positive impact on firm performance. Further, the author asserts that diversity can influence management tasks positively, can increase problem solving capacity and at the same time it's likely to establish external links with the environment and consequently fetch crucial resources to the firm. The provision of the requisite resources enhances the proper functioning of the organization, increased performance of the firm and its long term survival, (Daily, Dalton and Canella, 2003). Thus, from the foregoing discussion, both theories anticipate a negative relationship between gender diversity and financial distress.

The boardroom is the place where major decisions are taken by management and therefore it's imperative and beneficial to have both female and male talents on the board so as to realize better outcomes, (Sangeeta and Lavina, 2018; Smith, Smith and Verner, 2006). Women introduce useful female leadership qualities and skills to the boardroom such as risk averseness and less radical decision making as well as more sustainable investment strategies, (Adams, 2005). Further, they fulfill their leadership roles in a more transformational way than their male counterparts, especially through their encouraging and supportive treatment of colleagues and subordinates, (Fondas and Sassalos, 2000). Relatively, females are said to value their responsibilities as directors which is associated with good corporate governance. Furthermore, board members of diverse gender may lead to an increase in its effectiveness, which can eventually lead to good financial performance, as consequence of a wider variety of perspectives and a more exhaustive decision making process, (Isabel, Isabel and Luis, 2010).

An increased female presence on corporate boards is associated with the introduction of new desirable leadership skills and a variety of strategic advantages for companies that promote sound corporate governance. The overall effect is improved performance of the firm, (Terjesen, Sealy and Singh, 2009). The proponents of gender diversity argue that women bring in new ideas and are able to communicate effectively, which is very important to men as they deal with strategic issues at board meetings and this has a direct influence on business performance, (Carter, Simkins and Simpson, 2003; Mahadeo, Soobaroyen and Oogarah, 2012).

On the contrary, Coleman (2006) argues that the impact of females on the board may be impaired by their struggle to participate and maintain their standing in the already

male dominated corporate boards and are at risk of experiencing role ambiguity and role conflict, because they do not conform to typical gender roles in leadership. Such females may be perceived as tokens to meet society's expectations or those of important stakeholders and therefore may be marginalized or may not be taken seriously on the board, which might subsequently hinder their individual performance and that of the entire board. Consequently, their impact on ensuring financial stability may be limited. A similar argument was propagated by Litz and Folker (2002) who argue that such diversity may lead to a generation of discrepancies and less speed in decision making process, because the leadership styles are distinct among males and females.

The relationship between board diversity and financial distress has been explored in prior empirical studies and the result is inconclusive. Some authors support a direct influence of gender diversity on financial distress. Abdullah, Muhammad and Karren (2016) in their study of the relationship between the gender of the board members and financial distress using sample of 172 Malaysian companies over the period 2000 to 2012 documents that board gender is significantly and directly related to corporate financial distress. They observed that male managing directors are more likely to be associated with financial distress than their female counterparts.

Beatrice, Prince, Richard and Albert (2018) analyzed the effect of gender diversity on financial performance of companies listed on the Ghana Stock Exchange over the period 2009 to 2013. The study used the generalized least squares and panel regression analysis model to analyze the dataset of eleven firms. It was revealed that gender diversity has a positive impact on the financial performance of manufacturing firms in Ghana. On the same note, Mohammad and Nasir (2019) carried out a study

to investigate the impact of female directorship on firm's profitability of 110 companies listed on the Dhaka Stock Exchange from the year 2013 to 2017. Be means of multivariate pooled ordinary least square regressions, the results reveal that female directorship is positively associated with firm's profitability.

More evidence has been adduced by literature to support a direct relationship between gender diversity and financial soundness of firms.Carter, Simkins and Simpson (2003) examined the relationship between board diversity and financial performance for a sample of 638 American Fortune companies. The results of the study provide evidence that there is a significant and direct correlation between the proportion of women on corporate boards and financial performance. Fan (2012) in his study using a sample of 390 observations drawn from different sectors of companies listed at the Singapore Securities Exchange, during the period 2002-2004, established a direct effect of gender diversity on financial performance.

Similarly, Smith *et al*. (2006) conducted a study to investigate whether women in top management of corporations affect financial performance in Denmark. Utilizing data from 2,500 largest Danish firms over the period 1993 to 2001 and by using ordinary least squares regression, the study affirmed that women in top management tend to have a positive effect on the financial soundness of firms. Similar studies in Indonesia by Prihatiningtias (2012) shows that gender diversity has positive influence on firm performance. This study sought to establish the impact of the presence of women on the boardroom on financial performance over the period 2001-2010. The study concluded that female presence in the boardroom may bring organizational improvement which then enhances financial performance.

Some scholars disagree with the proposition of adirect influence of gender diversity on financial distress. Rekha (2018) studied the effect of corporate governance on financial distress based on a sample of 72 Indian selected banks over the years 2008 to 2015. The study represented corporate governance by the proportion of female directors. Through panel regression analysis, the study established that the presence of female directors pose a significant inverse influence on financial distress, findings attributed to a limited number of women directors on the Indian boards. In the United Kingdom, Haslam, Ryan, Kulich, Trojanowski and Atkins(2010) carried out a study to investigate the relationship between women on corporate boards and both accountancy-based and stock based measures of firm performance. The study used regression analysis to analyze data that was collected during the period 2010 to 2005 for a sample of 100 companies listed on the London Stock Exchange. The results of the study revealed an inverse association between women presence on corporate boards and firm performance.

Adams and Ferreira (2009) conducted a study based on sample of 1939 firms drawn from the US for the period 1996 to 2003. Using the ordinary least squares methodology, the study found out that boards that are more gender diverse devote more effort in monitoring managers and consequently there existed an inverse relationship between gender diversity and financial performance. Studies by Hana (2018) on the relationship between gender diversity and the probability of financial distress for 8774 USA firms indicate that the percentage of female board members is inversely related with financial distress.Correspondingly, Ofoeda (2016) conducted an analysis of the effect of corporate governance on profitability of non-financial institutions listed on the Ghana Stock Exchange during the period 2006-2014.

Corporate governance was represented by gender diversity. The result revealed an inverse influence of gender diversity on firm profitability.

The inconclusiveness of the analysis of the association between gender diversity and financial distress is further buttressed by studies that record a noand/or insignificant relationship. For instance, Sangeeta, Mittal and Lavina (2018) empirically examined female's representation on corporate boards as well as their impact on financial distress by analyzing a sample of Indian family firms for the period 2013 to 2016. Based on descriptive and logistic regression, the study showed that female directors have a diminutive impact on financial distress since their presence on the board is very low. Consistent with these findings, Salloum and Azoury (2012) posit that gender diversity does not have a significant association with the likelihood of financial distress. Their analysis was based on an examination of Middle Eastern countries between the period 2005- 2010.

The study by Salloum and Azoury (2012) contends that because of low representation on boards, their impact on financial distress is insignificant. Likewise, Isabel, Isabel and Luis (2010) analyzed the effect of gender diversity on corporate performance for sample of companies listed on the Madrid Stock Exchange over the period 2004-2006. By employing a linear panel regression model, the study established that firms with higher levels of gender diversity do not outperform companies with lower levels, in terms of several market and accounting measures. They concluded that gender diversity does not influence corporate performance.

The lack of influence of gender diversity on financial distress has also been reported by other scholars. In this context, David *et al*. (2010) examined the business case for the inclusion of women directors on the board of directors for a sample of US

corporations for the period 1998-2002. The study did not find any significant relationship between gender diversity and financial performance. Donker, Santen and Zahir (2009) in their examination of the influence of gender diversity on the likelihood of financial distress of firms listed on the Amsterdam Stock Exchange for the period 1992 to 2002, found no relationship between the gender of a director and financial distress. On the same vein, Charbel and Nehme (2012) analyzed the relationship between gender diversity and financial distress. The study determined that that there is no significant relationship between female directors on the board and financial distress a sample of 276 Lebanese non-listed firms. The population of the study comprised of 138 financially distressed firms and 138 health firms for the period 2007-2010. In another similar study Letting, Aosa and Machuki (2012) carried out a study to investigate the influence of board diversity on financial performance. All the forty seven companies listed at the Nairobi Securities Exchange as at 31st December 2010 provided the population of the study. Using ordinary least squares, the results show a statistically not significant (weak positive) influence of board diversity on financial performance.

Atty, Moustafasoliman and Youssef (2018), in their examination of the effect of gender diversity on financial performance based on a sample of firms listed on the Egyptian Stock Exchange over the period 2012 to 2017, reported that gender diversity had an insignificant effect on financial performance.Evidence from Kenya as reported by Ekadah and Mboya (2012) reveal that board diversity had no effect on performance of banks in Kenya. The study was conducted using a sample of commercial banks over the period 1998-2009. Data was analyzed using stepwise regression model. Suleman, Modar and Fida (2015) explored whether the percentage

of women on boards of directors and top and medium-level executive management positions had an effect on the financial performance of Jordanian banks. The population of the study comprised of all the 16 listed Jordanian banks. The study employed multiple regressions to analysis data collected from the sampled firms over the period 2009-2016. The findings indicate that there is no statistically significant relationship between women presence in management and financial performance. Further, the study recommended that Jordanian banks should increase their currently small proportion of women on boards and top executive positions in order to realize benefits arising from women leadership.

2.3.2 Board Structure and Financial Distress

Board structure refers to the attributes of the board such as size, tenure and activities. The board of directors plays an important corporate governance mechanism as they hold the responsibility of directing and leading a firm as well as protecting the interest of shareholders, (He and Huang, 2011). Moreover, the board perform other functions such as deciding the appropriateness of the company's strategies, linking the firm to the external environment and providing information to managers, (Abdullah, Muhammad and Karren, 2016). These functions make the board of directors one of the most important internal corporate governance control mechanism, (Hafiz and Desi, 2007; Linck, Netter and Yang, 2008). Nebert, Erasmus and Cyrus (2017) analyzed the effect of board structure on the performance of financial institutions in Kenya and showed that it has a significant influence on the financial performance of financial institutions. Similar findings were reported by Hussein (2012) who determined a significant direct relationship between the structure of the board of directors and financial distress for sample of UAE national banks. Mwanzia and

Ochieng (2017) researched on the effect of board structure on financial stability of commercial banks in Kenya over a five year period, 2011-2015. The results revealed that the structure of the board affects financial stability of commercial banks significantly.

Board size is not only a dominant attribute of board structure but also one of the most important mechanisms of effective corporate governance, (Bonn, Yoshikawa and Phan, 2004). Maere, Jorissen and Uhlaner, (2014) define board size as the number of directors sitting on the board in a particular year. Board size can vary between one country and another as each country has a unique culture which dictates the size of the board and in consequence there is no optimal and standard board size among corporations across the world, (Xavier, 2014). Shridev, Suprabha and Krishnaprasad (2016) assert that there is no optimal board size as the right size should be dictated by the effectiveness of the board as a team. In view of board size, there is a trade-off between additional value–added expertise or monitoring benefits and detriments arising from coordination problems, (Guest, 2009). Connelly and Limpaphayom (2004) explains that although a large board size can effectively facilitate the functions of the board and provide a more quality decision making processes, they can ultimately experience problems of coordination and communication, leading to a decline in board effectiveness and subsequently diminish financial performance.

In the theoretical framework for corporate governance, the relationship between board size and financial distress has been sustained by different governance theories. The agency theory and the resource dependency theory vouch for boards with large number of directors. However, the stewardship theory advocates for smaller boards for effective and efficient management, (Anjala and Shikha, 2016; Mandala, Kaijage

and Aduda, 2017). Proponents of the agency theory, argue that the board acts as a representative of shareholders and other stakeholders of the firm in monitoring the performance and controlling the activities of management. A larger board consists of more number of directors who work towards the interests of stakeholders in monitoring and controlling, and thereby minimizes financial distress. According to Mwengei and Kosgei (2017) the resource dependency theory views the size of the board as a measure of the diversity of the knowledge pool and the availability of critical resources needed by the firm. Theproponents of the theory argue that a large board size brings a wide variety of expertise and knowledge in diverse fields. They guarantee availability of resources for the firm due to their connections with people belonging to the same or different industry. Different directors have access to various resources and when the number of these directors is increased, the resource availability can simultaneously increase which in turn enhances firm performance, thereby reducing financial distress.

Just like other corporate governance practices, there is no unanimity of the influence of board size on financial distress; with studies revealing either inverse, direct or no relationship. Empirical literature is rich in studies that support an inverse influence of board size on financial distress. Xavier (2014) conducted a study on the relationship between financial distress and corporate governance for a sample of 312 USA firms quoted on the Amex and the National Association of Securities Dealers and the New York Stock Exchange from mid-2007 to 2009. By means of logit regression the study established that size of the board was negatively related to financial distress. These finding were in agreement with studies by Victor (2014) who showed that board size is inversely related to financial performance for manufacturing firms listed on the

Nairobi Securities Exchange for the period 2007 to 2012. Correspondingly, Manzaneque *et al.* (2016) conducted an empirical study on the effect of board size on the likelihood of financial distress for sample of firms drawn from Spain for the period 2007 to 2012. The study used a matched-pairs research design consisting of 308 observations and the results show that board size has an inverse effect on financial distress.

In their examination of the link between board size and financial distress for a group of 350 Indian listed companies for the period 2010-2014, Shridev, Suprabha and Krishnaprasad (2016) indicated that the effect of board size on the probability of financial distress is negative, suggesting that a large board tend to have a strong ability to control management hence leading to reduced chances of financial distress. Similar findings were reported by Montserrat, Alba and Elena (2016) who found an inverse relationship between board size and likelihood of financial distress. Ching-Chun *et al*. (2017) in their examination of the impact of board size on the probability of financial distress for a sample of listed firms on the Taiwan Stock Exchange for the period 2006 to 2014 showed that board size has a negative relationship with financial distress.

Ayoola and Obokoh (2018) investigated the effect of board size on financial distress in the Nigerian banking industry for the period 2005 to 2015. Secondary data was analyzed using descriptive and generalized quantile regression model. The empirical evidence of the study shows that financially distressed banks are characterized by large board size with most members not well versed with banking intricacies. The study concluded that financial distress can be caused by poor corporate governance.Correspondingly, Khalida, Muhammad, Sadaf, Umar and Imtiaz (2018)

compared financially health and financially distressed companies on the basis of board size for a sample of manufacturing companies listed on the Karachi Stock Exchange over the period 2006-2010. The results reveal that financially distressed firms have larger boards as compared to the financially healthy companies and consequently concluded that board size is inversely related with the possibility of financial distress.

In their study of the role of board size in predicting financial distress of firms listed on the Pakistan Stock Exchange during the period 2009 to 2016, Muhammad *et al.* (2018) discerned that increase in the size of the board decrease the likelihood of financial distress. Besides, Ahmed and Syed (2017) sought to assess how corporate governance affects the likelihood of financial distress using a sample of 53 non-financial companies listed on the Karachi Stock Exchange over the period 2010 to 2014. Corporate governance was measured by the natural logarithm of total number of board members whereas financial distress was indicated by the Altman's Z-score. Regression analysis was then used to estimate the empirical results of the study. The study concluded that board size has an inverse effect on the level of financial distress. The result was attributed to the higher level of competence of large boards which enables better financial decisions than otherwise. In their study of the effect of board size on financial performance for a sample of multinational firms in Nigeria from 2012 to 2016 Akinleye, Odunayo and Bamikole (2019) established that board size significantly and inversely impacts on financial performance.

Ngwenze and Irungu (2017) sought to determine the influence of board size on financial performance of agricultural listed firms in the Nairobi Securities Exchange during the period 2012-2016. Board size was found to be negatively related with

financial performance. Hafiz and Desi (2007) sought to determine effect of the size of the board of directors on the likelihood of financial distress. The study was carried out during the period 2011-2015 using 190 non-financial companies in Indonesia. It was revealed that board size has a significant and inverse role in preventing companies from experiencing financial distress. Addullah, Muhammad and Karren (2016) analyzed the effect of board size on the likelihood of financial distress for a sample of 172 Malaysian companies, with an equal number of failed and non-failed firms, for the period 2000 to 2012. The study found out that large board size decreases the likelihood of financial distress. They concluded that having more directors in the board may help to increase oversight, monitoring and expertise in the company's operations, thereby reducing the chances of financial distress. Hana (2018) studied the effect of board size on the likelihood of financial distress for a sample of 8774 USA firms over the period 2007 to 2016. Financial distress was measured by the Altman's Z-score. By means of logistic regression analysis, the study found out that firms with more board members are less likely to get into financial distress.

Yameen, Farhan and Tabash (2019) investigated the effect of board size on firm performance using a panel data set of 30 hotels listed on the Bombay Stock Exchange for the period 2013-2016. Using ordinary least square regressions, the study revealed that board size has an inverse impact on the performance of Indian Hotels. In their study of the effect of board size on financial performance for sample of firms drawn from the Johannesburg Stock Exchange over the period 2010 to 2015, Isaiah and Michael (2017) established a weak negative correlation between board size and financial performance.

There is evidence to indicate that board size is directly related with the likelihood of financial distress. Kajola (2018) examined the relationship between board size using a sample of 20 Nigerian listed firms between 2000 and 2006. Using panel regression method, the results show a direct but significant relationship between board size and firm performance. In his analysis of the influence of board size on the likelihood of financial distress for a sample of UK firms over the period 2009 to 2016, Joseph (2019) reveal that board size is significantly but positively related with the likelihood of financial distress. Correspondingly, Hana (2019) examined the impact of board size on financial performance for a sample of 40 non-financial companies listed in Egypt between 2009 and 2014. The findings indicate that board size has a direct significant determinant on firm performance.

Sri (2017) conducted a study on the impact of good corporate governance on financial distress. The study used secondary data that was collected from consumer goods manufacturing firms that were listed on the Indonesian Stock Exchange over the period 2009 to 2014. In particular, the study sought to determine how board size influences financial distress. Financial distress was represented by the interest coverage ratio such that if a company had a ratio of 1.5 or below it was classified as financially distressed. By use of multiple regression analysis, the study showed that the number of directors has a positive influence on financial distress, implying that the larger the size of board the higher the possibility of financial distress. On the same token, Ofoeda (2016) conducted an analysis on the effect of board size on profitability of non-financial institutions listed on the Ghana Stock Exchange during the period 2006-2014. The results revealed a direct influence of board size on firm profitability.

Ammar, Asif and Ammar (2013) conducted an empirical study on the relationship between board size and financial performance using a sample of firms listed on the Karachi Stock Exchange for the period spread from 2007 to 2011. The study unveiled a positive association between board size and financial performance. Equally, by examining the relationship between board size and financial distress for Taiwan listed firms, Chang (2009) found a direct influence of board size on the likelihood of financial distress. Similar results were reported by Mohammad and Nasir (2019) who investigated the impact of board size on firm profitability of 110 companies listed on the Dhaka Stock Exchange. The study applied multivariate pooled ordinary least square regressions to test hypothesis from the year 2013 to 2017.The results revealed that a large board size is directly associated with firms' profitability.

Some empirical studies provide evidence that the number of board members does not significantly influence financial distress. Atty, Moustafasoliman and Youssef (2018) examined the effect of board size on financial performance using a sample of 50 active companies listed on the Egyptian Stock Exchange covering the period 2012 to 2017. The study supported an insignificant effect of board size on financial distress. Amira and Tulia (2014) explored the relationship between board size and the probability of financial distress for sample of 118 companies drawn from Denmark and Sweden. The study revealed that board size has an insignificant relationship with the probability of financial distress.

In another study, Lakshan and Wijekoon (2012) examined the influence of corporate governance characteristics on corporate failure of firms listed in Sri- Lanka for the period 2002 to 2008. The study utilized secondary data from the annual reports of 70 failed firms and a matched sample of 70 non-failed companies. Using logistic

regression analysis, it was revealed that board size was not a significant determinant of corporate failure. Also, Nizar, Frédéric and Habib (2016) examined the effect of board size on financial distress of commercial banks in the European Union during the period 2005 to 2011. Guided by the agency theory as the theoretical framework, the study employed a binary logistic regression model to analyze data that was filtered from 147 banks spread throughout 18 countries of the European Union. The study recorded lack of a statistically significant relationship between board size and financial distress.

Mwengei and Kosgei (2017), who examined the relationship between board size and financial distress of firms listed in Kenya over the period 2004 to 2013, contends that the relationship between board size and financial distress is not significant. Equally, Wang and Deng (2006) found out that board size do not significantly affect the probability of financial distress for a sample of Chinese companies that experienced financial distress in the year 2002 and 2003. By the same token, Dissanayke *et al.* (2017) examined the effect of size of the board on financial distress for a sample of manufacturing firms listed on the Colombo Stock Exchange during the period 2012 to 2016. The correlational analysis results indicate an insignificant effect of board size of on financial distress.

The concept of board tenure refers to the average number of years a director of a corporation serves on the board, (Vafeas, 2005). Directors with long tenure would accumulate more firm specific knowledge while sitting on the board, (Maere, Jorissen and Uhlaner, 2014). This firm specific knowledge refers to the tactical understanding of the firm which allows board members with long tenure to deal effectively with strategic issues and improve the board's ability to provide resources to the firm,

(Johnson, Schnatterley and Hill, 2013). According to Hillman *et al.* (2000) these firm's specific knowledge and experience enhances the board ability to monitor management effectively and thus reduce chances of financial distress. Further, Huang and Zhao (2008) asserts that director tenure should be able to enhance the ability of the board to not only monitor but also provide resources to the firm and by so doing reduce the risk of financial distress. As pointed out by Maere, Jorissen and Uhlaner (2014) director tenure serves as a proxy for firm specific knowledge and experience and is useful in enhancing the ability of the board to monitor management, given its deeper insight into the behavior of management and the firm's situation.

Board tenure captures the trade-off between knowledge accumulation and board independence. The members of the board acquire specific knowledge and experience as board tenure increases, which is associated with an increase in firm value and financial stability, (Vefeas, 1999a). However, increased familiarity between the board and management can undermine board independence which can result in decreased value of the firm, (Hwang and Kim, 2009). Moreover, long tenure directors are more likely to befriend management and therefore less likely to monitor management effectively. They are likely to lose their independence over time and promote management's interest at the expense of the shareholders' interest, (Vafeas, 2005). A long tenure board develops an allegiance toward management which reduces their effectiveness in monitoring management, (Zahra, Jamal and Muhammad, 2018). Long term tenure boards, according to Vafeas (2003), may lead to conflict among board members which may limit the number of views and opinions that are openly discussed and debated in meetings. Such a board may be slow to detect and react to certain legal violations committed within the firm. Thus,boards with long tenure

present an opportunity to gain experience and understanding of the firm. However, it can contribute to financial distress when such board befriends management and pursues their interests.

Mwengei and Kosgei (2017) examined the relationship between the tenure of the board and financial distress of listed firms in Kenya during the period 2004 to 2013. Based on an exploratory research design, the study employed a panel regression model to analyze secondary data collected from a sample of 57 listed firms. Board tenure was measured by the average number of years a director has served on the board. The study found out that board tenure was inversely but significantly related to financial distress, indicating that firms with long term boards are less likely to experience financial distress. In another study Charbel and Nehme (2012) analyzed the relationship between board tenure and financial distress for a sample of Lebanese firms. The result of the study showed a negative and insignificant effect of board tenure on financial distress. The scholars attributed the inverse relationship to the fact that proper monitoring of managerial behavior may require in-depth knowledge of the firm and as such, shorter tenured directors may not have sufficient firm-specific knowledge to adequately control corporate managers.

Maere *et al*. (2014) confirmed an inverse association between director's tenure and the risk of bankruptcy. The study was based on data analyzed over a period of five years (2008-2012) for sample of 232 matched pairs of unlisted firms in Belgium. The scholars concluded that firms ending in a state of financial distress are likely to have boards with shorter tenures compared to those with longer tenure boards. Correspondingly, Zahra, Jamal and Muhammad (2018) tested whether the board tenure has an impact on corporate survival of firms in Pakistan. Using Panel

regression analysis to analyze data collected from a sample of 42 non-financial firms listed on the Karachi Stock Exchange over the period 2009-2013, the study determined that board tenure was negatively related with the probability of financial distress.

The study usedthe frequency of board meetings as a measure of board activity. An important measure of monitoring power and effectiveness of the board of directors is the frequency of board meetings, (Jensen, 1993: Vefeas, 1999a). The frequency of board meetings measures the intensity of board activities and the quality of effectiveness of its monitoring. Also regular meetings allow directors more time to confer, set strategy and appraise managerial performance, (Vafeas, 2005). High frequency of meetings helps directors to remain informed and knowledgeable about important developments within the entity and thereby place them in a better position to address emerging critical problems, (Mangena and Tauringana, 2008).

Sonnenfeld (2002) consider regular board meetings to be a hallmark of a conscientious director. Boards of directors that frequently have meetings are more likely to conduct their responsibilities according to the interests of their shareholders, because ample time can be dedicated to controlling and monitoring issues such as conflicts of interest, monitoring management and earnings management, (Bilal, Faudziah and Syed, 2014). According to Mangena and Tauringana (2008) the frequency of corporate board meetings is one of the critical ways of improving the effectiveness of the board. Attendance of board meetings is an important conduit through which the directors obtain firm –specific knowledge which enables them to fulfill their monitoring role effectively, (Adams and Ferreira, 2003). When corporate

boards meet frequently they are likely to enhance the performance of the board and also meet the expectations of the shareholders, (Ofoeda, 2016).

An opposing view is that board meetings are not necessarily beneficial to shareholders. Jensen (1993) casts doubt regarding the effectiveness of corporate meetings because the agenda is generally set by the chief executive officer and so, routine tasks absorb much of the meeting time thus limiting opportunities for directors to exercise meaningful control over management. He also suggests that board meetings are more reactive than proactive, which reduces their effectiveness. This line of thought is supported by Vefaes (1999a) and Adams (2005) who state that boards respond to poor performances by raising their level of board activity. As per Brick and Chidambaran (2008), the danger of discordance between board members increases when the firm performs poorly.

Whereas there is consensus that corporate board meetings play an important role in enhancing governance and firm performance, the theoretical and empirical evidence on the role of board meetings in influencing financial distress is conflicting. In a study of corporate boards and firm performance in an environment of severe political and economic uncertainty, Mangena and Tauringana (2008) report a direct relationship between the frequency of board meetings and financial performance for a sample of Zimbabwean listed firms over the period 2001 to 2003. Bilal, Faudziah and Syed (2014), in their study of the relationship between board activity and going concern for firms listed on the Amman Stock Exchange for the period 2000 to 2011, found out a direct and significant relationship between board meetings and going-concern evaluation. Equally, Dissanayke *et al.* (2017) examined the impact of board configuration on financial distress of manufacturing firms listed on the Colombo

Stock Exchange over the period 2012 to 2016. Based on a correlational analysis of secondary data, the study confirmed a directbut insignificant relationship between board activity and financial distress.

Muhammad *et al*. (2018) studied the effect of board activity on the likelihood of financial distress for 164 firms listed on the Pakistan Stock Exchange during the period 2009 to 2016. The study used a logistic regression model to analyze secondary data. It was revealed that an increase in the frequency of board meetings leads to an increase in the probability of financial distress. Approving these results, Noriza and Mazurina (2018) researched on the correlation between corporate governance, as measured by board activity, and financially distressed companies in Malaysia for the years 2010 till 2016. The results from the binary logistic regression analysis showedthat there is a significant direct influence of board activity on financial distress. The results give credence to the assertion that more board meetings are held when companies are in a state of financial distress.

Some scholars, nevertheless, testament an inverse influence of board activity on the likelihood of financial distress. For instance, Ma and Tian (2009) analyzed the effect of board activity on financial performance for a sample of corporations listed on the Shanghai and Shenzhen Stock Exchanges over the period 2003 to 2004. The study found out that the frequency of board meetings is inversely related with financial performance. Likewise, Joseph (2019) examined the relationship between board activity and financial distress for a sample of United Kingdom firms for the period 2009-2016. The results of the study indicate that board activity is inversely and significantly related to the degree of financial distress.Some authors posit that there is no influence of board activity on the likelihood of financial distress. Xavier (2014) in

his analysis of the relationship between financial distress and corporate governance reported that the influence of board activity on financial distress was not significant. The study was based on a sample of USA firms for the period 2007- 2009.

2. 3.3 Ownership Structure and Financial Distress

Studies on the structure of ownership of corporations date back to the pioneering propositions by Berle and Means (1932) and later by Jensen and Meckling in 1976. These scholars had hypothesized that hired hands (managers) cannot be expected to safeguard the interests of the firm to the same extent as the owners would do. According to Kerman (2008) the ownership structure refers to the distribution of equity in terms of votes and the capital provided by each identified equity holder. Thus, ownership structure in respect to corporations occurs in two dimensions; ownership concentration and ownership identity. According to Welch (2004) ownership identity refers to the actual names of major shareholders while ownership concentration refers to the proportion of shares held by an owner relative to the total shareholding of the firm. The structure of ownership of a corporation is a crucial aspect when judging corporate governance because it addresses the relationship between inside and outside investors, (Aydin, Sayim and Yalama, 2007; Rohani, Kamarun, Rohaida and Zarina, 2013).

The study measuredownership structure in three dimensions; block, managerial and institutional ownerships. Block ownership refers to the shareholding ownership of large volumes of a corporation's shares or bonds that are able to influence the company's decisions by virtue of the voting rights awarded to them, (Ongore and K'obonyo, 2011). Block owners provide a role of active monitors to limit opportunism of managers. They have incentives to monitor managers because they

have enough ownership control and therefore the existence of large shareholders is helpful in alleviating the free ride problem, (Shleifer and Vishny, 1997; La Porta *et al*., 2000 and Claessens *et al*., 2002).

Unlike the block owners, diffused shareholders may not be motivated to influence voting, though they only affect the outcome slightly. Thus, in corporations with dispersed shareholding, shareholding is barely likely to influence the decisions of management and control it, (Lakshan and Wijekoon, 2012). On the contrary, large shareholders can monitor performance of the firm and behavior of management in order to protect their investment. Moreover, they are likely to deploy sufficient power to protect their interest and monitor business performance, (Claessens *et al*., 2002). They can use their voting rights in the direction of desired changes much more easily than shareholders of a company with dispersed shareholding, (Nizar, Frédéric and Habib, 2016).

Block shareholders could have a keen interest to monitor management, especially if the expected benefits of monitoring outweigh costs. The cost of monitoring may be punitive for small shareholders and this may limit their monitoring ability. Consequently, small shareholders can be able to free ride on the conduct and behavior of large shareholders, who unfortunately can't exclude the other shareholders from the value enhancing activities, (Lee and Yeh, 2004). Donker, Santen and Zahir (2009) argue that large equity holders are motivated to monitor the behavior of management so as to safeguard their interest. This is because they can receive corporate benefits disproportionate to their shareholding.

According to Elloumi and Gueyie (2001) block shareholders have an opportunity to influence and improve the firm's strategy by pressuring management to undertake

positive net present value projects, discourage corporate managers from consuming perquisites and limit managers from implementing decision that reduce the value of the firm. Relative to small equity holders, large shareholders may possess a good understanding of the firm's operations, have complex understanding of financial operations and thus they will directly influence the performance of the firm, (Susan, Peters and Howard, 2002). Wang and Deng (2006) assert that the monitoring of management by large shareholders can alleviate sub-optimal management behavior such as excessive consumption of perquisites, reluctant to undertake new profitable projects, investing of free cash flow in sub-optimal projects and organizational inefficiencies.

In cases of concentrated ownership, large shareholders may create information asymmetry between large and minority shareholders and thus large shareholders may unnecessarily pressure management and generate private benefits regardless of the interest of minority group, (La Porta *et al*., 2000). Agency problems arise when managers or controlling shareholders have the ability to redirect or consume corporate resources in ways that benefit themselves but which are not in the best interest of the other owners, including minority owners, (Jensen and Meckling, 1976). They occur at block ownership structure, between majority and minority shareholders because the interest of the two groups does not always coincide. This divergence occurs because of the asymmetric information between majority and minority shareholders, (Shleifer and Vishny, 1997). The large shareholders may attempt to undertake actions that capture advantages of the business for themselves at the expense of the minority. They may tend to generate private benefits exercised through control over the company. In this context concentrated ownership cannot function as

an effective monitoring tool on management'sconduct; rather it could generate agency conflicts between majority and minority shareholders, (Lee and Yeh, 2004).

There has been a great deal of research on the effect of block ownership on corporate financial distress, though the results are mixed and conflicting. Some studies posit that the influence of block ownership on financial distress is direct.For instance, Parker, Peters and Turetsk (2002) investigated the association between block ownership and the financial characteristics with the survival likelihood of distressed firms. The study was based on a sample of 3567 USA firms that experienced financial distress during the period July 1988 to June 1996. By employing survival analysis technique, the study found out that large levels of block holders are positively associated with the likelihood of firm survival. They concluded that the ownership structure has a significant influence on the likelihood of financial distress. Lee and Yeh (2004) tested the relationship between corporate governance and the probability of financial distress using a sample of firms listed on the Taiwan Stock Market. Data was collected from firms that encountered financial distress between January 1996 and December 1999, together with a matching pair consisting of healthy companies. Corporate governance was represented by the percentage of directors occupied by the controlling shareholder. By means of binary a logistic regression model, it was revealed that block ownership is directly related to the risk of financial distress.

Susan, Peters and Howard (2002) investigated the association between block ownership and survival likelihood of distressed firms. The study utilized a sample of 176 firms that were selected from an initial sample of 3567 USA firms that experienced financial distress during the period 1988 to 1996. The study employed survival analysis technique by incorporating cox proportional hazards regression. The

results indicated that large levels of block holders are positively associated with the likelihood of firm survival.

On the contrary, some authors assert that the influence of block ownership on financial distress is inverse and not direct. Wang and Deng (2006) conducted a study on the relationship between corporate governance characteristics and the risk of financial distress for a sample of Chinese companies that experienced financial distress between the year 2002 and 2003. Corporate governance was represented by two variables: largest shareholders ownership and top five largest shareholders. Using logit regression model, the study analyzed a sample of ninety-six financially distressed and ninety six healthy companies. The study revealed that large shareholders ownership is negatively related with the probability of financial distress.Consistent with the monitoring hypothesis Donker, Santen and Zahir (2009) in their examination of firms listed on the Amsterdam Stock Exchange between the years 1992 to 2002 discern that large shareholders ownership reduce the probability of financial distress. Similarly, Miglani *et al.* (2015) reviewed the role of voluntary adoption of corporate governance mechanisms using a sample of 171 financially distressed and 106 non-financially distressed Australian companies over a period of 5 years (1999-2003). The study found out that block ownership decreases the possibility of financial distress.

Montserrat, Alba and Elena (2016) examined the relationship between block ownership and the likelihood of financial distress in the Spanish context. The study conducted an empirical analysis between 2007 and 2012 using a matched pair's research design with 308 corporations, with half of them classified as distressed and

others non –distressed. The study showed that block ownership does not have a significant impact on financial distress in the Spanish context.

Managerial ownership occurs when the top management of a corporation owns part of the organization through acquisition of a fraction of the equity of the firm. Jensen and Meckling (1976) posits that managers who own a portion of the firm they manage cannot make decisions that can adversely hurt the business as their interest may suffer alongside those of other shareholders. These scholars further theorize that the separation of ownership and control creates a potential conflict of interest between corporate managers and shareholders. Managers deviate from the shareholders wealth maximization goal by consuming perquisites when they do not have an ownership stake in the firm. Jensen and Ruback (1983) suggest that managers should be encouraged to take up high stock ownership so as to align their interest with those of other shareholders. The scholars explain that managers are inclined to pursue personal benefits when they do not own a smaller portion of the firm's shares. From the foregoing, the incentives to invest sub-optimally and misappropriate funds decline as managerial ownership increases.

According to Jensen and Meckling (1976) the granting of stocks to the agents (managers) increases their affiliation to the company. Managerial ownership motivates managers to work as the owners of the firm and by doing this, the interest of the owners and managers align, (Niem, 2005). As stock ownership increases, managers are more likely to implement measures that will lead to the alignment of their interest with the equity owners, (Gomper, Ishii and Metrick, 2003).

According to Niem (2005) managers can increase the value of the firm and reduce chances of financial distress because they have invested in it. Moreover, as the

owners are actively engaged in day to day activities of the company, less conflicts and less complex organizational structure will reduce the need for monitoring and effectively reduce agency costs. However, as managers begin to hold a substantial fraction of the firm's equity, they become entrenched. This entrenchment in turn motivates them to pursue non-value maximizing behaviors which do not uphold the interest of shareholders, (Matnor and Sulong, 2007). Schulze, Lubatkin, Dino and Buchholtz (2001) contend that managerial ownership may not only fail to minimize the agency costs of ownership, but can actually create agency costs. This is because it reduces the influence of external governance and aggravates the self-control problems that arise whenever firms are led by a powerful owner -manager.

The influence of managerial ownership on financial is a contentious issue that has been widely researched in literature. Ching-Chun *et al*. (2017) examined the effect of ownership structure of firms and the probability of financial distress using a sample of listed firms in Taiwan for the period 2006 and 2014. The study employed the Altman's Z-score to measure financial distress while shareholding ratio of managerial share ownership represented ownership structure. The result showed that the shareholding ratio of managerial share ownership had a positive impact on the probability of financial distress. Similar results were reported by Bilal, Faudziah and Syed (2014) who studied the relationship between corporate governance mechanisms and going concern for firms listed on the Amman Stock Exchange for the period 2000 to 2011. The study established that managerial ownership and going concern were directly related but not significantly. Conversely, using secondary data obtained from annual reports of a sample of firms listed on the Indonesian Stock Exchange for the period 2009 to 2014, Martin (2017) examined the impact of managerial ownership on

financial distress. Managerial ownership was computed as the ratio of the total number of stocks held by management to the total number of stocks. The study indicated that managerial ownership was negatively related with the likelihood of financial distress.

Donker, Santen and Zahir (2009) examined the impact of ownership structure on the likelihood of financial distress of firms listed on the Amsterdam Stock Exchange from the period 1992 to 2002. By means of logistic regression, the study infers that increase in managerial shareholding leads to significant and statistical reduction in the likelihood of financial distress. The study concluded that consistent with the alignment hypothesis, managerial shareholding reduce agency problems between shareholders and management. Conflicting results were reported by Wang and Deng (2006) who conducted a study on the relationship between managerial shareholding and the risk of financial distress for a sample of Chinese companies for the period 2002 and 2003. According to this study, managerial ownership does not significantly affect the probability of financial distress.

Sri (2017) in his study of the influence of good corporate governance on financial distress established that managerial shareholding was adversely related to the possibility of financial distress. The study used secondary data that was collected from consumer goods manufacturing firms that were listed on the Indonesian Stock Exchange over the period 2009 to 2014. Managerial ownership was measured by the proportion of shares held by management, while financial distress was measured by the interest coverage ratio such that if a company had a ratio of 1.5 or below it was classified as financially distressed. Data was analyzed by use of multiple regression analysis. On the same latitude, Abdullah (2006) carried out a study on sample of

Malaysian companies over the period 1999-2001. The results showed that managerial ownership was inversely associated financial distress. Additionally, Muhammad *et al.* (2018) examined the role of corporate governance in the detection of financial distress using secondary data published by the statistical department of the state bank of Pakistan over the period 2009 to 2016. Financial distress was measured by the emerging markets score, an updated version of the Altman's Z-score, whereas corporate governance was measured by the degree of managerial ownership. The study established that managerial ownership has a significant inverse effect on financial distress.

Sandisiwe and Mabutho (2015) investigated the association between managerial ownership and financial performance of selected firms listed on the Johannesburg Securities Exchange. The study conducted regression analysis for 23 retail sector firms over the period 2010 to 2013. The results suggest a negative impact of managerial ownership on financial distress. The study did not support the agency theory as aligning the interests of shareholders and managers does not improve firm performance. In another similar study, Drakos and Bekiris (2010),based on their study of the relationship between managerial ownership structure and firm performance for a sample of firms selected from the USA, UK and Greece, found out that when managerial ownership is treated as endogenous, there is a positive and significant influence on firm performance. Correspondingly, Hanaa (2019) examined the impact of managerial ownership on firm performance based on a sample of 40 non-financial companies listed in Egypt between 2009 and 2014. The findings indicate that managerial shareholding has an insignificant positive impact on accounting and

market measures of firm performance. The study interpreted the results that a high level of managerial shareholding discourages management from undertaking risks.

Institutional investors play a critical role in shareholders' wealth maximization and corporate governance of public companies, (Hellman, 2005). Institutional investors are specialized financial institutions which manage savings on behalf of investors with a view of attaining specific objectives in terms of acceptable risk, maximization of returns and maturity of claims, (Davis and Steil, 2001). They include commercial banks, insurance companies, pension funds and investment funds. In the context of corporate governance, the role of institutional investors is based on a dual status. On one part, they can be critical proponents of sound governance practices. As the major stock owners in listed companies, they have a primary responsibility of maximizing shareholders value. On the other hand, most of these institutionshave multiple owners who could themselves avail good or bad corporate governance. Sometimes they can promote ineffective corporate governance practices, (Belev, 2003).

There exist two categories of institutional investors: pressure resistant investors and pressuresensitive investors, (Matanda, Oyugi and Lisiolo, 2015). Pressure resistant investors include those institutional investors who only have investment relationships with the firm in which they hold equity stakes. Examples include mutual funds, pension funds and endowments. Besides, pressure sensitive institutional investors refer to those institutional investors who have both investment and business relationship with the firm in which they are shareholders. Examples in this category include commercial banks, insurance companies and non-bank trusts, (Ramzi, 2008).

There are four alternative hypotheses on the relationship between institutional ownership and financial distress, namely; effective monitoring (Shleifer and Vishny,

2000), strategic alignment and conflict of interest, (Pound, 1988) and cost of capital, (Fama and Jensen, 1983). The effective monitoring hypothesis postulates that the larger the institutional ownership, the more the effective the monitoring exercised by these shareholders. These institutions have at their disposal various formal and informal mechanisms such as shareholders activism, voting power and election of board members which can be used to effectively monitor management and influence the decision making process of the board. Owing to the high stakes they hold, they are able to exercise controls on the actions of management, aligning them with shareholders' wealth maximization objectives. The cost of capital hypotheses argues that increased institutional ownership raises the firm's cost of capital as a result of market liquidity or decreased diversification opportunities on behalf of the investor, (Fama and Jensen, 1983). The conflict of interest hypothesis posits that due to business relationships with the company in which they hold equity stakes, institutional investors are forced to vote in line with management since voting against might negatively affect their business relationships. When institutional shareholders collaborate with corporate managers against their fiduciary duty, these would decrease the value of the firm and consequently increase probability of financial distress, (Pound, 1988).

There is evidence that institutional equity holders often exercise control through proxy voting and behind the scenes engagement with management. Nevertheless, some scholars argue that such institutions may promote unethical business behavior by either influencing managerial incentives or advocating for less aggressive corporate polices, (Shahab, Khan and Attiya, 2017). Besides, these investors have been viewed as passive owners, raising concerns that their role in corporations will

not only weaken corporate governance but also aggravate agency problems, (Sri, 2017). Some scholars assert that the active monitoring by institutional investors could improve financial performance of an entity up to a certain level. That is, institutions investors will lead to a decrease in the value of the firm, once their ownership percentage exceed certain levels. Consequently, at a higher level of equity ownership, these investors may encourage the implementation of sub-optimal decisions that could be harmful to the business of the firm, (Navissi and Naiker, 2006).

Empirical studies between institutional ownership and financial distress appear to be varied and inconclusive.Reza, Yadollah and Najmeh (2016) considered the impact of institutional ownership on financial distress for a sample of 118 firms listed on the Tehran Stock Exchange for the period 2006 to 2013. Using multivariate regression analysis, the study found out that institutional ownership concentration has a negative and significant effect on financial distress, whereas institutional ownership level had no significant effect on corporate financial distress. Similarly, Ching-Chun *et al.* (2017) in their examination of the impact of institutional ownership on the probability of financial distress for a sample of listed firms in Taiwan for the period 2006 and 2014 showed that institutional ownership has a negative relationship with financial distress. Correspondingly, Shridev, Suprabha and Krishnaprasad (2016) examined the aspect of institutional investors and its impact on financial distress using a sample of 350 Indian listed companies for the period 2010 to 2014 using a matched pair research design. Data was analyzed by means of logistic regression model. The result of the study showed that institutional ownership is inversely related with the probability of financial distress.

Matanda, Oyugi and Lisiolo (2015) sought to ascertain the relationship between institutional ownership and financial distress for sample of 43 commercial banks in Kenya that were in operation between the period 2001 and 2013. Bank performance was defined by the return on equity, Tobin Q and the return on assets. Secondary data collected was analyzed using descriptive and hierarchical multiple regression under the panel data framework. The empirical findings indicated that there is no significant influence of institutional ownership on financial performanceof commercial banks in Kenya. On a sample of 146 companies listed on the Karachi Stock Exchange, Shahab, Khan and Attiya (2017) explored the role of corporate governance, as measured by ownership structure, on the likelihood of financial distress over the period 2003-2012. The Altman's Z-score was used as an indicator of financial distress. The study established evidence of a negative and insignificant influence of institutional ownership on financial distress. The finding of this study is in disagreement with the findings of Matanda, Oyugi and Lisiolo (2015).

Rohani, Kamarun, Rohaida and Zarina (2013) sought to determine whether the type of ownership structure has an influence on firms that experienced financial distress. The sample of the study included all firms listed on the Main Market of Bursa-Malaysia for the period 2004-2009.The ownership structure was represented by the institutional investors that was classified into government linked institutional investor and domestic private institutional investors. Results of logistic regression shows that ownership by government linked investment companies do not explain financial distress while ownership by domestic private investment companies positively and significantly influence financial distress. Likewise, based on a study of firms listed on the Amman Stock Exchange for the period 2000 to 2011, Bilal, Faudziah and Syed

(2014) reported that the direction of the relationship between institutional ownership and going concern is negative and not significant. In their study of the influence of financial institutions ownership on financial distress of firms listed on the Pakistan Stock Exchange during the period 2009 to 2016, Muhammad *et al.* (2018) discerned a negative association between institutional ownership and likelihood of financial distress.

Sri (2017) evaluated the impact of institutional ownership on financial distress. The study used secondary data that was collected from consumer goods manufacturing firms listed on the Indonesian Stock Exchange over the period 2009 to 2014. Institutional ownership was proxied by the percentage of stocks owned by institutional investors, while financial distress was measured by the interest coverage ratio such that if a company had a ratio of 1.5 or below it was classified as financially distressed. By use of multiple regression analysis, the study found out that institutional ownership negatively affects the probability of financial distress. Correspondingly, using secondary data obtained from annual reports of a sample of firms listed on the Indonesian Stock Exchange for the period 2009 to 2014, Martin (2017) examined the impact of institutional ownership on financial distress. The results of the study showed that institutional ownership was negatively related with the likelihood of financial distress. Contrary to aforementioned studies, Bilge, Mesut and Mustafa (2010) investigated the association between institutional investors and financial distress for a sample of firms that were operating in the Istanbul Stock Exchange over the period 2005-2009. Financial distress was measured by the Altman's Z-score for emerging markets while the ownership structure was represented by the proportion of shares held by the largest five shareholders. A

positive and significant relationship between institutional investors and financial distress was found.

Nzioka and Olweny (2017) sought to establish the relationship between institutional ownership and financial performance of firms listed on the Nairobi Securities Exchange for a period of 10 years from 2006 to 2015. Adopting descriptive study design and E-Views 9 data analysis tool, the study recorded a positive influence of institutional ownership on financial performance. Divergent results were reported by Manzaneque *et al.* (2016) who conducted an empirical study on the effect of institutional ownership on financial distress for a sample of listed firms in Spain from 2007 to 2012. The study used matched –pairs research design consisting of 308 observations. Results of the study showed that institutional ownership has no significant impact on the probability of financial distress. On the same vein, Udin, Khan and Javid (2017) explored the effect of institutional ownership on the probability of financial distress in selected 146 firms listed on the Karachi Stock Exchange for the period 2003 to 2012. The study proxied financial distress by the Altman's Z-score. By employing panel logistic regression, the findings showed an insignificant association between institutional ownership and financial distress.

Hafiz and Desi (2007) sought to determine whether institutional ownership has an impact on the likelihood of financial distress. The study was carried out during the period 2011-2015 using 190 non-financial companies drawn from the Indonesian Stock Exchange. The result of the empirical research suggests that institutional ownership has no effect upon the possibility of companies experiencing financial distress. Conversely, using a sample of 82 companies listed on the Tehran Stock Exchange during the period 2010-2014, Reza and Mahdi (2016) found out that

institutional ownership can significantly reduce the possibility of financial distress. Abdalmuttaleb, Musleh and Zakeya (2019) investigated the relationship between institutional ownership and the level of financial distress in Bahrain. The study established that there is a significant inverse relationship between institutional ownership and financial distress.

2.3.4 Moderating Influence of Financial Leverage

A moderator is a variable that potentially influences the nature of the relationship between the independent variable and dependent variable in a research. It refers to an interaction effect where introducing a moderator variable alters the direction and/or magnitude of the relationship between the dependent and independent variable(s), (Saunders *et al*., 2009). The effect of moderation can either be enhancing, antagonistic or buffering. Buffering effect occurs where introducing the moderator decreases the primary relationship between the dependent and independent variable. Antagonistic moderation arises where increasing the moderator reverses the primary effect of the independent variable on the dependent variable. In enhancing moderation, increasing the moderator also increases the primary effect of the predictor variable on the outcome variable, (Fairchild and Mackinnon, 2009).

The literature on corporate governance and financial distress widely recognizes debt as an important mechanism for solving problems in corporations characterized by separation of ownership and control, (Jensen and Meckling, 1976; Jensen, 1986; Ferii and Jones, 2009; Higgins, 2007; Baimwera and Muriuki, 2014. The employment of debt in the capital structure is expected to reduce agency costs of free cash flow of the company. This is because the onus of paying debt along with its interest reduces free cash flows and as a result managers refrain from using the free cash for non-optimal

activities, (Jensen, 1986). Debt reduces free cash flow of the company due to its compulsorily periodic interest commitment and consequently, it may not only prevent corporate managers from freely investing into unfavorable projects, (Ferii and Jones, 2009) but also bond the promise of future cash flow as a sort of dividends, (Jensen, 1986). The reduction of free cash flow by utilizing debt is expected to reduce the agency problems.

While debt could reduce agency costs in corporations by committing managers to pay out excess cash flow and curbing over-investing, there are costs associated with the use of debt which can impact on the firm negatively. One of the primary costs is that high levels of debt commitment prevent managers from taking up positive net present projects should such opportunities arise, (Ferii and Jones, 2009). Further, the higher the proportion of debt in the capital structure, the higher the risk that a firm will be unable to meet its financial obligations to its creditors. The expected cost of financial distress increases proportionately as the relative use of debt financing increases. This expected cost reduces the value of the firm, offsetting, in part, the benefit arising from interest deductibility, (Higgins, 2007). Corporations using debt potentially face the risk of default. Failure to honor the interest obligation could lead to financial distress and even to bankruptcy of the firm, (Dothan, 2006). Consequently, to maximize value of the firm managers must find a balance between other sources of capital and debt capital. The value of the firm is maximized at the point of optimal capital structure where the marginal costs of debt equals its marginal benefits. Issuing debt beyond optimal levels can reduce the value of the firm and increase the likelihood of bankruptcy, (Pratheepkanth, 2011).

A number of studies show the relevance of financial leverage in influencing the degree of financial distress. Umar *et al*. (2012) undertook a study on 100 firms listed on the Karachi Securities Exchange during the period 2006 to 2009.The result of the study affirms that financial leverage has a significant and negative influence on the degree of financial distress. Similarly, Muigai, Muhanji and Nasieku (2015) conducted a study on the effect of debt financing on financial soundness of non-financial companies listed on the Nairobi Securities Exchange for the period 2004 to 2013. The study evaluated the degree of sound financial soundness using the Altman's Z-score. The feasible generalized least square regression results showed that leverage as represented by the proportion of total debt to the total capital is negatively and significantly related to the financial soundness of non-financial firms listed at the NSE. The study concluded that increasing the debt component within the capital structure on non-financial firms leads to a decline in their financial soundness.

In their analysis of the effect of financial leverage on financial distress of firms listed on the Indian Stock Exchange for the period 2006 to 2010, Gupta, Srivastava and Sharma (2014) revealed that financial distress is significantly and negatively related with debt financing. Further, Pratheepkanth (2011) studied a sample of 210 entities listed on the Colombo Stock Exchange with the objective of determining the effect of financial leverage on financial distress for a period of five years from 2005 to 2009. Financial leverage was measured by two ratios; total debt-total capital and debt-equity, while financial distress was measured by the gross profit and net profit margins. The study established a negative and insignificant relationship between financial distress and financial leverage. Conversely, Ebaid (2009) investigated the effect of financial leverage on financial distress for firms listed on the Egyptian

Securities Exchange. The results of the study showed that financial leverage had insignificant to no impact on the financial distress of the firms.

Some scholars have tested the impact of financial leverage in moderating the relationship between corporate governance practices and financial soundness of firms. Frah, Muhammad and Zeenet (2013) analyzed the moderating effect of financial leverage on the relationship between corporate governance practices and financial performance for a sample of firms drawn from the banking sector in Pakistan. The frequency of audit meetings, board size, independence of the board, CEO duality, insider ownership were used as proxies of corporate governance while the return on assets was used as a measure of financial performance. By means of regression analysis, the results show that financial leverage does not moderate the relationship between corporate governance and financial performance in both linear and non-linear forms. In another study, Aideed and Muzaffar (2018) examined the relationship between corporate governance and firm performance of listed textile firms on Pakistan Stock Exchange for the period 2015-2017. The study accommodated leverage as a moderator. By using multiple regression to analyze data, the study indicated a significant moderating effect of financial leverage on the relationship between board meetings and performance, but insignificant on the relationship between board size and performance.

George, Tabitha and Tobias (2018) examined the mediating effect of capital structure on the relationship between ownership structure and financial performance of non-financial firms listed at the Nairobi Securities Exchange. Using balanced panel regression the study analyzed 42 firms for the period 2008-2017. Ownership structure was measured using managerial and institutional ownership, while capital structure

was represented by the leverage ratio. The return on equity and Tobin's Q were used as proxies of financial performance. The study established that financial leverage has no significant mediating influence on the relationship between managerial ownership and financial performance. Nonetheless, the study established that there is a significant mediating effect of capital structure on the association between institutional ownership and financial performance. On the same vein, Amirhossein and Ali (2017) examined the impact of financial leverage as a mediation variable on the relationship between ownership concentration and financial corporate performance for a sample of 60 companies listed on the Tehran Stock Exchange during the period 2004-2015. Using multiple regression analysis, the study found out that financial leverage explains the relationship between ownership concentration and financial corporate performance. The study concluded that ownership concentration does not have any significant relationship with financial performance in the presence of financial leverage (full mediation effect).

From the foregoing review of empirical literature, it's clear that financial leverage plays a critical role in moderating the association between corporate governance practices and financial performance. Aideed and Muzaffar (2018) suggested that financial leverage significantly moderates the relationship between corporate governance and firm performance, whereas Frah, Muhammad and Zeenet (2013): George, Tabitha and Tobias (2018): Amirhossein and Ali (2017) established that financial leverage does not moderate the relationship between corporate governance and financial performance. Nevertheless, it's worth noting that these studies evaluated the moderating effect of financial leverage based on the relationship between corporate governance and financial performance as opposed to financial distress. The

current study fills this gap in literature by evaluating the moderating role of financial leverage on the association between corporate governance practices and financial distress.

2.3.5 The Influence of Firm Size on Financial Distress

Mule, Mukras and Nzioka (2015) define firm size as the amount and variety of production capacity and ability that a firm possesses or the amount and variety of services a firm can provide concurrently to its customers. Surajit and Saxena (2009) explain that the variable refers to how big or small the firm is in terms of assets. The study incorporated firm size as a control variable because there is empirical evidence to suggest that firm size either has a direct, inverse or no influence on the probability of financial distress.

According to Rommer (2004) there are two hypotheses regarding the relationship between firm size and the possibility of financial distress. The first hypothesis suggests that the impact of firm size on the probability of financial distress is almost U-shaped. Small firms have a higher probability of entering financial distress because they are not so resistant to shocks they might experience. Large firms, on the other hand, have a high probability of entering financial distress because they might have inflexible organizations coupled with problems of monitoring managers and employees. They may also be faced with difficulties of providing efficient intra-firm communication. The second hypothesis is that the probability of financial distress is a decreasing function of firm size.

Large firms have a large asset base that can be used as collateral, have better access to external sources of funds and are able to avoid financial distress by utilizing equity

markets, (Polsiri and Sookhanphibarn, 2009; Papadogonas, 2006). They have an advantage over small firms for the reasons that they have a more history, better access to credit, more entrenched competitive positions, (Johnsson, 2007; Lee, 2009) and a strong asset base that can be sold in the event of financial challenges and better diversification strategies, (Kane, Velury and Ruf, 2005). Holding other factors constant, large companies due their experience and significant resources tend to handle financial distress better than small firms, (Artikis, Eriotis, Vasiliou and Ventoura, 2007; Robert and Jane, 2017).

Amato and Burson (2007) in their analysis of the relationship between firm size and financial distress of corporations operating in the UK's financial services sector affirms a direct relationship under both linear and cubic models. They argued that as firms expand, they have a tendency to increase the debt levels in their capital structure opposed to small-sized firms. This inevitably results to a reduction in efficiency which culminates in a higher possibility of financial distress. The same argument is supported by Gonenc (2005) who contends that due to increased debt capacity, large firms may have a tendency to issue more debt and hence suffer from effects of overleveraging, leading to a decline in profitability, thus increasing the likelihood of financial distress. Additionally, Parker, Peters and Turetsky (2002b) indicated that size is directly associated with the likelihood of financial distress. They assert that larger firms are more likely to go to bankruptcy as they have a greater difficulty in maintaining ongoing operations during periods of financial distress.

Additionally, some studies have reported inconclusive results whereas others indicate an inverse influence, (Serrarsquerio and Nunes, 2008: Montserrat, Alba and Elena, 2016). Ooghe and Prijcker (2008) posit that large firms have a high chance of

survival during a crisis than small firms due to accumulated reserves. However, some studies such as Turetysky and McEwen (2001), Yu (2006) and Rommer (2004) determined that firm size does not have a significant effect on the likelihood of financial distress.

2.4 Research Gap

The review of literature provided evidence that a majority of past empirical studies have used financial performance measures as indicators of financial distress. Some of these indicators include interest coverage ratio (Sri, 2017), return on equity, Tobin's Q and the return on assets (Matanda, Oyugi and Lisiolo, 2015), negative earnings per share (Khalida, *et al.*, 2018) and lack of capacity to settle obligations, (Manzaneque, Priego and Merino, 2016). According to Hoque, Hossain and Hossain(2014) financial performance measures may provide limited assessment of the overall financial health of a firm and therefore they are not good indicators of financial distress. However, the most commonly used measure of financial distress in prior studies is the Atman's Z-score model for emerging markets, (Muhammad *et al.*, 2018;Ahmed and Syed, 2017; Mwengei and Kosgei, 2017;Ching-Chun *et al*., 2017;Shahab, Khan and Attiya, 2017;Bilge, Mesut and Mustafa, 2010 and Udin, Khan and Javid, 2017).

The Altman'sZ-score combines several important ratios, (retained earnings/total assets, net working capital/ total assets, earnings before interest and taxes/ total assets, book value of equity/ book value of total liabilities), into a single metric that gives information about the financial health of a firm. It employs the multivariate discriminant approach to predict financial distress, (Altman and Hotchkiss, 2010). Nevertheless, despite the multivariate discriminant approach models showing relatively superior accuracy, their validity has been questioned on grounds that they

are based on unrealistic statistical assumptions that include linearity of variables, normal distribution of ratios and equality of variance, (Platt and Platt, 2002).The other limitation of theAltman'sZ-score is that it has been mostly used to assess the predictability of financial distress on non-financial firms, (Muigai, Muhanji and Nasieku, 2015, Mwengei, and Kosgei, 2017, Ahmed and Syed, 2017). This means that studies based on this methodology have focused on only non-financial firms, excluding financial firms. The study sought to address this gap by using a more robust measure of financial distress; the distance to default Z-score measure. This indicator has been widely used to predict financial distress for both financial and non-financial corporations, (Cihak and Martin, 2007; Laeven and Levine, 2009).The use of this measure enabled the study to determine the level of financial distress for financial and non- financial firms listed at the Nairobi Securities Exchange.

Review of prior studies provided evidence that there is a general lack of scholarly consensus on the influence of corporate governance practices on financial distress. The results of empirical analysis of the influence of corporate governance practices on financial distress is equivocal and has not yet produced conclusive results, with some studies either showing direct, inverse or no relationship. This is true even in situations where particular indicators of corporate governance have been researched across the globe but end showing divergence influence on financial distress. For instance Bilal, Faudziah and Syed (2014), Ayoola and Obokoh (2018),Shridev, Suprabha and Krishnaprasad (2016), Khalida, Muhammad, Sadaf, Umar and Imtiaz (2018), Miglan, Hana (2018) and Joseph (2019) revealed a significant direct influence of board independence on financial distress. Nevertheless, Fathi and Jean-Pierre (2001), Manzaneque *et al.* (2016), Luqman *et al*. (2018), Ahmed and Syed (2017),

Li, Wang and Deng (2008), Mwengei and Kosgei (2017), Lakshan and Wijekoon (2012) and Charbel and Nehme (2012) support a significant inverse association between board independence and financial distress. Similarly, scholars among them Hafiz and Desi (2007), Atty, Moustafasoliman and Youssef (2018) and Xavier (2014) revealed that the relationship between board independence and financial distress is insignificant. The conflicting results imply that the influence of corporate governance practices on financial distress is still unclear and thus open to further empirical analysis.

Further, studies in the Kenyan situation are few andhave paid attention to selected indicators of corporate governance or isolated sectors of the economy. Specifically, studies by Matanda, Oyugi and Lisiolo (2015),Nzioka and Olweny (2017) and Letting, Aosa and Machuki (2012) focused on selected indicators of corporate governance practices. Studies by Mandala, Kaijage, and Aduda (2017), Nebert, Erasmus and Cyrus (2017), Nebert, Erasmus and Cyrus (2017) and Mwengei and Kosgei (2017) focused on listed commercial banks. Consequently,the study filled this research gap byfocusing on all Kenyan listed firms and also by probing on a wide range of corporate governance practices that includes elements of the board structure, board composition, ownership structure and financial leverage.

Review of literature indicated that the issue of corporate governanceandfinancial distress has attracted great interest among scholars. This has led to the birth of many theories with often varying and contradicting propositions on how various corporate governance practices influence financial distress.Nevertheless, there is no universal theory that has been adopted to date. The study added to existing literature by providing a comprehensive review on how the agency, stewardship and the resource

dependence theories hypothesize the relationship between corporate governance practices and financial distress.

2.5 TheConceptual Framework

According to Myers (2013) a conceptual framework is diagrammatic representation of the hypothesized relationship among the variables of the study. Based on a review of theoretical literature, the study undertook a conceptualization of the interrelationship between the indicators of corporate governance practices and financial distress. In addition, the model captures the moderating influence of financial leverage on the relationship between corporate governance practices and financial distress.

Modern corporations are characterized by the separation of ownership and control, which may lead to conflict of interest between managers and shareholders, (Jensen and Meckling, 1976). In this situations managers cannot be expected to look after shareholders' interest with the same vigilance as the owners and consequently the consumption of perquisites must prevail, (Panda and Leepsa, 2017). This separation may motivate managers to pursue self-serving interests such as sub-optimal allocation of resources, corruption, fraud and misrepresentation of financial information that may culminate in financial distress, (Rezart, 2016). To control divergence of interest the agency theory advocates for the implementation of strict corporate governance mechanisms that includes attributes of the board of directors and ownership structure, (Jensen, 1993).

The study adopted financial distress as the dependent variable. Financial distress is abroad concept that is used to describe a situation in which firms face financial

difficulty, (Ayoola and Obokoh, 2018). Some scholars describe financial distress as the inability of an entity to pay its financial obligations as and when they fall due, (Agrawal, 2015: Altman and Hotchkiss, 2006: Lee and Yeh, 2004). It's refers to a situation where operating cash flows does not exceed negative net assets, (Li, Crooks and Andreeva, 2014). Besides, financial distress has been defined in terms of the distance to default. Default can occur if the value of the company's total assets is less than the value of the debt obligations should the company be unable to make the required payment, (Wei-Ling and Leh-Chyan, 2014).

Financial distress encompasses several situations in which firms face some degree of financial difficulty. The most common terms used to describe this continuum of financial difficulty includes failure, insolvency, default and bankruptcy, (Boubaker, Hamza and Vidal-Garcia, 2016). According to Thakor (2014) bankruptcy describes the legal definition of financial distress. Bankruptcy is the extreme and irredeemable outcome of financial distress, (Geng, Bose and Chen, 2015). However, many financially distressed firms never file for bankruptcy, but financially healthy firms may file for bankruptcy to avoid taxes and expensive lawsuits. Failure is defined by Agrawal (2015) as the situation where the realized rate of return on the capital invested, with allowances for risk consideration, is continually and significantly lower than the prevailing rates of similar investment. Default refers to a situation where a firm violates a condition of agreement with creditors, which may ultimately lead to legal action. Failure is an economic term and does not necessarily indicate the discontinuity of a firm. On the other hand, insolvency in bankruptcy sense indicates a negative net worth, (Altman and Hotchkiss, 2006).

Financial distress can be grouped into sub-intervals: deterioration of performance, corporate failure, insolvency and default. Though deterioration and failure could affect firm performance, insolvency and default are deeply rooted in its liquidity. Financial distress is generally characterized by a sharp decline in performance of an entity and its value. However, a firm can be distressed without defaulting, (Thakor, 2014). Nevertheless, bankruptcy can't occur without the preceding state of financial distress. Failure does not happen suddenly but occurs gradually, (Memba and Nyanumba, 2013). It's a dynamic process where a firm moves in and out of financial trouble and as it passes through separate stages, each with specific characteristics and consequently, contributes differently to corporate failure, (Menicucci and Paolucci, 2016).

According to Balcaen and Ooghe (2006) several accounting and financial measures have been used to identify financially distressed firms. These include the suspension of payment of dividends, negative net operating income, negative earnings before interest and tax, negative shareholders' funds, major restructuring or retrenchment and low interest coverage ratio. For instance, Sri (2017) in his study of the effect of corporate governance on financial distress for Indonesian firms used the interest coverage ratio to measure financial distress. Manzaneque, Priego and Merino (2016) in their study of the effect of corporate governance on financial distress for a sample drawn from Spain used lack of capacity to settle obligations as a measure of financial distress. Khalida, Muhammad, Sadaf, Umar and Imtiaz (2018) in their study of the relationship between board composition, firm size, firm ownership and performance of firms listed on the Karachi Stock Exchange between the periods 2006 to 2010 used negative earnings per share as a measure of financial distress. As pointed out by

Geng, Bose and Chen (2015) some of the methods that have been utilized to predict financial distress include discriminant analysis, logit or probit regression, distance to default, neural network, linear conditional probability models, genetic algorithm, neural network, decision trees and support vector machine.

The study used the reciprocal of the distance to default to measure financial distress. To measure a firm's solvency risk the distance to default Z score explicitly compares buffers (capitalization and returns) with risk (volatility of returns), (Cihak and Hesse,2010). It measures the financial stability of a firm and is negatively related to the probability that a firm can become broke. The higher the Z-score,the higher the stability of a firm and therefore a higher Z-score implies a lower probability of insolvency, (Rajhi and Hassairi, 2013).As proposed by Laeven and Levine (2009), the study determined the distance to default for each company as follows;

$$\text{Distance to Default Z score} = \frac{\text{CAR} + \text{ROE}}{\sigma\,(\text{ROE})}$$

Where:

CAR- is the firm's capital asset ratio, ROE is the return on equity, and σ (ROE) is the standard deviation of return on equity.

According to Bourkhis and Nabi (2013) firm insolvency is commonly defined as a state where $\text{CAR} + \text{ROE} \leq 0$.

The independent variable of the study was corporate governance practices. Corporate governance is a central and dynamic aspect of corporate business. The term is derived from the latin word *gubernare* which means to steer and applies to the steering of a ship. This implies that corporate governance involves the functions of direction rather than control, (Rezart, 2016). The concept of corporate governance can be viewed

from at least two perspectives- the narrow view and the broader view, (Olayiwola, 2010). The narrow view aims to maximize and protect the shareholder's value while from the broader viewpoint, the corporation is responsible for a wider constituency of stakeholders other than the shareholders. From the narrow viewpoint, Shleifer and Vishny (1999) define corporate governance as the process through which suppliers of finance to a corporation ensure a return on their investment. On the other hand, Cadbury (1997) define corporate governance as the system by which corporations are directed and controlled.

The broader perspective consider the company as a social entity that has accountability and responsibility to a variety of stakeholders, encompassing shareholders, creditors, customers, management, government, suppliers and the local community. Rezaee (2019) views corporate governance as an ongoing process of managing, controlling and assessing a corporation to create value for shareholders and protect the interest of other stakeholders. Likewise, the Capital Market Authority (2016) define corporate governance as the process and structure used to direct and manage the business and affairs of a firm towards enhancing prosperity and corporate accountability with the ultimate objective of maximizing value for shareholders while taking into account the interest of other stakeholders. The OECD (2004) views corporate governance as set of relations between a firm's management, its board, its shareholders and other stakeholders.

Alternatively, some scholars describe corporate governance as a set of internal and external mechanisms that are put in place in order to realize the objectives of an entity. The board structure and composition, transparency and disclosure, incentives structure and debt financing are regarded as internal corporate governance

mechanisms, which refers to the sum of management-disciplining mechanisms that can be influenced by the firm or its shareholders. In contrast, external mechanisms comprises of all disciplining mechanisms induced by external institutions and include laws and regulations, market for corporate control and market competition, (Susan, Gary and Howard, 2002). The use of such mechanisms could lead to greater stability in the business of a corporation, (Charbel and Nehme, 2012).

The study used board composition, board structure and ownership structure as indicators of corporate governance practices. According to Deloitte (2014) board composition refers to issues related to board independence, diversity and the CEO duality. Independence of the board refers to the trade-off between insider and outsider controlled boards, (Harris and Raviv, 2008). A corporate board is viewed as being independent when it's constituted by a majority of independent outside directors. Independent outside directors are directors who have no personal connection or business dealing with the firm, (CMA, 2016). Prior studies on corporate governance centered on financially distressed firms have used mainly two proxies to measure board independence: the separation of roles between the board chair and CEO and the presence of independent directors on the board, (Maere *et al*., 2014). In the study board independence has been represented by the number of independent members to the total size of the board.

Board diversity takes various forms and can be broadly categorized into the following elements; skills, expertise, experience, gender, age, ethnicity and geographical background. However, gender diversity is the most emphasized diversity in the boardroom, (Deloitte, 2014). Gender diversity refers to the presence of women on the board of directors and it's an important aspect of board diversity, (Sangeeta Mittal

and Lavina, 2018). On the other hand, board structure refers to attributes of the board such as size, tenure and activity, (Wagana and Nzulwa, 2016). The board tenure has been conceptualized by the average number of years a director has served on the boardroom, (Zahra, Jamal and Muhammad, 2018; Mwengei and Kosgei, 2017; Charbel and Nehme, 2012). Aideed and Muzaffar (2018) describe the board size as the number of directors sitting on the board in a particular year. The study represented board size by the number of members sitting on the board in a financial year, (Ayoola and Obokoh, 2018; Muhammad *et al.*, 2018; Akinleye, Odunayo and Bamikole, 2019). Sonnenfeld (2002) indicates that board activity is one of the critical elements of board performance as its shows the number of times the board meets to deliberate on issues of the firm. The study measured this variable by the frequency of board meetings in a financial year.

The ownership structure encompasses the decision making segment of the firm and is defined by the distribution of equity with regard to capital and votes, (Anthony, 2014). It's defined by the distribution of equity in addition to the identity of the owners of equity, (Nahila and Amarjeet, 2016). According to Benjamin and Dirk (2010) ownership structure is a system within corporate governance that has influenced corporate performance of firms for many years. This is because the owners have economic relations with the firm and not only influence the decisions undertaken but also the level of financial risk and performance. The ownership structure has a direct bearing on the risk orientation of the firm, (Ongore and K'Obonyo, 2011: Hall, Hutchinson, Michaelas, 2004). Prior literature reveals different levels of ownership; family, foreign, institutional, individual (dispersed), block, director and managerial ownership, [Montserrat, Alba and Elena (2016),

Parker, Peters and Turetsk (2002), Lee and Yeh (2004), Wang and Deng (2006), Reza, Yadollah and Najmeh (2016)]. The study evaluates ownership structure at block, managerial and institutional ownership constructs.

Managerial shareholding refers to the shareholding ownership of equity held by the company's management who actively participate in the making of corporate decisions, (Martin, 2017). The variable was selected for review because of the postulation by the agency theory that management may pursue self-serving interest in a modern corporation characterized by separation of ownership and control. Conversely, institutional investors are specialized financial institutions which manage savings on behalf of investors, (Ching-Chun *et al.*, 2017). They play a critical role in influencing financial distresses as their supervision may determine management's appetite for self –interest. Block owners refers to the owners of large volume of a firm's stock and are able to influence the company's decisions by virtue of their voting rights, (Ongore and K'obonyo, 2011).

In the current study firm size was represented by the natural logarithm of total assets, (Klock, Mansi and Maxwell, 2005). The study held firm size constant thus allowing the effect of other variables to be evaluated. Consistent with other prior studies, the current study incorporates financial leverage as a moderator, (Frah and Zeenet, 2013: George, Tabitha and Tobias 2018: Aideed and Muzaffar, 2018). Financial leverage is the proportion of capital that is financed by debt, (Berk and Demarzo, 2011: Hamidreza and Gholamreza, 2015). The higher the degree of financialleverage, the higher the amount of debt in the capital structure of a firm, (Aideed and Muzaffar, 2018; Maina and Ismaili, 2014). The study measured financial leverage by the debt ratio, which was determined by the ratio of total liabilities to total assets. The variable

was selected for analysis because debt presents a significant level of financial risk to the firm in form of interest and repayment of principal.Figure 2.1 shows the conceptual framework adopted by the study.

INDEPENDENT VARIABLE

MODERATING VARIABLE

DEPENDENT VARIABLE

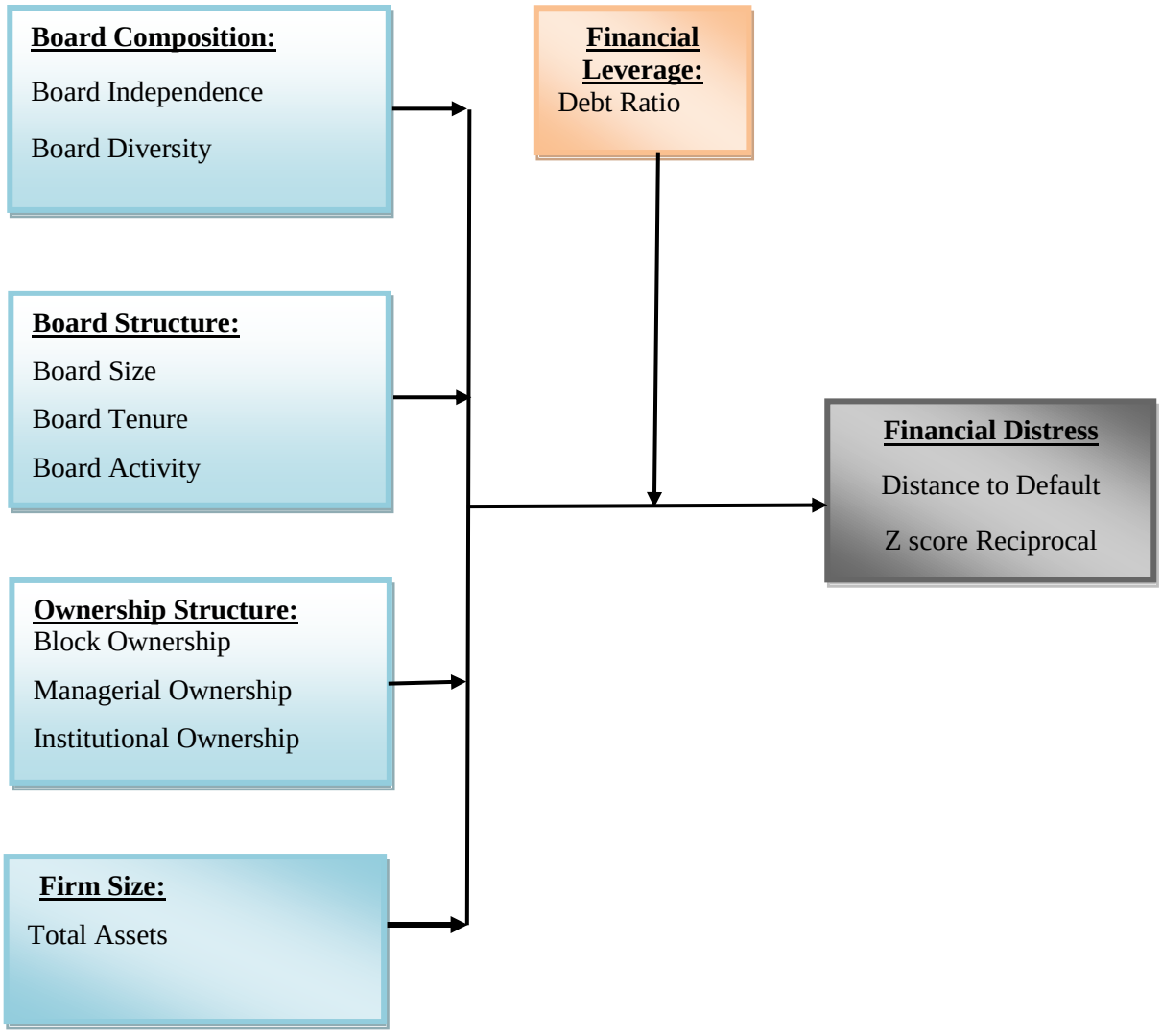

Figure 2. 1: Conceptual Framework

(Source: Researcher, 2020)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Overview

This chapter outlines the methodology that was used to conduct the study. This include research philosophy, model specification, model assumptions, measurement of variables, reliability and validity measures, research design, the population and sample, data collection procedures, data analysis and data presentation.

3.2 The Philosophical Foundation

Research is guided by philosophical assumptions about what constitutes a valid research and which method(s) are appropriate for its development, (Bryman and Bell, 2007). Research philosophy refers to a system of beliefs and assumptions about the development of knowledge. These include the assumptions about the realities the research encounters in the course of the research (ontological assumptions), human knowledge (epistemological assumptions) and the extent and ways in which values influence the research discourse (axiological assumptions),(Saunders, Lewis and Thornhill, 2009). The assumptions shape the understanding of the research questions, the methodology, data collection techniques and interpretation of the findings. Within the context of business research, Dudoviskiy (2016) argues that the main research philosophies include pragmatism, realism, positivism and interpretivism. According to Collins and Hussey, (2009) positivism and interpretivism are the two extreme mutually exclusive paradigms about the nature and sources of knowledge.

The study adopted the positivist research paradigm. This philosophy sticks to the view that only factual knowledge gained through observation (the senses), including measurement is trustworthy, (Saunders *et al*., 2009). In positivism, the role of the

researcher is limited to data collection and interpretation through an objective approach and the research findings are usually observable and quantifiable, (Collins and Hussy, 2009). The researcher is independent from the study and there are no provisions for human interest within the study. It depends on quantifiable observations that lead themselves to statistical analysis, (Dudovskiv, 2016). Studies with the positivism paradigm are based purely on facts and consider the world to be external and objective, (Wilson, 2009). The methodology adopted in this philosophy is quantitative, involving vastly structured hypotheses testing and statistical tools, i.e. quantitative method, (Alexander and Dmitry, 2013).

In line with the positivist research paradigm, the study used a scientific approach to test hypotheses and determine whether they are true or false. The study collected and analyzed quantifiable data on the influence of corporate governance practices on financial distress of corporations listed on the Nairobi Securities Exchange. The study adopted an objective statistical analysis of data and deductively made generalizations and conclusions. The hypotheses were verified through empirical tests. Further, the study sought facts or causes of the relationship with little regard to the subjectivity of the mind of the researcher. As a result, the study did not manipulate data during collection as it was independent to the subject of the research.

3.3 Model Specification

Model specification entails the formulation of a combination of variables which depicts the hypothesized relationship among the independent, dependent and the moderator variables. To achieve the objectives of the study, the multiple regression model was estimated as follows:

(Financial Distress)$_{it}$

$= \alpha_i + \beta_1$(firm size) $_{it}$ + β_2(Board Independence) $_{it}$ + β_3(Board Diversity) $_{it}$ + β_4 (Board Size) $_{it}$ + β_5 (Board Tenure) $_{it}$ +β_6 (BoardActivity) $_{it}$ + β_7 (Block Ownership) $_{it}$ + β_8 (Managerial Ownership) $_{it}$ + β_9 (Institutional Ownership) $_{it}$ + B_{10} (Financial Leverage) $_{it}$+ β_{11} (Financial Leverage*Board Independence) $_{it}$ + β_{12}(Financial Leverage*Board Diversity) $_{it}$ + β_{13}(Financial Leverage*Board Size)$_{it}$+ β_{14}(Financial Leverage*Board Tenure)$_{it}$ +β_{15}(Financial Leverage*BoardActivity) $_{it}$ + β_{16}(Financial Leverage*Block Ownership) $_{it}$ + β_{17}(Financial Leverage*Managerial Ownership)$_{it}$ + β_{18}(Financial Leverage*Institutional Ownership)$_{it}$ +ε_{it}...…………………………………(3.1)

Where;

i= the companies analyzed, ranging from 1 to 41, *t*= time in years from 2008 to 2017, β_1- β_{18} are slope coefficients, α_i– individual heterogeneityand ε_{it} =Error term.

The indicators of corporate governance practices, that is, board composition (board independence and board diversity), board structure (board size, board tenure and board activity) and ownership structure (block ownership, managerial ownership and institutional ownership) were regressed against financial distress. Besides, the model tested the moderating influence of financial leverage on the relationship between corporate governance practices and financial distress. As recommended by Baron and Kenny (1986) the products of the indicators of corporate governance practices and the moderator, financial leverage, were included in the model alongside the moderator and the independent variables.The control variable, firm size,was included in the panel regression model so as to correctly estimate the effect of corporate governance practices on financial distress. Firm size can strongly influence the results of the study

and hence its inclusion in the model allowed the relationship between financial distress and corporate governance practices to be understood better.

3.4 Model Assumptions

The linear regression model is based on a number of assumptions that include linearity in parameters, normality of random errors and the independence of errors terms, (Williams, Gomez and Kurkiewicz, 2013; Salkind, 2010). Additionally, the study used panel data that requires testing for muiticollinearity and stationarity, (Field, 2009: Arnold, 2008). This section provides a discussion on the various tests carried out to validate these model assumptions.

3.4.1 Test of Panel Multicollinearity

Multicollinearity in data occurs when two or more independent variables are highly correlated, (Field, 2009), meaning that one independent variable can be predicted from the others with some reasonable degree of accuracy, (Woolridge, 2002). According to Brook (2008) when the independent variables are highly correlated, the resultant regression model will have high standard errors of the individual coefficients making it sensitive to marginal changes in the specifications. When correlation between the independent variables is high it becomes difficult for the model to estimate the relationship between each independent variable and the dependent variable because the independent variables tend to change in unison, (Green, 2008).

According to Gujarat (2004) if the pairwise correlation coefficient between two independent variables is above 0.8 there is a serious problem of multicollinearity.The author explains that for a K-variable regression involving explanatory variables: X_1,

X_2, X_3,…, X_k (where X_1 is equal to one for all observations to allow for the intercept term) an exact linear relationship exists if the following condition is satisfied:

$$\lambda_1 X_1+\lambda_2 X_2+\lambda_3 X_3+\ldots\ +\lambda_k X_k= 0 \ldots\ldots\ldots\ldots(3.2)$$

Where $\lambda_1, \lambda_2 \ldots \lambda_k$ are constants such that not all are zero simultaneously. The term multicollinearity refers to a case where the X variables are inter-collerated but not perfectly as indicated below:

$$\lambda_1 X_1+ \lambda_2 X_2+ \lambda_3 X_3+\ldots\ +\lambda_k X_k + V_i = 0, \ldots\ldots\ldots\ldots(3.3)$$

Where Vi is a stochastic error term

In cases of multicollinearity, the estimators of the ordinary least squares havelargevariances and co-variances, consequently the regression coefficients are characterized by large standard errors (compared to the coefficients themselves). This implies that the regression coefficients can't be estimated with great precision. In the same way, the t ratios tend to be statistically insignificantalthough the coefficient of determination can be very high, (Farrar and Glauber, 1967).

3.4.2 Normality of Errors Test

One of the assumptions underlying the classical linear regression model is the assumption of normality of errors. Since in small or finite samples, the student's t-test require the normality assumption, it is important that the assumption be checked formally, (Gujarat, 2004). The residuals (errors) must be random, normality distributed with a mean of zero, so that the difference between the study model and the observed data should be close to zero. The residuals should be normality

distributed at every value of the dependent variable, while the predictors themselves do not have to be normally distributed, (Cohen and Lea, 2004).

The assumption of normality of errors was tested using the Jarque-Bera test, which uses two properties of a normal distribution, that is, the skewness and kurtosis. The test is a goodness of fit measure of departure from normality based on the sample skewness and kurtosis. It has an asymptotic chi-square distribution with two degrees of freedom. A normal distribution has a kurtosis of three and a skewness of zero indicating that it's perfectly symmetrical around the mean,(Box, Jenkins and Reinsel, 2008). The Jarque- Bera test was used to test the null hypothesis that the distribution is not normally distributed. In line with the recommendation by Hardin and Hilbe (2003), the study could have adopted the generalized linear technique to deal with a violation of the assumption of normality of errors. This technique is a flexible generalization of ordinary linear regression that allows for response variables that contain error distribution models other than normal distributions.

3.4.3 Stationarity in Data

Estimation of time series data is based on the assumption that the variables are stationary, (Brookes, 2008). Data that is non-stationary is often unreliable and estimating models without taking into consideration the non-stationary nature would lead to spurious results, (Gujarat, 2003; Chatfield, 1996). By definition a time series is stationary if itsproperties of the mean, variance and covariance do not change over time, (Ayat 2010). On the other hand, a non-stationary series contains a clear time trend and has a variance that is not constant overtime, (Pesaran, 2011; Baltagi, 2013). Becketti (2013) suggests that to properly analyze the relationship between two or more time series variables, there ought to be some stability over time.

There is need to analyze the stationarity conditions and for the sake of robustness in methodologies the study adopted the Levin, Levin, Chu (LLC), (2002) and Im, Pesaran, and Shin (IPS), (2003) unit roots tests.

3.4.3.1 Levin, Levin, Chu Test

Levin, Levin, Chu (2002) testassume that the models shown below produce the stochastic term Y_{it};

Model 1 $Y_{it} = \rho I y I_{,t-1} + \varepsilon_{I,t}$ ……(3.4)

Model 2 $Y_{it} = \alpha_i + \rho I y I_{,t-1} + \varepsilon_{I,t}$…….....(3.5)

Model 3 $Y_{it} = \alpha_i + \alpha_{it} + \rho I y I_{,\,t-1} + \varepsilon_{I,t}$ ……....(3.6)

The null and alternative hypothesis for model 1 is $\rho = I$ and $\rho < I$ respectively. The null hypothesis for model I was that the panel data contained a unit root whereas the alternative hypothesis was that the panel series was stationary. The assumption for the second and third model was that the error term was distributed independently across individuals and was stationary for each individual.

3.4.3.2 Im Pesaran and Shin Test

The IPS tests for the presence of unit roots in panels and combines information from the cross section-dimension with that from the time series dimension, such that few time series is sufficient for the test to have power. The IPS specifies the Augmented Dickey Fuller regression (ADF) for a cross-section with no individual and no time trends as shown hereafter;

$$\Delta y_{it} = \alpha_i + \rho_i y_{i,t\ 1} + \sum_{j=1}^{p_i} \beta_{ij} \Delta y_{i,t\ j} + \varepsilon_{it} \quad \text{……..(3.7)}$$

where i= 1,…,N and

t= 1,…,T

The IPS uses separate unit root tests for the N cross-section units. It's based on the ADF statistics averaged across groups. After estimating the separate ADF regressions, the average of the *t*-statistics for p_1 from the individual ADF regressions, $t_{iT_i}(p_i)$:

$$\bar{t}_{NT} = \frac{1}{N}\sum_{i=1}^{N} t_{iT}(p_i\beta_i) \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots.... (3.8)$$

The standardized *t*-bar statistic converges to the normal distribution as N and T→∞.

In case of non-stationarity, the study will adopt a cointergration analysis. Cointegration testing is an econometric concept that is used to analyze non-stationary time series, that is, processes that have variances and means that vary over time, (Rao, 2007). It allows the estimation of the long run parameters in systems with unit roots variables and provides a flexible functional form for modeling the behavior of the variables under the long-run equilibrium status. If a linear combination of two variables has a lower order of integration, then the sets of variables are cointergrated, (Engle and Granger, 1987).

One weakness of the LLC test is that it relies critically on the assumption of cross-sectional independence. Further, the null hypothesis that all cross-sections have a unit root is very restrictive and does not allow intermediate case where some individuals are subject to a unit root and some are not. On the other hands, the IPS is not very restrictive as the LLC since it allow for heterogeneous coefficient. In the presence of a linear time trend, the power of IPS test diminishes. The LLC performs better if the time dimension is large relative to cross sectional dimension and has low power for a small time dimension, (Baltagi, 2013). Thus, it's advisable to analyze the outcome of both the LLC and IPS test.

3.5 Data Types and Measurements

This section outlines the reliability and validity measures, data types and the measurement of study variables.

3.5.1 Reliability and Validity

Validity refers to the degree to which a research instrument measures what it's supposed to measure. The study measured validity in terms of content and construct validities. According to Cooper and Schindler (2008), construct validity refers to the extent to which a measure may be said to represent a theoretical construct or trait, deriving from established relationships among behavioral measures. Construct validity measures the degree to which the sampled items are a fair representation of the characteristics of attributes measured. On the other hand, content validity relates to the degree to which the content of the items adequately represents the universe of the relevant items under study. Content validity was maintained through anchoring of the measures of the variables on the conceptual framework. To ensure construct validity, the various measures and variables were derived from theory and prior empirical studies. Furthermore, the study used secondary data that was be derived from audited financial statements. Besides the mandatory and independent audit, listed companies are subjected to thorough scrutiny by the regulator, Capital Market Authority. Therefore, it's expected that data derived from these sources is reliable.

3.5.2 Data Types

The study used secondary data. Secondary data refers to pre-existing data that has been generated for a different purpose or by someone other than the researcher, (Cowton, 1998). It includes data collected by others, not specifically for the research

question at hand. The essential point is that the researcher does not gather the data, (Creswell, 2012). The study adopted secondary data because of the advantages that accrue from its use. Conducting research based on secondary data entail considerable savings in time, money and labor relative to when primary data is used. Besides, variables of the study could better be explained quantitatively.

3.5.3 Measurement of Variables

The study adopted financial distress as the dependent variable. Board structure, board composition and ownership structure constituted the explanatory variables. The moderating and control variable comprised of financial leverage and firm size respectively. This segment provides detail of how each of the study variable was measured and operationalized.

3.5.3.1 Financial Distress

Financial distress refers to the inability of an entity to meet its financial obligations as and when they fall due or does so with difficulties, (Ayoola and Obokoh, 2018; Agrawal, 2015; Kihooto, Omagwa, Wachira and Emojong, 2016). Some scholars posit that financial distress can occur if the value of the company's total assets is less than the value of the debt obligation, (Wei-Ling and Leh-Chyan, 2014). The study used the reciprocal of the distance to default Z score to measure financial distress. According to Rajhi and Hassairi, (2013) the distance to default Z score indicates financial stability of an entity and thus its reciprocal varies directly with the probability of financial distress.

3.5.3.2 Financial Leverage

The study utilized financial leverage as moderator in evaluating the influence of corporate governance practices on financial distress. According to Fabozzi and Drake (2009) financial leverage encapsulates the extent to which an entity employs debt and equity in its capital structure. The debt component of financial leverage is the sum total of current and non-current liabilities. Equity consists of the aggregate of share-premium, reserves, minority interest, paid-up capital and retained earnings, (Pandey, 2009). In the study financial leverage was represented by the debt ratio, which has been widely used in similar prior studies, (Frah, Muhammad and Zeenet (2013); George, Tabitha and Tobias (2018); Aideed and Muzaffar (2018) and Amirhossein and Ali (2017).

3.5.3.3 Firm Size

The study used firm size as a control variable. Firm size refers to how big or small a firm is in terms of assets, (Surajit and Saxena, 2009). Firm size was measured by the natural logarithm of total assets. The inclusion of firm size as a control variable was informed by the fact that the variable has potential to influence the relationship between corporate governance practices and financial distress, (Amato and Burson (2007); Gonenc (2005); Serrarsquerio and Nunes, 2008; Montserrat, Alba and Elena 2016).

3.5.3.4 Ownership Structure

The ownership structure of a firm refers to the distribution of equity with regard to capital and votes, (Anthony, 2014); Nahila and Amarjeet, 2016). The variable was indicated by managerial, institutional and block ownership. Managerial shareholding

refers to the shareholding held by management whereas institutional ownership was measured by the proportion of shares held by institutional investors. Block ownership refers to the shareholding attributed to the owners of the largest volume of a firm's shares, (Malik, 2007) and was represented by the proportion of shares held by the five largest shareholders.

3.5.3.5 Board Structure

Board structure was indicated by board size, board tenure and board activity. The board tenure was conceptualized by the average number of years a director has served as a member of the board of directors in line with studies by Mwengei and Kosgei (2017), Charbel and Nehme (2012), Maere *et al*. (2014) and Zahra, Jamal and Muhammad (2018). Board size was hypothesized by the number of members sitting on a corporate board, (Garg, 2007). On the other hand, consistent with studies by Mangena and Tauringana (2008), Dissanayke *et al.* (2017), Zahra, Jamal and Muhammad (2018) board activity was represented by the average number of meetings held by the board in a year.

3.5.3.6 Board Composition

Board independence and diversity were used as indicators of board composition. A board is deemed independent if it constitutes of a majority of independent outside directors, (Lakshan and Wijekoon, 2012). Board independence was represented by the proportion of independent members in the board. Contrariwise, board diversity includes characteristics of the board such as the mix of skills, gender, age, ethnicity and geographical orientation. The study adopted the gender perspective of diversity, which was measured by the ratio of female directors to the size of the board. A

summary of the definition and measurement of the study variables is presented in Table 3.1

Table 3. 1: Summary of Variable Definition and Measurement

Variable	Variable Name	Indicator	Sub-indicator	Measurement
Independent Variable	Corporate Governance	Board composition	Board diversity	Proportion of female board members
			Board independence	Proportion of independent members
		Board Structure	Board size	Number of board members
			Board Tenure	Number of years of service in the board
			Board Activity	Number of board meetings in a year
		Ownership Structure	Block ownership	Proportion of shares held by the largest five shareholders
			Managerial ownership	Proportion of shares held by the management board
			Institutional ownership	Proportion of shares held by institutional investors
Dependent Variable	Financial Distress	Probability of Default	Distance to default	Reciprocal of the distance to default Z score
Moderating Variable	Financial Leverage	Total liabilities to total assets		Total debt (Total book value of debt) divided by total capital (market value of equity + book value of debt)

(Source: Researcher, 2020)

3.6 Research Design, Population and Data Collection Procedure

This section outlines the research design, target population, sample of the study, data collection procedures, data analysis methodology and presentation.

3.6.1 Research Design

Welman, Kruger and Michell (2009) describe a research design as the overall plan, according to which the respondents of a proposed study are selected, as well as the means of data collection and generation. It's the plan or blue print for conducting a research. According to Creswell (2012) a research design is the procedure for collecting, analyzing and reporting research in quantitative and qualitative studies. Cooper and Schindler (2008) define research design as the plan and structure of investigation so conceived as to obtain answers to research questions. Kothari (2004) contends that a research design is a master plan that specifies the methods and procedures for collecting and analyzing the needed information.

The study employed an *ex-post facto* explanatory research design to analyze the influence of corporate governance practices on financial distress for firms listed at the NSE for a period of 10 years from 2008 to 2017. An e*x- post facto* design is ideal for conducting research when it's not possible or acceptable to manipulate the characteristics or variables to investigate their potential on the dependent variable, (Cohen, Manion and Morrisson, 2007). It's a research design in which the investigation starts after the fact has occurred and does not include any form of manipulations or measurement before the fact occurred, (Black, 1999). On the other hand, the explanatory research design is carried out to identify the extent and nature of cause and effect relationships, (Creswell, 2012). The design involves an

investigation into an issue that looks at the effect of one variable on another, (Sekaran and Bougie, 2013).

An *ex-post facto* explanatory research design enabled the researcher to examine the effect (financial distress) and tries afterward to determine the cause (corporate governance practices), without manipulating the antecedent conditions. The design made it possible to examine the dependent variable retrospectively in order to identify possible causes or contributing factors and possible relationship between dependent variable and independent variable. The design was used to establish the causal relationship between corporate governance practices and financial distress and determine whether significant associations existed.

3.6.2 Target Population

The population of study refers to the entire group of individuals, events or objects having a common observable characteristic. It includes an aggregate of all that conforms to given specification, (Mugenda and Mugenda, 2003). Sekaran and Bougie (2013) define the population as a collection of individuals or objects known to have similar characteristics. The population of the study comprised of the 65 listed companies at the Nairobi Securities Exchange as at 31st December, 2017, (NSE, 2017). The study chose to analyze listed firms because of the availability and reliability of the financial statements from which the data was collected. These firms are subjected to mandatory external audits as well as scrutiny by the regulators.

3.6.3 Sample of the Study

The study conducted a census survey because of the small size of the population. According to Kothari (2004) a census inquiry involves a complete enumeration of all

the items in the population. In such kind of enquiry, where all items are covered, there is no element of chance left thus obtaining highest accuracy. The intention of the study was to include all the 65 companies in the study and because of the reason that not all companies had full financial reports for the study period; only 41 were included in the final analysis. The study analyzed ten variables for each company (board diversity, board independence, board size, board tenure, board activity, block ownership, managerial ownership, institutional ownership, financial distress and firm size), which translated to 410 data points. The study only considered corporations which had been listed at the Nairobi Securities Exchange and had full financial statements from 2008 to 2017.

3.6.4 Data Collection Procedures

The researcher sought authority from Rongo University to proceed to the field for data collection. Further, the researcher sought permission from the National Commission for Science, Technology and Innovation. Since the study involves secondary data, the researcher physically visited the Capital Markets Authority and Nairobi Securities Exchange libraries to collect the relevant data. The data was collected with the help of trained research assistants.

To ensure the completeness of data, the study utilized a data collection guide. For each company and for the period 2008 to 2017, the study sought to collect data on the number of board members, female board members, independent board members, number of years of service of board members and the number of board meetings in a year. The study also sought data on the ownership structure and this involved collecting data on the total number of outstanding shares, shares owned by institutional investors, management and the five largest shareholders. Besides, data on

market value of equity, book value of debt, total value of assets, operating results and shareholders' equity was also collected.

3.7 Data Analysis and Presentation

Gall, Gall and Borg (2007) defines data analysis as the practice in which raw data is ordered and organized so that useful information can be extracted from it. Empirical data obtained from the audited financial statements and other reports of firms listed at the NSE for the period 2008 to 2017 was analyzed by means of panel regression techniques. The tests of stationarity, multicollinearity and normality of errors were carried out to determine the suitability of the data for regression analysis. A determination of whether the data was pool-able or not was decided by the application of the fixed effects and random effects models as guided by the Hausman test. Hypothesis was tested using the t-test at 95% confidence level. Besides inferential statistics, descriptive statistical techniques were employed to analyze data. Descriptive statistics, that is, standard deviation, mean, minimum and maximum values were computed for each variable. Inferential statics, that is, regression analysis were used to establish the nature and magnitude of the relationships among the study variables. Data was be presented in form of tables and graphs.

3.7.1 Panel Regression Model Estimations

To determine whether the data is pool-able or not,the study conducted both the fixed effects and random effects tests as guided by the Hausman test. In the fixed effects model, the unobserved variables are allowed to have any associations whatsoever with the observed variables. The fixed effect model controls for all time-invariant differences between the individuals so that the estimated coefficients of the fixed model cannot be biased because of omitted time-invariant characteristics.The

regression model under the fixed effect estimation model allows the intercept to vary across time space with the slope coefficients remaining constant, (Green, 2008). By so doing, the model includes the differences in individual characteristics of the entities being studied such as management style or philosophy. This is achieved by employing the mean differencing or differentiated intercept dummies technique, (Tabachnick and Fidell, 2001). Another way of specifying the fixed effect model involves designing model that allows for the intercept to vary across the individual firms and time with the slope coefficients remaining constant, (Gujarat, 2004).

Green (2008) asserts that the main distinction between fixed and random effects is whether the unobserved individual effect embodies elements that are correlated with the model regressors, not whether these effects are stochastic or not. The rationale behind the random effects model is that, unlike the fixed effects model, the variation across entities is assumed to behave randomly and uncorrelated with the independent variables that are included in the model. The model assumes that the entity's error term is not correlated with the predictors which allows for time-invariant variables to play a key role as explanatory variables. According to Gujarat (2004) the model assumes that all the sample firms being studied have an intercept that has universal mean. This means that differences in their individual features are captured by the intercept term which is reflected as deviations from the mean term, (Torres, 2007). In this model the composite error term consists of two components: the firm –specific component and the combined time series and cross sectional error component. In order to determine which estimation effects provide superior results between fixed and random effects, the study conducted the Hausman test for the specified regression

model. The test was conducted against the null hypothesis that the random model is the superior model.

3.7.2 Testing of Hypothesis

The theory of hypothesis testing is concerned with the development of procedures or rules for deciding whether or not to reject the null hypothesis, (Gujarat, 2004). The study used thetest of significance approach to test statistical hypothesis.According to Gujart (2004) the test of significance is a procedure by which sample results are used to verify the truth or falsity of a null hypothesis. The gist behind the test of significance is that of a test statistic and the sampling distribution of such statistic under the null hypothesis. The study utilized the t-statistic to test the hypothesis that a coefficient is equal to zero. The t-statistic wasinterpreted on the basis of the absolute values and the probability value, assuming that the coefficient is equal to zero. The decision on whether the t-statistic is significant or not was made in reference to the probability value.According to Green (2008), the probability value measures the strength of evidence in support of the null hypothesis and refers to the probability of observing a test statistic as extreme as the t statistic, assuming the null hypothesis is true. It can also be defined as the lowest significance level at which a null hypothesis can be rejected, (Gujarat, 2008). If the *p*value is less that the significance level, the study rejected the null hypothesis.

Table 3. 2: Summary of the Study Objectives, Hypotheses, Analytical Model, Analytical Technique and the Decision Rule

Objectives	Hypotheses Statement	Analytical Technique	Decision Rule
To examine the influence of board composition on financial distress of firms listed at the NSE.	H_{01}: There is no significant influence of board composition on financial distress of firms listed at the NSE.	T -test	$H_{01}: \beta_1=0$ $H_{01}: \beta_1 \neq 0$ Reject H_0 if $p \leq 0.05$
To determine the influence of board structure on financial distress of firms listed at the NSE.	H_{02}: There is no significant influence of board structure on financial distress of firms listed at the NSE.	T -test	$H_{01}: \beta_2=0$ $H_{01}: \beta_2 \neq 0$ Reject H_0 if $p \leq 0.05$
To establish the influence of ownership structure on financial distress of firms listed at the NSE.	H_{03}: There is no significant influence of ownership structure on financial distress of firms listed at the NSE.	T -test	$H_{01}: \beta_3=0$ $H_{01}: \beta_3 \neq 0$ Reject H_0 if $p \leq 0.05$
To evaluate the moderating influence of leverage on the relationship between corporate governance practices and financial distress of firms listed at the NSE.	H_{04}: There is no significant moderating influence of financial leverage on the relationship between corporate governance practices and financial distress of firms listed at the NSE.	T -test	$H_{01}: \beta_4=0$ $H_{01}: \beta_4 \neq 0$ Reject H_0 if $p \leq 0.05$

(Source: Researcher, 2020)

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Overview

This chapter presents the findings and interpretation of results as indicated in the research methodology. Analysis of data commenced by a descriptive analysis so as to understand the general profile of the companies studied. Moreover, appropriate statistical quality tests were carried out to determine the suitability of data for further statistical analysis. This was followed by a panel statistics analysis and interpretation of results using inferential statistics. Lastly, a discussion of the results is presented in the context of theoretical and empirical literature.

4.2 Background Information

This segment presents the results of descriptive analysis of the data collected based on a measure of central tendency (mean) and measures of dispersion (standard deviation, maximum and minimum measures). The results presented in Table 4.1 shows that during the period of analysis, financial distresshad a mean of 0.2399with a minimum of -1.7533 and a maximum of 9.0522.Thevariable had a spread of 0.0851 around the mean. It can also be deduced from the results that the sampled firms had an average size of 8 board members, with a maximum of 16 and a minimum of 4, that deviated by 3 directors on either side of the average. The results further show that the independent directors comprise of 51% of the board size with a minimum of 30% and a maximum of 80% that was spread on either side of the mean by 16%. Besides, board diversity had a mean of 21% with a maximum and minimum of 50% and 10% respectively. The standard deviation indicates that the spread of the variable on either side of the mean is 19%.

It can also be seen from the results shown in Table 4.1 that on average institutional investors hold 71% of equity stakes in the sampled firms, with a minimum of 32% and a maximum of 98% that is spread on either side of the average by 14%. On the other hand, block holders ownan average of 67.1% with a maximum of 92% and a minimum of 35 percent. The ownership is spread on either side of the mean by 19%. Managerial shareholding holding is negligible with an average of five percent of the equity stake. The maximum managerial shareholding is 0.03% with a minimum of zero percent and the spread on either side of the mean was 0.25%. The moderating variable, financial leverage had an average of 65% anda standard deviation of 0.45. Further, the results showed that the average board tenure was 6.3 years with maximum of 9.4 years and a minimum of 0.08 years. Board activity, on the other side, had an average of 6 meetings in a year, with a maximum of 16 meetings and a minimum of 3 meetings in a year. The spread on either side of the mean was 3 meetings. The result of descriptive analysis is shown in Table 4.1

Table 4. 1: Descriptive Statistics of Variables

Variable	Obs.	Min.	Max.	Mean	Std. Deviation
Financial distress	410	-1.7533	9.0522	0.2398	0.0851
Board diversity	410	0.01	1.50	0.21	0.19
Board independence	410	0.42	0.87	0.51	0.16
Board size	410	4.00	16.00	8.29	2.68
Board Tenure	410	0.08	9.40	6.32	3.77
Board activity	410	3.00	16.00	5.81	2.70
Block ownership	410	0.35	0.92	0.67	0.19
Managerial ownership	410	000	0.30	0.05	0.025
Institutional ownership	410	0.32	0.98	0.71	0.14
Financial leverage	410	0.08	6.60	0.65	0.45

Source: Research Data (2020)

4. 3 Model Assumptions Tests Result

The study verified the suitability of the data collected for panel data regression analysis. This was done through testing for assumptions of normality of errors, multi-collinearity, autocorrelation, panel- level heteroscedasticity and stationarity. This was necessitated by the realization that violation of these assumptions may lead to biased estimates of the standard errors and significance levels, which may lead to spurious conclusions, (Green, 2008: Gujarat, 2004). Where violations of these assumptions were noted, appropriate remedies were applied. Therefore, this section presents the results of the diagnostic tests with the appropriate remedial actions, where necessary, to ensure suitability of data.

4.3.1 Normality of Errors Test

The test for the normality of errors was conducted using the Jarque-Bera test. The result of the test shows that the value of the statistic is 10.3978 with a probability of 0.4240. Since the probability value of the model was greater than the conventional significance level of 5%, the study concluded that the errors were normally

distributed. The null hypothesis that the errors were not normally distributed was thus rejected.

4.3.2 Test for Stationarity in Data

To determine the stationarity of the pane data, the Levin, Levin, Chu test, (2002) and the Im Pesaran and Shin Test, (2003) were applied on the study variables. The two tests were based on the null hypothesis that the panel data is non-stationary against the alternative hypothesis that the data is stationary. The results of the panel unit roots tests as shown in table 4.2 indicate that all the variableswere stationary at 1(0). The null hypothesis was rejected since all the probability values were significant. As a result, a robust regression model would be fitted at levels (without lags). Further, there was no need to conduct a cointergration analysis as the variables were found to be stationary.In Table 4.2 are the results following the stationary analysis.

Table 4. 2: Panel Unit Root Test Results

Variable	Levin, Levin, Chu Test	Im Pesaran and Shin Test	**Conclusion**
Firm Size	-4.0478**	-3.85623**	I (0) with individual intercept
Financial Distress	-2.6545***	-0.70412***	I (0) with individual intercept
Board Independence	-8.1060 **	-5.0063**	I (0) with individual intercept and trend
Board Diversity	-0.8906*	-0.4563*	I (0) with individual intercept
Board Size	-15.5231***	-7.4765***	I (0) with individual intercept
Board Tenure	-4.2331**	-1.9551**	I (0) with individual intercept
Board Activity	-6.5204**	1.5312**	I (0) with individual intercept and trend
Block Ownership	-2.2573**	-1.3945**	I (0) with individual intercept
Managerial ownership	-0.5463*	-0.2498*	I (0) with individual intercept
Institutional Ownership	-0.4420*	1.8106*	I (0) with individual intercept and trend
Financial Leverage	-0.6875***	-0.3476***	I (0) with individual intercept

*Note: *, **and *** indicatelevel of significance at 10%, 5% and 1% respectively.*
(Source: Research Data, 2020)

4.3.3Test of Multicollinearity Results

The test for multicollinearity among the independent variables was conducted using pair wise correlation analysis and the result is presented in Table 4.3. The results show that financial distress, firm size, board independence, board diversity, board size, board tenure, board activity, block ownership, managerial ownership, and institutional ownership were not highly correlated. Since the absolute values of the coefficients of all the independent variables were below 0.8, the study concluded there is no problem of collinearity.

Table 4. 3: Pairwise Correlation Analysis Results

	Variable	1	2	3	4	5	6	7	8	9	10	11
1	Financial distress	1.000										
2	Firm size	0.036	1.000									
3	board diversity	0.018	0.064	1.000								
4	Board independence	-0.061	0.006	0.559	1.000							
5	Board size	0.017	0.544	-0.031	-0.385	1.000						
6	Board tenure	-0.068	0.249	0.080	0.088	0.301	1.000					
7	Board activity	-0.034	0.376	0.068	0.105	0.211	0.181	1.000				
8	Block ownership	-0.041	-0.313	0.003	-0.055	-0.181	0.030	-0.129	1.000			
9	Managerial ownership	-0.011	0.036	0.010	0.332	-0.154	0.023	0.523	-0.027	1.000		
10	Institutional ownership	0.022	-0.311	0.066	-0.039	-0.199	-0.127	0.027	0.700	-0.218	1.000	
11	Financial Leverage	0.050	0.148	0.029	-0.006	0.233	0.063	0.013	-0.170	-0.031	-0.165	1.000

Source: Research Data: 2020

4.4Choice of Appropriate Model

The study carried out both the fixed effects andthe random effects model tests.The fixed effects model assumes that individual company characteristics playa critical role in influencing a firm's state of financial distress. The model recognizes that the firm'sindividuality in form of managerial system, talent and philosophy is critical in estimating the parameters of the model. It's unrestrictive and does not assume that that the data is pool-able. In contrast, the random effects model is restrictive and assumes that data is pool-able so that any difference among the firms is captured by the stochastic term, (Tabachnick and Fidell, 2001: Gujarat, 2004 and Green, 2008).In determining the appropriate model between fixed effects and random effects model, the study was guided by the Hausman test. The test involves sequentially estimating both the random and fixed models (starting with the fixed model) against the null hypothesis that the preferred model is random effects at 5% confidence level.

The result of the Hausman test provides a Chi-square statistic and a *p*value that forms the basis of accepting or rejecting the null hypothesis,(Hausman, 1978). The criteria is that the null hypothesis is rejected if the Chi-square statistic is significant at 5% level of significance, or else, the null is accepted. Results presented in Table 4.4show that the Chi-square statistic for the model is insignificant at 5% level as evidenced by a *p*value of 0.0762. The study therefore failed to reject the null hypothesis that the random effect was the preferred model and therefore estimated the model equation for random effects. Table 4.4 shows the results of the Hausman test.

Table 4. 4: Hausman Test Results for Difference in Coefficients

Variable	Fixed (b)	Random (B)	(b-B) Difference	sqrt(diag(V_b -V_B))
Firm Size	0.1145362	0.0335719	0.0809643	0.1026
Board Independence	0.4495659	-0.2516814	0.7012472	0.3148
Board Diversity	-3.019855	-2.0097	-1.010155	1.4957
Board Size	0.0647593	-0.0311735	0.0959328	0.0659
Board Tenure	-0.133669	0.0115662	-0.1452352	0.1082
Board Activity	0.0387782	0.1025778	-0.0637996	0.0455
Block Ownership	-2.836936	2.640468	5.477404	2.2221
Managerial Ownership	-0.4404483	-0.5316245	0.0911762	1.5042
Institutional Ownership	-1.846895	-4.162010	2.315115	2.3829
Financial Leverage (L)	-1.099611	-0.774432	-0.3251793	1.2646
Board Diversity *L	4.018338	2.619479	1.398859	2.1919
Board Independence*L	0.1317446	0.6559936	-0.524249	0.1948
Board Size*L	0.0706801	0.061321	0.0093591	0.0368
Board Tenure*L	0.0220074	-0.0803486	0.102356	0.1197
Board Activity *L	-0.1814138	-0.1746099	-0.0068039	0.0437
Block Ownership*L	-1.467360	-6.29765	4.830291	1.3545
Managerial Ownership*L	1.932071	0.8148316	1.117239	1.178
Institutional Ownership*L	2.832532	7.408876	-4.576344	1.3903

Source: Research Data, 2020

$\chi 2$= (b-B)'[(V_b-V_B)^(-1)](b-B) = 32.45

P = 0.0762

4.5 Panel Regression Analysis

The objectives of the study were to investigate:the influence of board composition on financial distress, the influence of board structure on financial distress, the influence of ownership structure on financial distress and the moderating influence of financial leverage on the relationship between corporate governance practices and financial distress of firms listed at the Nairobi Securities Exchange over the period 2008 to 2017. To achieve these objectives, the study conducted a panel regression analysis guided by the model outlined in section 3.3.In deciding the importance and the direction of the relationships, the study relied on the probability value (*p*value) andthe

sign of the coefficient of each variable, (Donker, Santen and Zahir, 2009; Wang and Deng, 2006; Miglani *et al*., 2015).

4.5.1 The Influence of Board Composition on Financial Distress

Board composition was represented by measures of board independence and board diversity. The first hypothesis tested by the study was that there is no significant influence of board independence on financial distress of firms listed at the NSE. As shown by the regression results in Table 4.5, board independence had an important influence on financial distress as the corresponding *p*value (0.0490) isless than 5% significance level. Therefore, the hypothesis that board independence does not have a significant influence on financial distress was rejected and consequently concluded that board independence importantly influence financial distress. The results further show that coefficient of board independence is negative sign, (β= -2.0097), which shows that the relationship between the variable and financial distress is inverse. This means that as the level of board independence increases, the probability of financial distress decreases.Similarly, low levels of board independence increase the likelihood of financial distress.

Thisresult is in line with the agency and the resource dependence theories that advocate for boards dominated by independent directors. The agency theory postulates that the monitoring function of the board could be better with a board dominated by independent directors. Such a board is more likely to act in the best interest of shareholders and thus promote activities that ensure that the firm is financially sound, (Adullah and Valentine, 2009). Likewise, the resource dependence theory supports a board dominated by independent board members on the premise that such composition will enable the firm to reduce external uncertainties by

accessing critical resources, (Adams and Ferreira, 2007) that will enable it to be financially non-distressed. On the contrary, the stewardship theory advocates for an inside controlled board for the reason that insiders have superior understanding of the business of the firm than outside directors, (Stout, 2003). Therefore, with such inside experience they are likely to ensure stability of the firm relative to when the board is dominated by outsiders, (Li, Wang and Deng, 2008).

Areview of empirical literature indicates that there is a mixed influence of board independence on financial distress. Nevertheless, the finding of this study in respect to board independenceis in agreement with studies by Fathi and Jean-Pierre (2001), who researched on Canadian firms and established an inverse effect of board independence on financial distress. Scholarly work by Manzaneque *et al.* (2016), based on sample of firms drawn from Spain for the period 2007 to 2012, established that board independence decreases the possibility of financial distress. Moreover, Luqman *et al.* (2018) in their study of firms listed on the Karachi Stock Exchange during the period 2006 to 2015 indicate that board independence is inversely related to financial distress. Other studies that support an inverse relationship between board independence and financial distress includes, Ahmed and Syed (2017); Li, Wang and Deng (2008); Mwengei and Kosgei (2017); Lakshan and Wijekoon (2012): Hong-xia, Zong-jun and Xiao-ian (2008).

On the converse, scholars such as Bilal, Faudziah and Syed (2014), Abdullah (2006) and Ayoola and Obokoh (2018) posit that the influence of board independence on financial distress is direct. These studies opine that an increase in board independence could lead to an increase in financial distress. These scholars attribute the direct influence of board independence on financial distress to boards dominated by

outsiders with inadequate experience on the firm's operations. Other scholars lead by Xavier (2014) and Dissanayke *et al.* (2017) affirm that board independence and financial distress reflect an insignificant relationship.

Based on the finding and discussion, the study determines that board independence is an important factor that reduces the likelihood of financial distress and therefore corporate stakeholders should put up structures to ensure independence of boards. The findings support the key benefit of having independent board members. They could bring in expertise and knowledge in areas where the management's team may be lacking such as internal controls, finance, human resources, strategy, tax and other areas and this may have a direct bearing in reducing financial distress.

The second hypothesis verified by the study is that there is no significant influence of board diversity on financial distress of firms listed at the Nairobi Securities Exchange.Results presented in Table 4.5 show that board diversity has a significant influence on financial distress with a probability value of 0.025. This probability value is less than the set level of significance of 5%, thus providing sufficient evidence to reject the null hypothesis. The study, therefore, posits that board diversity has an important influence on financial distress.The empirical results further shows that the coefficient of board diversity, (β= 0.2519), is positive implying a direct relationship with the likelihood of financial distress. The result demonstrates that an increase in board diversity could result in an increase in financial distress.

The direct relationship between board diversity and financial distress contradict the propositions of the agency and the resource dependence theories. The agency theory advocates for diversified boards that exhibit the characteristics of independence and better monitoring, (Carter *et al*., 2003). A more diversified board is likely to provide

better monitoring,(Sangeeta and Lavina, 2018), leading to improved corporate governance, (Terjesen, Sealy and Singh 2009). By the same token, the resource dependence theory supports a diversified board on the premise that it's likely to bring in resources that are critical in ensuring financial soundness, (Stiles, 2001).

One of the most likely explanations for this finding, which is contrary to theoretical foundations, is that female representation in the Kenyan corporate boards is negligible. This was evidenced by the descriptive statistics presented in Table 4.1 which shows that board diversity has a mean of 21%. Thus, the proportion of female members sitting on the corporate boards of firms listed at the Nairobi Securities Exchange is small so as to have a meaningful impact on corporate governance issues. Based on a study of Indian firms for the period 2013 to 2016, Sangeeta Mittal and Lavina (2018) assert that female directors have a little influence on financial distress when their presence on the board is very low. Besides, the study attributes this finding to the inclusion of females board members who do not have adequate experience of firms on whose boards they sit, thus their influence may be curtailed.

The above results were supported by prior studies on the link between board diversity and financial distress. The results were consistent with studies by Letting, Aosa and Machuki (2012) who found a direct link between board diversity and financial distress of firms listed at the Nairobi Securities Exchange. Abdullah, Muhammad and Karren (2016) in their study of the influence of gender diversity on financial distress for Malaysian firms found a significant but direct influence on financial distress. Similar findings were reported by Carter, Simkins and Simpson (2003) who conveyed a significant direct relationship between board diversity and financial distress. On the contrary, Charbel and Nehme (2012) found no significant relationship between

female directors on the board and financial distress for sample of 276 Lebanese non-listed firms. Similar results were posted by David *et al.* (2010) and Donker, Santen and Zahir (2009) who found no relationship between the gender of a director and financial distress. The no relationship resultwas attributed to the low representation of females on boards of corporations.

The findings provide evidence that gender diversity does contribute to financial distress, though it increases as diversity increases. Though theory advocates that an increase in gender diversity reduce financial distress, the finding of the study suggest otherwise. The study attributed the findings to low female representation and inexperience in a male dominated environment. Due to the apparent benefits of increased gender diversity, this study recommends that corporations should increase their small percentages of females on board in order to potentially achieve such advantages.

4.5.2 The Influence of Board Structure on Financial Distress

The study represented board structure using board size, board tenure and board activity. The third hypothesis of the study sought to establish that there is no significant influence of board size on financial distress of firms listed at the Nairobi Securities Exchange.The regression results (Table 4.5) indicate that board size has a significant influence on financial distress,(*p*value=0.028). Theprobability value is less than 5% level of significance and as a result the influence of board size on financial distress is significant.Consequently, the study rejected the hypothesis that there is no significant influence of board size on financial distress.Besides, the regression results show that board size has a negative coefficient, (β = -0.0312), implying an inverse influence on financial distress.This result means that as board size increase, the

chances of financial distress decline, thereby suggesting that firms with large boards are not likely to experience financial distress. Correspondingly, a reduced board size increases the probability of financial distress.

The inverse relationship between board size and financial distress concurs with theoretical propositions. The agency theory vouches for large boards with a large number of directors on the grounds that such aboard consists of more directors who are likely to pursue the interest of the shareholdersby reducing agency costs, (Lakshan and Wijekoon, 2012). A large board is not likely to side with managers and may not dilute the interests of the capital providers, (Connelly and Limpaphayom, 2004), and thus not likely to lead the firm to a state of financial distress.Similarly, the support of the resource dependency theory for a large board arises from its likely diversified knowledge and access to critical resources required bythe firm to minimize the tendency towards financial distress, (Xavier, 2014). Both the agency and resource dependency theories envisage an inverse influence of board size on financial distress. Theoretically, a large board consists of more directors who bring in more knowledge and expertise and are likely to steer the firm towards financial stability as opposed to financial distress. According to Anjala and Shikha (2016) the stewardship theory hypothesizes a direct relationship between board size and financial distress. This is based on the argument that a large board is not easy to coordinate and decision making, therefore, becomes difficult thus increasing the likelihood of financial distress.

In the context of empirical studies, a significant number of studies have recorded an inverse relationship between board size and financial distress. Xavier (2014) in his study of USA firms over the period 2007 to 2009 found out that board size is

inversely related to financial distress. Correspondingly, Manzaneque *et al.* (2016) based on a study of Spaniard firms for the period 2007 to 2012 revealed that board size has aninverse effect on financial distress. Ching-Chun *et al*. (2017) in their examination of the impact of board size on the probability of financial distress for a sample of firms listed in Taiwan for the period 2006 to 2014 showed that board size had aninverse relationship with financial distress. Other studies which testament an inverse association between board size and financial distress include, Shridev, Suprabha and Krishnaprasad (2016), Montserrat, Alba and Elena (2016), Ching-Chun *et al*. (2017), Ayoola and Obokoh (2018) and Khalida *etal.* (2018).

On the contrary, other scholars assert that board size has a direct and/or insignificant influence on financial distress. Scholars such as Lakshan and Wijekoon (2012) and Nizar, Frédéric and Habib (2016) report aninsignificant influence of board size on financial distress. Further, Sri (2017) established that board size has a direct influence on financial distress, implying that the larger the size of board, the higher the possibility of financial distress. Harmoniously, empirical studies by Kajola (2018), Ammar, Asif and Ammar (2013), Hana (2019) and Chang (2009) testament a direct association between board size and financial distress. This result implies that board size plays an important role in reducing the chances of financial distress.

The study provides empirical evidence of the important but inverse influence of board size on financial distress. Emphasis has been put on the need to reduce the size of the board, though in the study evidence shows that a large board size could contribute to a greater diversity of opinion, increased access to information and increased ability to monitor management, which are critical in reducing financial distress.

The fourth hypothesis verified by the study is that there is no significant influence of board tenure on financial distress of firms listed at the Nairobi Securities Exchange.The regression results as shown in Table 4.5 suggest that board tenure has an insignificant influence on financial distress. This was evidenced by a p -value of 0.918, which is above the set level of significance of 5%.Based on this result, the study failed to reject the null hypothesis andconsequently, the study concluded that the influence of board tenure on financial distress is insignificant.

This finding resonates with prior empirical studies. Charbel and Nehme (2012) in their analysis of Lebanese firms,during the period 2007 to 2010, showed an insignificant effect of board tenure on financial distress. Correspondingly, Zahra, Jamal and Muhammad (2018) in their study of the impact of board tenure on financial distress for a sample of Pakistan entities determined that board tenure was insignificantly related with the probability of financial distress. This result contradicts the work of Mwengei and Kosgei (2017) whose analysis of firms listed at the Nairobi Securities Exchange found out that board tenure was significantly related to financial distress. Similarly, Maere *et al*. (2014) established a significant association between director's tenure and the risk of bankruptcy for Belgium firms over the period 2008 to 2012.

The findings show that board tenure exert an inverse influence on financial distress. However, since the influence is not important the study asserts having corporate boards with long tenures is not one of the strategies that could be used to reduce financial distress. The result confirms that board tenure is not a crucial variable in determining the level of financial distress.

The fifth hypothesis evaluated by the studyis that there is no significant influence of board activities on financial distress of firms listed at the Nairobi Securities Exchange. The regression results,(Table 4.5), indicate that the probability value of board activity is 0.009, suggesting that the variable has a significant influence on financial distress, (p- value= 0.009< 0.05). The result leads to the rejection of the null hypothesis that there is no significant influence of board activities on financial distress.As a result, the study concludes thatboard activity has a significant influence on financial distress. Additionally, the result indicate that board activity has a positive coefficient, (β= 0.1026), signifying that the variable has a direct influence on financial distress. As per the result, an increase in board activities could lead to an increase in financial distress, whereas a decrease leads to a decline in financial distress.

Thisresult showing a direct impact of board activity on financial distresssupportsthe theoretical propositions. In particular, the agency theorists argue that board meetings do not necessarily benefit shareholders, (Dissanayke *et al.,* 2017). This is because board meetings are usually reactive, the agenda is set by the chief executive officer and much of the meeting time is consumed by routine tasks. For these reasons, the theory anticipates a direct relationship between board activity and financial distress, (Adams, 2005). Additionally, the study attributes the direct influence of board activity on financial distress to the reactive nature of corporate boards. Unlike management, corporate boards by their nature do not participate in day to day activities of the firm and meet periodically to deliberate on agenda mostly set by management. In most cases, the boards increase their meetings in response to instances of financial distress, (Noriza and Mazurina, 2018; Ma and Tian, 2009). The study attributed the direct

relationship to tendency of boards to hold more meetings in an effort to resolve challenges related to financial distress.

This findingin respect to board activities mirror prior studies. Mangena and Tauringana (2008), who studied the impact of board meetings on financial distress for a sample of Zimbabwean firms, document a direct relationship. Additionally, Bilal, Faudziah and Syed (2014), Dissanayke *et al.,* (2017) and Noriza and Mazurina (2018) who conducted their studies on the Amman Stock Exchange, Colombo Stock Exchange and the Malaysia Stock Exchange respectively, established a direct influence of board activities on financial distress. Similarly, Muhammad *et al*. (2018) in their evaluation of the effect of board activity on financial distress for Pakistan firms reported a direct relationship. On the contrary, some authors argue that board activity has an inverse impact on the likelihood of financial distress. For instance, Ma and Tian (2009) in their analysis of firms listed on the Shanghai and Shenzhen Stock Exchanges over the period 2003 to 2004 reveal that board activity is inversely related with financial distress. Likewise, Joseph (2019) based on a study of UK firms over the period 2009-2016 report a negative association. Contrariwise, empirical studies by Xavier (2014) found out that there is no influence of board activity on financial distress. Based on the preceding finding and discussion, the research suggests that board activity is a significant determinant of the likelihood of financial distress.

4.5.3 The Influence of Ownership Structure on Financial Distress

Theownershipstructure was represented by threeindicators; block ownership, managerial ownership and institutional ownership. Arising from this, the sixth hypothesis sought to test that there is no significant influence of block ownership on financial distress of firms listed at the Nairobi Securities Exchange.

The regression results, (Table 4.5),indicate that the *p*value for block ownershipis 0.020, indicating that the variable has a significant influence on financial distressof firms listed at the Nairobi Securities Exchange over the period 2008 to 2017. This observation was arrived at since the corresponding *p*value is less than 5% level of significance. On the basis of this, the study rejected the null hypothesis that there is no significant influence of block ownership on financial distress. In addition, the regression results as displayed in Table 4.5reveal that the coefficient of block ownership is negative (β = -2.6403), implying an inverse association between block ownership and financial distress. This means that an increase in the proportion of block ownership could lead to a decline in the likelihood of financial distress. Equally, firms that have low proportions of block ownership are likely to experience financial distress, whereas firms with high block shareholding are not likely to experience financial distress, ceteris paribus.

This finding can be attributed to various reasons based on the theoretical and empirical foundations. According to the agency theory, block ownership could provide the role of active monitors to limit the opportunism of corporate managers. Block shareholders are motivated to monitor management because of their large ownership, (Shleifer and Vishny, 1997; La Porta *et al*., 2000) and their existence is helpful in alleviating the challenges of financial distress, (Nizar, Frédéric and Habib, 2016). In situations of financial distress, block shareholders could suffer most because of their shareholding and they are, therefore,likely to deploy enough resources in an effort to protect their interest,(Claessens *et al*., 2002). On this basis, the agency theory anticipates an inverse influence of block ownership on financial distress. Conversely, some scholars posit that block ownership does not reduce the

chances of financial distress. Levine (2003) asserts that high block ownership may raise corporate governance issues that may negatively impact on performance. Moreover, block owners could increase agency problems when they are able to redirect corporate resources in ways that are not in the best interest of other shareholders, (Jensen and Meckling, 1976; Shleifer and Vishny, 1997).

This results of the inverse association between block ownership and financial distress has been supported by a number of empirical studies. Donker, Santen and Zahir (2009) in their examination of firms listed on the Amsterdam Stock Exchange between the years 1992 to 2002 confirms that block ownership reduce the probability of financial distress. Similarly, Wang and Deng (2006) argue that block ownership is inversely related with the probability of financial distress. Studies by Miglani *et al*. (2015) also attest that block ownership decreases the possibility of financial distress.However, some scholars claim that block ownershipdoes not reduce financial distress. Montserrat, Alba and Elena (2016) in their study of Spanish firms over the period 2007 to 2012 revealed that block ownership does not have a significant impact on financial distress. Studies by Lee and Yeh (2004) show that block ownership has a direct effect on financial distress, meaning that higher levels of block owners leads to financial distress. Further, Parker, Peters and Turetsk (2002) in their study of USA firms, avers that a block ownership structure has a significant direct influence on the likelihood of financial distress. Susan, Peters and Howard (2002) in their study of 3567 USA firms indicate that large levels of block ownership are directly associated with the likelihood of financial distress.

The separation of control and ownership in corporations may result to fully dispersed ownership where not a single shareholders has incentive to engage in governance.

Nevertheless, the study provides sufficient evidence that block owners have not only an important but also an inverse effect on financial distress. The implication is that block owners play critical role in corporate governance, probably because of their stake. Their large stake accords more voting rights and more clout in discussions with management. Thus, the study suggests that in the context of financial distress the firm is better off with high levels of block ownership.

The seventh hypothesis tested by the study is that there is no significant influence of managerial ownership on financial distress of firms listed at the Nairobi Securities Exchange. The regression results as shown in Table 4.5 show that managerial ownership has a significant influence on financial distress. This was evidenced by a *p*value of 0.0453 which is less than the set significance value of 5%. On the basis of this, the study rejected the null hypothesis and concluded that managerial ownership has a significant influence on financial distress of firms listed at the NSE for the period 2008 to 2017. Besides, the results indicate that managerial ownership has a negative coefficient (β = -0.5316), pointing to an inverse association between managerial ownership and financial distress. This implies that an increase in managerial ownership could lead to a decrease in the probability of financial distress, whereas low levels of managerial ownershipincrease chances of financial distress.

The theoretical support on the influence of managerial ownership on financial distress is as mixed as the empirical studies themselves. Scholars led by the proponents of the agency theory, (Jensen and Ruback, 1983: Jensen and Meckling, 1976), contend that managerial ownership motivates managers to work as owners of the firm and align their interest with that of the firm. Because they own stock in the firm, such managers cannot make decisions that hurt the firm as their business will suffers alongside those

of the other stakeholders, (Niem, 2005).Thus they could be motivated to increase the value of the firm and also reduce the likelihood of financial distress.On the other hand, managerial shareholding may not prevent a firm from declining into a state of financial distress. As managers hold substantial stock, they become entrenched and pursue personal interest at the expense of the welfare of the firm, (Ching-Chun *et al.* 2017; Gomper, Ishii and Metrick, 2003).

On the empirical studies front, Martin (2017) in his study of firms listed at the Nairobi Securities Exchange showed that managerial ownership was inversely related with the likelihood of financial distress. In the same way, Donker, Santen and Zahir (2009) in their analysis of the impact of managerial ownership on financial distress of firms listed on the Amsterdam Stock Exchange over the period 1992 -2002 document an inverse association between managerial ownership and the likelihood of financial distress. On the other hand, Ching-Chun *et al.* (2017) and Bilal, Faudziah and Syed (2014) record a direct influence of managerial ownership on financial distress. Accordingly, Wang and Deng (2006) in their study based on a sample of Chinese companies for the period 2002 and 2003, upholds that managerial ownership does not significantly affect the probability of financial distress.

The study showed that an increase in a managerial shareholding leads to a reduction in financial distress. The inference is that when shareholding of managers is increased, they are motivated to pursue activities that increase the value of the firm. This is because any action detrimental to the value of the firm equally reduces their wealth. In consequence, the shareholding of managers should be encouraged as a good incentive to help align the interest of managers to shareholders and other stakeholders.

The eighth hypothesis reviewed by the study is that there is no significant influence of institutional ownership on financial distress of firms listed at the Nairobi Securities Exchange.Based on the regression results shown in Table 4.5, the study submits that the relationship between institutional investors and financial distress is significant (p value= 0.007). Since the *p*value of institutional ownership is less that the set significance level, the study rejected the null hypothesis and subsequently conclude that institutional ownership has a significant influence on financial distress. Moreover, the regression result shows that institutional ownership has negative coefficient, (β = -4.162), indicative of an inverse association between institutional ownership and financial distress. Thus, higher levels of institutional ownership are likely to reduce the probability of financial distress, whereas low levels of such ownership could increase the likelihood of financial distress.

The inverse influence of institutional ownership on financial distress resonates with theoretical foundations. The agency theory hypothesizes that the higher the levels of institutional ownership, the more the effective the monitoring of managers, (Shleifer and Vishny, 2000), which could ensure reduced instances of financial distress.According to Manzaneque *et al.* (2016) institutional investors have at their disposal a variety of mechanismswhich can be used to effectively monitor management and influence the decision making process of the board so as to improve firm performance. Ching-Chun *et al*. (2017) argues that institutional investors may not allow the firm to go into a state of financial distress because of their high shareholding. With this monitoring, managers could desist from consuming private benefits and be able to pursue strategies that ensure financial soundness and thus minimize the chances of financial distress.

The findingof the study in the context of institutional investors is in agreement with similar empirical studies. Shridev, Suprabha and Krishnaprasad (2016) in their study of Indian listed companies for the period 2010-2014 indicated that institutional ownership is inversely related with the probability of financial distress. Ching-Chun *et al*. (2017) based on their studies of Taiwan listed firms infers a negative association between institutional ownership and financial distress. Equally, Shahab, Khan and Attiya (2017) in their examination of the impact of institutional ownership on the probability of financial distress for a sample of firms listed on the Karachi Stock Exchange record an inverse relationship.

Bilal, Faudziah and Syed (2014) reported that the direction of the relationship between institutional ownership and financial distress is inverse, though non-significant. These scholars attribute the inverse relationship to the power of influence held by institutional investors who are able to determine the direction of the firm through their voting rights, election of board of directors and shareholders activism. However, studies by Matanda, Oyugi and Lisiolo (2015), based on firms listed on the Nairobi Securities Exchange, document that there is no relationship between institutional ownership and financial distress. Besides, studies by Manzaneque *et al.* (2016) and Nzioka and Olweny (2017) designate that institutional ownership has no significant impact on the probability of financial distress.

The results of the study confirm the importance of institutional shareholding in reducing corporate financial distress. This because when the firm ownership is held by a few shareholders they are able to exert more control on management and this may reduce opportunistic behaviors of managers. This category of owners can improve efficiency and effective utilization of the firm’s resources as a result of

increased supervision of management's decisions. In view of this, corporate stakeholders are advised to pay attention to the role of institutional ownership in aligning the interest of various groups as increase in their shareholding reduces divergence in interest, thereby reducing corporate financial distress.

4.5.4 The Moderating Influence of Financial Leverage

The study conducted a moderator analysis in order to determine whether the relationship between corporate governance practices and financial distress depends (is moderated by) on financial leverage. As recommended by Baron and Kenny (1986) the study included the product terms of the moderator and the various indicators of corporate governance practices in the regression model.

The results shown in Table 4.5indicate that the coefficient of board diversity is significant at 5% level of significance, (p value = 0.025 <0.05).This means that financial leverage had an important moderating influence on the association between board diversity and financial distress. The study, therefore, rejected the ninth hypothesis that financial leverage does not have a significant moderating influence on the relationship between board diversity and financial distress. Besides, the result show that before moderation board diversity had a direct influence on financial distress, (β = 0.2519) and upon moderation its coefficient increases, (β = 0. 6566, p value= 0. 025). Accordingly, the coefficient of the moderated model is larger than that of the primary model, signifying an important enhancing moderation of financial leverage on the relationship between board diversity and financial distress.

Theresults further provide evidence that financial leverage had an important moderating influence on the relationship between board independence and financial

distress at 5%, (β *p* value= 0.016. Consequently, the study rejected the tenth hypothesis that there is no significant moderating influence of financial leverage on the relationship between board independence and financial distress. Further, the beta value of the primary relationship between board independence and financial distress is -2.0097. However, subjecting the relationshipto moderationreduces the coefficient to -2.6195. This means that financial leverage had a buffering moderation because increasing the moderator decreases the primary relationship between board independence and financial distress.

The result presented in table 4.5 indicates that financial leverage hada significant and direct moderating effect on the relationship between board size and financial distress. The corresponding coefficient of board size is significant as evidenced by aprobabilityvalue of 0.018, which is below 5% level of significance. As a result the study rejected the eleventh hypothesis and asserted that financial leverage had an important moderating influence on the relationship between board size and financial distress. Nevertheless, this result contradicts the findings of Aideed and Muzaffar (2018) who found an insignificant moderation effect of financial leverage on the relationship between board size and financial distress. The coefficient of the un-moderated model is inverse, (β = -0.0312), which nevertheless changes to direct,(β= 0.0613), when the moderator is introduced. This result suggests that financial leverage had an antagonizing moderating influence on the association between board size and financial distress.

Results displayed in Table 4.5 shows that financial leverage had an important moderating influence on the association between board tenure and financial distress. This assertion was arrived at by examination of the probability value of board

tenure,(p =0.032), which is significant at 5%. Grounded on this result, the study rejected the twelfth hypothesis and concludedthat financial leverage had an important moderating influence on the effect of board tenure on financial distress. The coefficient of the primary model and the moderated model is -0.0116 and -0.0803 respectively. In consequence, the effect of this moderation is buffering because increasing the moderator decreases the primary influence of board tenure on financial distress.

The empirical results show that financial leverage had an important moderating influence on the relationship between board activity and financial distress at 5% significance level. This is evidenced by the probability value relating to the coefficient of board activity as moderated by financial leverage, ($p$value = 0.001 < 0.05). Thisoutcome led to the rejection of the thirteenth hypothesis that financial leverage does not have a significant moderating influence on the association between board activity and financial distress. This finding resonates with empirical studies by Aideed and Muzaffar (2018) who found a significant moderating effect of financial leverage on the relationship between board activity and financial distress for a sample of firms listed on the Pakistan Stock Exchange over the period 2015 to 2017.Besides, the coefficient of the primary relationship is direct, (β = 0.1026), which changes to inverse upon the introduction of the moderator, (β = -0.1747). As a consequence,the moderating effect of financial leverage is antagonistic as increasing the moderator reverses the primary effect of board activity on financial distress.

The fourteenth hypothesis tested by the study was that there is no significant moderating influence of financial leverage on the relationship between block ownership and financial distress of firms listed at the Nairobi Securities Exchange.

However, the study rejected this hypothesis since the corresponding probability value ofthe moderated relationship between block ownership and financial distress is important, (*p*value = 0.000<0.05).As tabulated in table 4.5 the coefficient of the un-moderated model is -2. 6403 but the analogous coefficient of the moderated model is -6.2973.Though the influence of financial leverage is inverse in both cases, introduction of the moderator decreases the primary relationship between block ownership and financial distress. Consequently, the study concluded that financial leverage had an important buffering moderation on the influence of block ownership on financial distress.

In the context of moderation, the probability value of managerial ownership is greater than 5% significance level, (β =0.532). The implication of this finding is that financial leverage does not have an important moderating influence on the association between managerial ownership and financial distress. This suggests that the influence of managerial ownership on financial distress does not vary with the level of financial distress. As a result, the study failed to reject the fifteenth hypothesis that managerial ownership does not have a significant moderating influence on the association between managerial ownership and financial distress. Besides, though the matching coefficient of managerial ownership is positive it's not significant, (β =0.8148).

Additionally, the empirical results as elaborated on Table 4.5 depict an important moderatinginfluence of financial leverage on the link between institutional ownership and financial distress, (*p* value = 0.000 < 0.05). The results supporteda rejection of the sixteenth hypothesis that financial leverage does not have asignificant influence on the association between institutional ownership and financial distress. Moreover, financial leverage had a buffering moderating effect on the relationship between

block ownership and financial distress. This conclusion was arrived at because the coefficient of the primary model, (β= -4.162), diminishes to -7.4089 upon moderation.The study therefore concluded that financial leverage had an important buffering moderation on the relationship between block ownership and the level of financial distress.

The seventeenth hypothesis reviewed by the study is that there is no significant influence of financial leverage on financial distress of firms listed at the Nairobi Securities Exchange. The regression results in table 4.5 indicate that financial leverage had an important but direct influence on financial distress, (β=0.7744, *p*value= 0.015).This implies that the higher the levels of financial leverage, the higher the risk of financial distress; whereas low levels of financial leverage reduce the risk of financial distress. As pointed out by Amato and Burson (2007) financial leverage comes with a cost and one of the primary costs is the risk of financial distress. These scholars support a direct relationship between financial leverage and financial distress. In the opinion of Pratheepkanth (2011) financial leverage may not be solely responsible for financial distress, but it's a significant contributor. This is, however, contrary to proponents of the agency theory who see debtas a critical mechanism for solving agency problems and thus would minimize, rather than increase the risk of financial distress, (Zogning, 2017).

This finding of the study, in respect to the influence of financial leverage on financial distress, contradicts prior empirical studies. Umar *et al*. (2012) in their study of firms listed on the Karachi Securities Exchange asserted that financial leverage had a significant but inverse influence of the degree of financial distress. Similar studies by Gupta, Srivastava and Sharma (2014) on firms listed on the Indian Stock Exchange

found out that that financial distress is significantly but negatively related to financial leverage. Further, Pratheepkanth (2011) in a study carried on firms listed on the Colombo Stock Exchange established a negative and insignificant relationship between financial distress and financial leverage.

From the foregoing analysis, the study provides empirical evidence that the influence of corporate governance practices, (board independence, board diversity, board size, board tenure, board activity, block ownership and institutional ownership), on financial distress is moderated by financial leverage. Theoretical and empirical evidence in the study have shown that the influence of these corporate governance practices on financial distress varies with the level of financial leverage. This result confirms findings by Aideed and Muzaffar (2018) who found a significant moderating effect of financial leverage on the relationship between corporate governance practices and financial performance. Similar findings were documented by Amirhossein and Ali (2017) who established that financial leverage significantly moderates the relationship between corporate governance and financial distress. On the contrary, the study confirmed that the moderating influence of managerial ownership on financial distress does not vary with the moderator. This is in agreement with studies by Frah, Muhammad and Zeenet (2013), George, Tabitha and Tobias (2018) and Amirhossein and Ali (2017) who revealed that financial leverage does not moderate the relationship between managerial ownership and financial distress.

The contribution of the study to theory and practice is that financial leverage has an important influence on how corporate strategies on board independence, board diversity, board size, board tenure, board activity, block ownership and institutional

ownership impact on the level of financial distress. It's therefore imperative that corporate stakeholders should critically evaluate the impact of financial leverage as they determine the matrices of their corporate governance practices.

4.5.5 The Influence of Firm Size on Financial Distress

The results presented in Table 4.5 show that the firm size has a significant influence on financial distress of firms listed at the Nairobi Securities Exchange, (*p* value = 0.0400< 0.5). As a result the eighteenth hypothesis that firm size does not have a significant influence on financial distress was rejected. Additionally, the coefficient of firm size is positive, (β = 0.0335), signifying a direct influence of firm size on financial distress. This means that an increase in firm size leads to an increase in the level of financial distress. This also implies that large firms, as measured by the magnitude of their total assets, have a high likelihood to experience financial distress relative to small firms. This result can also be interpreted to mean that small firms are relatively financially stable when compared with large firms.

This finding is an affirmation of earlier studies that found a direct influence of firm size on financial distress. Amato and Burson (2007) established a direct relationship between firm size and financial distress based on a study of United Kingdom companies. Similarly, Parker, Peters and Turetsky (2002) found out that firm size is directly associated with the likelihood of financial distress. On the contrary, studies by Donker, Santen and Zahir (2009) document a statistically inverse influence of firm size on financial distress of firms listed on the Amsterdam Stock Exchange. Studies by other scholars such as Turetysky and McEwen (2001), Yu (2006) and Rommer (2004) did not find any evidence that firm size has a significant effect on the likelihood of financial distress.

From the preceding result and discussion, firm size is an important factor that determines the level of financial distress. Further, it's evident that firms with large assets are more inclined to financial distress than small firms. There is need therefore for corporate stakeholders to take into account the fact that any variation in the asset level has an important impact on financial distress.Theoverall results of the regression analysis are shown in Table 4.5 hereafter.

Table 4. 5: Panel Regression Results

Variables	Coefficient	P>|t|
Constant	0.8023	0.454
	(0.7494)	
Firm Size	0.0335	0.040
	(2.0603)	
Board Diversity	0.2519	0.025
	(2.2412)	
Board Independence	-2.0097	0.049
	(-2.2497)	
Board Size	-0.0312	0.028
	(-2.2051)	
Board Tenure	-0.0116	0.918
	(-0.1030)	
Board Activity	0.1026	0.009
	(2.6104)	
Block Ownership	-2.6403	0.020
	(-2.3355)	
Managerial Ownership	-0.5316	0.045
	(-2.0108)	
Institutional Ownership	-4.162	0.007
	(-2.7105)	
Financial Leverage (L)	0.7744	0.015
	(2.4427)	
Board Diversity * L	0.6566	0.025
	(2.2497)	
Board Independence * L	-2.6195	0.016
	(-2.4190)	
Board Size * L	0.0613	0.018
	(2.3752)	
Board Tenure * L	-0.0803	0.032
	(-2.1518)	
Board Activity * L	-0.1747	0.001
	(-3.3145)	
Block Ownership * L	-6.2973	0.000
	(-3.9401)	
Managerial Ownership * L	0.8148	0.532
	(0.6254)	
Institutional Ownership * L	-7.4089	0.000
	(-4.2903)	
Statistics		
R-squared	0.1529	
Wald-statistic	63.820	
Prob. (Wald-statistic)	0.000	

Notes: the results shown are from a random effects model; t value in parenthesis
Source; Research Data, 2020

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Overview

This chapter presents the summary of the empirical results derived from the study, conclusions and the relevant recommendations. The presentation of this chapter is organized around the specific objectives and hypotheses as enumerated in chapter one. The sections also presents recommendations meant to add value in accordance with the findings of the study. Finally, the chapter proposes areas for further research to address gaps that could not be filled by the study due to time and resource constraints.

5.2 Summary of Findings

The study sought to investigate the influence of corporate governance practices on financial distress of firms listed at the Nairobi Securities Exchangeover the period 2008 to 2017. This involved investigating the influence of board composition, board structure and ownership structure on financial distress of firms listed at the Nairobi Securities Exchange. Additionally, the study sought to evaluate the moderating influence of financial leverage on the relationship between corporate governance practices and financial distress of firms listed at the NSE. The summary of the research findings is presented hereafter.

5.2.1 The Influence of Board Composition on Financial Distress

The first objective of the study wasto examine the influence of board composition on financial distress of firms listed at the NSE. This was achieved by analyzing the influence of board independence and board diversity on financial distress. The study found out that board composition, in terms of board independence, hadan inverse but

significant influence on financial distress, whereas in terms of board diversity it had a direct but significant influence on financial distress.

5.2.2 The Influence of Board Structure on Financial Distress

The second objective of the study was to determine the influence of board structure on financial distress of firms listed at the Nairobi Securities Exchange. This was achieved by establishing the influence of board size, board tenure and board activity on the likelihood of financial distress. The study established that board structure had a direct but significant influence on financial distress when measured in terms of board activity. Furthermore, the research findings designated that board structure, when represented in terms of board tenure, had an insignificant influence on the likelihood of financial distress, whereas in terms of board size it had an inverse but significant effect on financial distress.

5.2.3 The Influence of Ownership Structure on Financial Distress

The third objective of the study was to establish the influence of ownership structure on financial distress. Block ownership, managerial ownership and institutional ownership were used as proxies of ownership structure. The result of the study showed an inverse but significant association between block ownership and financial distress. Similarly, institutional ownership had an inverse but significant influence on financial distress. Likewise, the influence of managerial ownership on financial distress was inverse but significant.

5.2.4 The Moderating Influence of Financial Leverage

The fourth objective of the study was to evaluate the moderating influence of financial leverage on the relationship between corporate governance practices and

financial distress. The study revealed a significant moderating influence of financial leverage on the relationship between board independence, board diversity, board size, board tenure, board activity, block ownership, institutional ownership and financial distress. Nevertheless, the moderating influence of financial leverage on the effect of managerial ownership on financial distress was direct but insignificant.

5.3 Conclusion of the Study

This section outlines the conclusion of the study based on the empirical analysis of the relationship between corporate governance practices and financial distress of firms listed at the NSE between 2008 and 2017.

The study concludes that a board composition that includes a high proportion of independent directors significantly reduces the likelihood of financial distress. This is based on the finding that board independence has a significant inverse influence on financial distress. Moreover, the study concludes that board composition that is diversified in terms of gender increases the likelihood financial distress. This conclusion was derived from the direct but significant influence on financial distress.

The study concludes that aboard structure characterized by a large board size decrease the possibility of financial distress, which means that large boards are preferred in reducing the likelihood of financial distress. Also, the study concludes that a board structure that comprises of corporate boards with long tenures has an insignificant influence on financial distress. Further, the study concludes that a board structure that is characterized by more board activities in terms of board meetings increases the likelihood of financial distress.

The study concludes that an ownership structure that is premised on high proportions of block ownershipcould reduce the likelihood of financial distress.This was derived from the fact that both block ownership has a significant but inverse influence on financial distress. Similarly, based on the inverse but significant influence of institutional ownership on financial distress, the study concludes that an ownership structure characterized by a high percentage of institutional ownership could reduce the occurrence of financial distress. Further, the study concludes that an ownership structure that that include a high percentage of managerial ownership could reduce thechances of financial distress.

The study also concludes that financial leverage has an important moderating influence on the relationship between board independence, board diversity, board size, board tenure, board activity, block ownership, institutional ownership and financial distress.Concerning the relationship between managerial ownership and financial distress, the moderating influence of financial leverage is not important.

The study concludes that firm size plays a critical role in influencing the likelihood of financial distress. This conclusion derives from the direct but significant influence of firm size on financial distress.

5.4 Recommendations of the Study

Following the findings and conclusions arrived at bythe study, several recommendations were made. First, the study revealed that composition of corporate boards with high proportions of members who are independent of management could reduce the likelihood of financial distress. Hence, the study recommends that authorities should put up structures that enhance the appointment of independent directors. Second, the findings provide evidence that gender diversity does contribute

to financial distress, though it varies directly.The study attributed the result to low echelons of representation of females in Kenyan corporate boards and for this reason, the studyrecommends for increased gender diversity.

Third,board structure as indicated by board size was found to be inversely but significantly related with financial distress. On this premise, the study highlights the need for the appointment of large corporate boards that possess the benefits of diversity in skills, experience and independence. Fourth, the study established that a board structure that is characterized by more board activities increases the likelihood of financial distress, a result attributed to increased meetings during period of financial distress. Thestudy recommends that corporate boards should proactively deal with issues of financial distress before they escalate, instead of holding reactionary meetings during periods of financial distress.

Fifth, the results showed that as managerial, institutional and block shareholding increase corporate financial distress declines, implying that when the firm's ownership is held by few shareholders they are able to exert more control on management and this could reduce opportunistic behaviors of management. In view of this, corporate stakeholders shouldintroduce policies that encourage high proportions of block, managerial and institutional shareholding.Sixth, the study established that financial leverage significantly moderates the influence of corporate governance practices on financial distress. In consequence, corporate managers need to take account their leverage policies when setting strategies on board independence, board diversity, board size, board tenure, board activity, block ownership and institutional ownership.

5.5 Areas for Further Research

The study sought to establish the influence of corporate governance practices on financial distress of firms listed at the Nairobi Securities Exchange over the period 2008 to 2017. However, these companies are listed under stringentrequirements andalso subjected to serious scrutiny, especially by the Capital Markets Authority. This is likely to lead to biased research findings and conclusions, bearing in mind that there are many companies that are not subjected to similar conditions. Future researchers could consider out carrying out similar studies for non-listed companies to assess any variation in response.

The study focused on a sample of corporate governance mechanisms that included board diversity, board size, board independence, board activity, block ownership, managerial ownership and institutional ownership. However, there are many other mechanisms such as the regulatory framework, director and executive compensation, legal system and many others which may influence the likelihood of financial distress. Thus, in the study of financial distress future scholars could research on these other variables different from the ones analyzed by the study.

Literature provides a variety of methods for assessing the risky of financial distress such as the Altman's Z-score, the Ohlson's O-score, the Option to Default Methodology and the Hazard Model. Moreover, there are other non-financial measures of financial distress such satisfaction of stakeholders, upholding of rights of shareholders, corporate social responsibility and many others. More research could be carried out using the other indicators of financial distress, both financial and non-financial.

The study was carried out within the Kenyan context which is unique in terms of regulatory, political, ethical and economic fronts. Thus, the replicability of these results especially in international markets may be restrictive. Replication of this research using data from other international markets may provide invaluable insight into different market responses to corporate governance and its influence on financial distress.

The study focused on firms listed at the Nairobi Securities Exchange which comprises of companies drawn from different sectors. There are variations in corporate governance practices across the economic sectors that make up the Nairobi Securities Exchange. A more detailed study can be conducted on the individual economic segments: manufacturing and allied telecommunications and technology, construction and allied sector, agriculture sector, automobiles and accessories since this study did not examine the influence of corporate governance on financial distress for each sector.

The study considered the agency theory, the resource dependency theory and stewardship theory in studying the link between corporate governance practices and financial distress. The study recommend that future authors could evaluate the relationship between corporate governance and financial distress from different theoretical perspectives, maybe through the lens of other theories such as transaction theory, political theory and the stakeholders theory.

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APPENDICES

Appendix 1: Companies Listed at the Nairobi Securities Exchange as at December, 2017.

1	Eaagads Ltd
2	Kakuzi Ltd
3	Kapchorua Tea Co. Ltd
4	The Limuru Tea Co. Ltd
5	Sasini Ltd
6	Williamson Tea Kenya Ltd
7	Car & General (K) Ltd
8	Marshalls (E.A.) Ltd
9	Sameer Africa Ltd
10	Barclays Bank of Kenya Ltd
11	CFC Stanbic of Kenya Holdings Ltd
12	Diamond Trust Bank Kenya Ltd
13	Equity Group Holdings Ltd
14	Housing Finance Group Ltd
15	I&M Holdings Ltd
16	KCB Group Ltd Ord
17	National Bank of Kenya Ltd
18	NIC Group PLC
19	Standard Chartered Bank Kenya Ltd
20	The Co-operative Bank of Kenya Ltd
21	Atlas African Industries Ltd
22	Express Kenya Ltd
23	Hutchings Biemer Ltd
24	Kenya Airways Ltd
25	Longhorn Publishers Ltd
26	Nairobi Business Ventures Ltd

27 Nation Media Group Ltd

28 Standard Group Ltd

29 TPS Eastern Africa Ltd

30 Uchumi Supermarket Ltd

31 WPP Scangroup Ltd

32 ARM Cement Ltd

33 Bamburi Cement Ltd

34 Crown Paints Kenya Ltd

35 E.A.Cables Ltd

36 E.A.Portland Cement Co. Ltd

37 KenGen Co. Ltd

38 KenolKobil Ltd

39 Kenya Power & Lighting Co Ltd

40 Kenya Power & Lighting Ltd 4% Pref 20.00

41 Safaricom Ltd

42 Total Kenya Ltd

43 Umeme Ltd

44 Britam Holdings Ltd

45 CIC Insurance Group Ltd

46 Jubilee Holdings Ltd

47 Kenya Re Insurance Corporation Ltd

48 Liberty Kenya Holdings Ltd

49 Pan Africa Insurance Holdings Ltd

50 Centum Investment Co Ltd

51 Home Afrika Ltd

52 Kurwitu Ventures Ltd

53 Olympia Capital Holdings Ltd

54 Trans-Century Ltd

55 Nairobi Securities Exchange Ltd Ord 4.00

56	A.Baumann & Co Ltd
57	B.O.C Kenya Ltd
58	British American Tobacco Kenya Ltd
59	Carbacid Investments Ltd
60	East African Breweries Ltd
61	Eveready East Africa Ltd
62	Flame Tree Group Holdings Ltd
63	Kenya Orchards Ltd
64	Mumias Sugar Co. Ltd
65	Unga Group Ltd

Appendix 2: Data Collection Document

Name of Company……..

Variable /Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Number of board members										
Female board members										
Independent members										
Number of years of service in the board										
Number of board meetings in a year										
Number of shares held by the five largest shareholders										
Total number of outstanding shares										
Number of shares held by institutional investors										
Number of shares held by management										
Market value of equity										
Book value of debt										
Total value of assets										
Operating results										
Shareholders' equity										
Capital asset ratio										
Standard deviation of return on equity										
Return on equity										
Inverse of the distance to default Z score										

Appendix 3: Research Authorization

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
2241349,3310571,2219420
Fax:+254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref. No. **NACOSTI/P/19/16626/30383**

Date: **24th July, 2019**

Manduku Ogwoka Geoffrey
Rongo University
P.O. Box 103-40404
RONGO

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Influence of corporate governance practices on financial distress of firms listed at the Nairobi Securities Exchange, Kenya"*** I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for the period ending **23rd July, 2020.**

You are advised to report to **the County Commissioner and the County Director of Education, Nairobi County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Nairobi County.

The County Director of Education
Nairobi County.

Appendix 4 : Institutional Letter

RONGO UNIVERSITY

OFFICE OF THE DEAN

SCHOOL OF GRADUATE STUDIES

Tel. 0771349741

P.O. Box 103 - 40404
RONGO

Our Ref: **DPBM/9302/2014**

Date: Tuesday, March 5, 2019

The Chief Executive Officer,
National Commission for Science, Technology & Innovation,
off Waiyaki Way, Upper Kabete,
P.O Box 30623-00100,
Nairobi-KENYA.

Dear Sir,

RE: RESEARCH PERMIT FOR MR. MANDUKU OGWOKA GEOFFREY – DPBM/9302/2014

We wish to inform you that the above person is a bona fide graduate student of Rongo University in the School of Business & Human Resource Development pursuing a PhD degree in Business Management (Finance Option). He has been authorized by the University to undertake research titled; ***"Influence of Corporate Governance Practices on Financial Distress of Firms Listed at the Nairobi Security Exchange, Kenya."***

This is, therefore, to request the commission to issue him with a research permit to enable him proceed for field work.

Your assistance to him shall be highly appreciated.

RONGO UNIVERSITY
THE DEAN
06 MAR 2019
SCHOOL OF GRADUATE STUDIES
P. O. BOX 103 - 40404, RONGO

Thank you.

Dr. Edward Anino
DEAN, SCHOOL OF GRADUATE STUDIES

Copy to: Vice Chancellor
Deputy Vice Chancellor (Academic and Student Affairs).
Dean, School of Business & Human Resource Development
HoD, Business Studies