

**THE RELATIONSHIP BETWEEN BOARD COMPOSITION AND  
FINANCIAL PERFORMANCE OF LISTED FIRMS AT THE NAIROBI  
SECURITIES EXCHANGE**

**BY**

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## DECLARATION

This research project is my original work and has never been presented for a degree in any other university.

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This research project has been submitted for examination with my approval as the university supervisor.

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To the almighty God i say, òThis far you have brought me and for that i am greatly indebted.

**GOD BLESS YOU ALL**

## **DEDICATION**

This project is dedicated to the dearest figures in my life: My wife, Gretel Mwale and our two amazing God given children Lloyd and Yara, a very special thank you for your practical and emotional support. Without your love and support this project would not have been made possible.

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## **ABSTRACT**

The main objective of this study was to establish the relationship between board composition and financial performance of listed firms at the Nairobi Securities Exchange. Specifically, this study examined board size, gender diversity, board independence and CEO duality and how they affect the financial performance of listed firms in Kenya. Firm performance was measured using Return on Assets (ROA). This study adopted a descriptive research design and data was analyzed using a multiple linear regression model. The study population was all the firms quoted at the Nairobi Securities Exchange from January 2008 to December 2012. Secondary data were collected using documentary information from the Nairobi Securities Exchange Notebook for the periods 2008 to 2012. The study found a positive relationship between board independence, board size and CEO duality and financial performance of companies listed at the NSE. However, gender diversity and the proportion of executive directors were found to negatively affect the financial performance of companies listed at the NSE.

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## LIST OF ABBREVIATIONS

ANOVA	Analysis Of Variance
BOD	Board of Directors
CEO	Chief Executive Officer
COB	Chairman of the Board of Directors
CMA	Capital Markets Authority
DNR	Do Not Reject
EPS	Earnings Per Share
MoU	Memorandum of Understanding
NSE	Nairobi Securities Exchange
OECD	Organization for Economic Co-operation and Development
ROA	Return on Assets
ROE	Return on Equity Shares
SME	Small to Medium Enterprises
SPSS	Statistical Package for Social Science
UK	United Kingdom
US	United States of America

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the Study

Shleifer & Vishny (1998) defined corporate governance as a method by which firm suppliers can make sure that their investment in a firm will be returned. Corporate governance can also be defined as the set of institutional arrangements affecting corporate decision-making (Ball & Shivakuma, 2008). The connection between corporate governance and organisational financial performance lies in the multi-dimensional nature of good governance. Narrowly conceived, corporate governance involves ensuring compliance with legal obligations, and protection of shareholders against fraud or organisational failure. Without governance mechanisms in place, in particular, a board to direct and control - managers might run away with the profits (Gani & Jermias, 2006).

The relationship between board composition and financial performance has long been the subject of an important debate in the corporate finance literature. The past few years has seen an explosion in publicity about corporate misbehavior- both malfeasance and misfeasance. Every month, it seems, brings a new revelation of large scale top management corruption and failure of board oversight in either the corporate or not-for-profit arena. This has led scholars and policy makers to believe that boards of directors' attributes may have an influence in strategic decision-making and subsequently firm performance. Some scholars have argued that different board of directors' attributes impact organizational performance differently owing to their different orientations (Hermalin & Weisbach, 2003). Some of board of director attributes includes the ÷visible' and ÷less visible' types of diversity. The visible diversity includes members' age, chief executive officer duality and gender while less visible diversity relates to underlying attributes of education, technical capabilities, skills, knowledge, occupational background and range of industry experience (Milliken & Martins 1996). Studies on the determinants of board size and its composition have been relatively scanty, theoretical in nature, and inconclusive.

In Kenya, corporate governance has traditionally been associated with larger companies, mainly due to the separation between ownership and control of the firm. Although corporate governance is gaining some level of recognition, a lot needs to be done especially on regulation and enforcement. Some listed firms had tremendous governance problems including the unauthorized

sale of shares, mismanagement and board conflict. The board of directors, as internal mechanism of governance, has a major function on the limitation of managerial discretion and thereafter to manage the agency relationship between shareholders and managers and stakeholders of company. Improvements in the management and administration of many organizations are thus essential if the global efforts to halt corruption and other types of irregularity are to achieve desired results. An appropriate legal framework is necessary to define the roles of governing bodies, and chief executives and the related framework of authorities and responsibilities of each level of corporate governance.

### **1.1.1 Board Composition**

Board composition refers to the number and the type of board members, board demographics, board structure, board education and evaluation, and board leadership (Zahra & Pearce, 1989). Board composition is one of the important factors affecting firm financial performance. According to [Goodstein et al., 1994], a board fulfills three major tasks; it links the organization to its environment and secures critical resources, the board also has an internal governance and monitoring task and lastly it can discipline or remove ineffective management teams. This study particularly focuses on various aspects of board composition namely gender and age as part of board demographics; board leadership and board independence as part of board structure. Fama & Jensen (1983) established that an effective board depends on both the diverse collection of skills and competencies that individual director bring with them and the training that the board provides to help directors master board issues and develop the skills needed to participate effectively. Effective governance also depends on an effective selection process for new directors, which in turn rests on a clear definition of what the duties of a director are, Organization for Economic Co-operation and Development, (OECD, 2004).

In Kenya board composition is prescribed under Section 11(3) and 12 of the Capital Markets Authority Act (CMA Act, 2000) that empowers the Capital Markets Authority to make rules and regulations to govern capital markets in Kenya. The CMA guideline on corporate governance practices (2002) has proposed that a balanced board constitutes an effective board. It therefore requires that the board of directors of every listed company should reflect a balance between the independent non-executive directors and executive directors.

The independent and non-executive directors should form at least one-third of the membership of the board to ensure that no individual or small group of individuals can dominate board decision-making processes.

### **1.1.2 Financial Performance**

Financial performance is used to measure firm's overall financial health over a given period of time and can also be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. This study will follow predominant approaches and one financial measure of firm performance, the return on asset which also fits into accounting-based measures, (Barber & Lyon, 1996).

Rahman & Haniffa (2006) argued that financial performance of a firm can be used to determine its operating performance i.e. it translates the firm's performance in quantifiable metrics. Financial measures of firm financial performance. It is also be used to compare similar firms across the same industry or to compare industries or sectors in aggregation, thus help managers in decision making i.e. provide an overall picture of how a firm is performing over time as well as relative to others.

### **1.1.3 Relationship between Board Composition and Financial Performance**

Many institutional investors perceive corporate governance as a tool for extracting value for shareholders from under-performing, undervalued companies. Targeting companies that are under performing and analyzing their corporate governance practices can lead to improvements that unlock a company's hidden value. These improvements often include replacing poorly performing directors and ensuring that the companies comply with perceived best practice in corporate governance.

MacAvoy & Millstein (1998) in their study found that corporations with active and independent boards appeared to perform much better than those with passive, non-independent boards. Majority of investors prepare to pay a premium to invest in a company with good corporate governance. Jensen (1993) argued that boards of well-run companies should be relatively inactive and exhibit few conflicts. Frequently scheduled meetings generate opportunity costs in the form of management time consumed, and cash costs in the form of traveling allowances and fees for board members. Yet real benefits can be derived from such meetings as directors have

the opportunity to confer, set strategy and monitor management. Vafeas (1999), for instance found that meeting frequency was influential in improving operating performance in a manner consistent with agency theory.

Bhagat and Black (2000) examined the effect of board composition on long-term stock market and accounting performance. Once again, they do not find any relationship between board composition and firm performance. Overall, there is little to suggest that board composition has any cross-sectional relationship to firm performance. However the work of Dalton, Daily, Ellstrand & Johnson (1998) showed that board composition has virtually no effect on firm performance, and that there is no relationship between leadership structure and firm performance. Shareholder activism is the key to ensuring good corporate governance and without this there is less accountability and transparency.

#### **1.1.4 Nairobi Securities Exchange**

In 1954 the Nairobi Stock Exchange was then constituted as a voluntary association of stockbrokers registered under the Societies Act. Since Africans and Asians were not permitted to trade in securities, until after the attainment of independence in 1963, the business of dealing in shares was confined to the resident European community. At the dawn of independence, stock market activity slumped, due to uncertainty about the future of independent Kenya. 1988 saw the first privatization through the NSE, of government stake in Kenya Commercial Bank while in 1996, the largest share issue in the history of NSE, the privatization of Kenya Airways, came to the market. Live trading on the automated trading systems of the Nairobi Stock Exchange was implemented occurred in September 2006.

The East African Securities Exchanges Association came into being in 2004, following the signing of a Memorandum of Understanding (MoU) between the Dar-es-Salaam Stock Exchange, the Uganda Securities Exchange and the Nairobi Stock Exchange. The MoU between the Nairobi Stock Exchange and Uganda Securities Exchange allowed listed companies in both exchanges to dualist. This will facilitate growth and development of the regional securities markets. In July 2011, the Nairobi Stock Exchange Limited changed its name to the Nairobi Securities Exchange Limited (NSE). The change of name reflected the strategic plan of the

Nairobi Securities Exchange to evolve into a full service securities exchange which supports trading, clearing and settlement of equities, debt, derivatives and other associated instruments.

## **1.2 Research Problem**

Recent corporate scandals and major accounting failures have focused the minds of governments, regulators, companies, investors and the general public on weaknesses in corporate governance systems and the need to address this issue (OECD, 2004). Jensen & Meckling (1976) explained that the use of a board of directors reduces agency costs and in effect a cost reduction in administration of the firm.

Kenya has experienced situations where shareholders do not care to attend the annual general meetings to elect or change the board of directors, and often grant their proxies to the management and those that attend these meetings find it difficult to have a say in the selection of directors as only the management gets to propose a slate of directors for voting. Many local investors have a high financial illiterate level which catapults their ignorance or unawareness on their rights as shareholders in cases of infringement by the management of their company. The underlying premise is that shareholders dissatisfied with a particular management simply dispose-off their shares in that company, this drives down the share price, making such company a takeover target. Poor and corrupt board governance negatively affects the return on investment in many firms and account contributes to larger systematic problems at a national or county level. Expropriation is prevalent due to cash flow diversion, dilution of minority shareholders, asset stripping and delay of dividends/ non-payments. Lack of clear modality on appointment of board members, effective governance suffers because governance is hinged on competence and an effective selective process for new office bearers.

Ujunwa (2008) investigated the impact of corporate board characteristics on the financial performance of Nigerian quoted firms. The result found that board size, CEO duality and gender diversity were negatively linked with firm performance, whereas board nationality, board ethnicity and the number of board members with a PhD qualification were found to impact positively on firm performance. Dimovski & Brooks (2006) analyzed the change in the gender composition of the boards of large Australian companies after an IPO. The results found no significant change in the proportion of male and female directors holding directorships at the

time of the IPO and some five to eight years later when the company is recorded as a top 500 company (by market capitalization) on the Australian lists. McIntyre, Murphy, & Mitchell, (2007) seek to examine the relationship between key board composition variables and firm performance. The results revealed that high levels of experience, appropriate team size; moderate levels of variation in age and team tenure were correlated with firm performance. However, Dalton, Daily, Ellstrand & Johnson (1998) showed that board composition had virtually no effect on a firm's performance and that there is no relationship between leadership structure and firm's performance. All these studies depict conflicting and inconclusive empirical findings which has necessitated the study.

Locally, Muriithi (2008) on a study on the relation between the structure of board and the performance of firm quoted on the Nairobi Securities Exchange (NSE) found that the presence of outside directors is positively associated with output of a firm. In his study Ongore (2011) examined the interrelations among ownership, board and manager characteristics and firm performance in a sample of 54 firms listed at the Nairobi Stock Exchange (NSE). The results showed a significant positive relationship between managerial discretion and performance. None of these studies have focused on the effect of corporate governance on financial performance on corporate governance mechanisms of board composition in Kenya. Arising from these controversies, does the board composition have any effect on financial performance on firms listed at the Nairobi Securities Exchange?

### **1.3 Research Objective**

The objective of the study is to establish the relationship between board composition and financial performance on firms listed at the Nairobi Securities Exchange.

### **1.4 Value of the Study**

The findings will assist the policy makers especially in the Ministry of Finance/Treasury in formulating appropriate regulations to guide the governance of listed firms in Kenya, including the composition and size of key governance within the council's administrative frameworks. The findings will assist the Government and CMA in setting up benchmark policy on which corporate governance among listed stock be based on. It will also benefit Kenyan firms on how to effectively deal with corporate governance issues within their jurisdiction.

The study will also be an important resource for academicians and future researchers who may wish to investigate the future performance of firms within the listed firms in Kenya. Moreover, governance scholars and commentators suggest that governance is especially critical in imposing discipline and providing fresh leadership when the corporation is performing particularly poorly. It is possible that governance matters most in only certain firm events, such as the decision to change senior management. For this reason, the research will be useful in studying the relationship between governance, performance, and CEO turn over. It will also be useful in enhancing on the existing body of knowledge:

The study will also assist management and the board of directors in appreciating the importance of application corporate governance tenets in enhancing firms overall performance. The findings will guide the management of both listed and not listed firms in determining the appropriateness of various governance characteristics and how they relate to the financial performance of their respective organizations. This would help in designing a governance framework that is able to optimize financial output for them, including planning and administration.



## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter aims to provide the theoretical background to the research through a literature review. The literature review provides evidence of the relationship between corporate governance mechanisms and performance. It also looks at empirical studies between corporate governance and performance. The literature is based on the corporate governance mechanisms of: board, ownership, and CEO duality and control variables.

### **2.2 Theoretical Review**

This research provides a new framework that is summarized basing on the drawings from the theories of agency by Berle & Means (1932) assertion that the modern public corporation had separated ownership from the control; the owners of the firm were no longer also the managers. Stewardship theory by Donaldson 1990; Donaldson & Davis (1991) disputes agency theory's portrayal of managers as economic rationalists seeking to maximize their own wealth shareholders' expense, they argue that rational action by managers need not disadvantage shareholders because managers are professionally motivated to improve the value of the firm. Stakeholder theory by Freeman (1999) argues that managers in organizations have a network of relationships to serve ó this includes the suppliers, employees and business partners.

#### **2.2.1 Agency Theory**

Jensen & Meckling (1976) define the agency theory as a contract under which one party (the principal) engages another party (the agent) to perform some service on their behalf. As part of this , the principal will delegate some decision-making authority to the agent. Implicit in this theory is the belief that the agent will be driven by self-interest rather than a desire to maximize the profits for the principal. The board, as an intermediary, is expected to resolve such conflict of interest and minimize the agency costs. Some see the board's role of control as also encompassing a role in strategy.

Agency theory is equally important to corporate governance, since it forms the backbone of any successful corporate governance policies and regulations, (get the agency theory framework right and the corporate governance principles will more than likely be right) especially in the 21st century where there have been some of the major corporate ecollapses and lots of talk with

regards to strengthening the corporate governance reporting by companies to make sure that it is effective and efficient in protecting the interest of shareholders and all other stakeholders.

### **2.2.2 Stewardship Theory**

This theory postulates that managers are motivated by the desire to achieve and gain intrinsic satisfaction by performing challenging tasks. Proponents of this theory argue that managers need authority and desire recognition from peers and bosses. Thus, their motivation transcends merely monetary considerations. The role of the BOD in matters of strategy is seen as contributing to this managerial perspective.

Critics to the stewardship theory have argued that boards can become redundant when there is a dominant active shareholder, especially when the major shareholder is a family or government. One could speculate that some boards are established from cultural habit, blind faith in their efficacy, or to make government or family firms look 'more businesslike'. However, Pfeffer (1972) showed that the value of external directors is not so much how they influence managers but how they influence constituencies of the firm. He found that the more regulated an industry then the more outsiders were present on the board to reassure the regulators, bankers, and other interest groups.

### **2.2.3 Stakeholder Theory**

Stakeholder theory was embedded in the management discipline in 1970 and gradually developed by Freeman (1984). Unlike agency theory in which the managers are working and serving for the shareholders, stakeholder theorists suggest that managers in organizations have a network of relationships to serve – this include the suppliers, employees and business partners.

The stakeholders are the people who assist or hinder the achievement of organization's objectives. Stakeholder theory is equally important to corporate governance, since it assist the organization in its supply chain management, and in the process help in resource management, allocation and management decision making.

## **2.3 Measures of Board Composition and Financial Performance**

This study section attempts to derive the two constructs into their specific variables that can be defined and measured operationally.

### **2.3.1 Measures of Board Composition**

Board duality is a corporate leadership structure that merges the position of board chair and CEO (Charan, 1998). The measurement variable for board duality will be a dummy, which takes a value of 1 if the CEO and chairman are the same person and 0 if the CEO is separated from the board chairman. Boards are traditionally composed of only male members. The presence of women on the board leads to gender diversity. It is generally accepted that female board members are more independent because they are not part of the "old boys" network (Carter, Simkins, & Simpson, 2003). The ratio of the number of women to total board size is used as a measure of board gender. Higher level of educational qualification like PhD will function as a strategic resource. These educational qualifications such as PhD act as a mix of competencies and capabilities that help in executing the governance function, (Carpenter and Westphal, 2001). We shall proxy board skill as a ratio of board members with the qualification to board size. Hambrick and Mason, (1984) suggests that the age of directors can play on the value created by the enterprise. The post/ (job tenure) is an important criterion in analyzing the contribution of directors to the creation of value of the enterprise.

### **2.3.2 Measures of Financial Performance**

Performance measure is designed to indicate the effectiveness of the control system in achieving the organizational goals, (Govindarajan, 1988). We shall achieve our financial performance using the following formula;

#### **i. Return on Asset (ROA)**

A measurement used to show the ability of the company to utilize their assets in an efficient way that can be reflected in having high return (Rahman & Haniffa, 2006).

$$\text{ROA} = \frac{\text{Total Assets}}{\text{Common Equity}}$$

## **2.4 Empirical Review**

Abdullah, (2004) investigated the roles of board independence and CEO duality on a firm's performance relying on financial ratios, namely ROA, ROE, EPS and profit margin. The findings suggested that neither board independence, leadership structure nor the joint effects of these two showed any relations with firm performance. Ujunwa, (2012) set out to investigate the impact of

corporate board characteristics on the financial performance of Nigerian quoted firms. Board characteristics studied comprise board size, board skill, board nationality, board gender, board ethnicity and CEO duality. He found that board size, CEO duality and gender diversity were negatively linked with firm performance, whereas board nationality, board ethnicity and the number of board members with a PhD qualification were found to impact positively on firm performance.

Locally several studies have been done on the effect of corporate governance on financial performance. Maina (2005) examined the effects of board composition on firms performance on all quoted firms in Kenya and found no significant relationship between firm's performance and board composition. Okiro (2006) examined the relationship between board size and board composition on firm performance: A study of quoted companies at the Nairobi stock exchange. He found that there was no significant relationship between board size and firm valuation.

Mululu (2005) examined the relationship between board activity and firm performance: A study of firms quoted on the Nairobi stock Exchange. He found that board activity is positively related to the financial performance of firms suggesting that board activity is a value relevant attribute in corporate governance in that board activity increases when a firm's financial performance is poor and there is improvement following intense board activity. Musyoka (2009) did examine how corporate governance indicators such as board size, board composition, CEO duality among other factors impact on financing decisions of firms. The study reaffirmed the notion that the governance structure of a firm affects its financing choices.

Kerich (2006) carried a similar study on corporate governance structures and performance of the firms in the Nairobi stock exchange. The study analyzed factors relating to board size, composition, insider ownership and executive composition, and the manner in which they have influenced performance of firms in the stock exchange. In his study, Lettingø (2010) examined the relationship between board diversity and financial performance of firms listed in the Nairobi Stock Exchange. He analyzed data on boards' age, gender, educational qualifications, study specialization, and board specialization as well as the companies' financial performance. The results indicated a statistically not significant effect of board diversity on financial performance except for the independent effect of board study specialization on dividend yield.

## **2.5 Summary of Literature Review**

From the literature reviews illustrated above, good corporate governance is of paramount importance in all organizations regardless of their industry, size or level of growth. Good corporate governance has a positive economic impact on the Institution in question as it saves the organization from various losses occasioned by frauds, corruption and similar irregularities. Besides, it also spurs entrepreneurial development enabling the organization to better seize the economic opportunities that come its way.

The literature establishes that good corporate governance results in a lower cost of capital due to a limitation to the risk on the investment. This in essence guarantees investors a payback on returns to their investments. Good governance is a symptom of lower agency costs ó a signal not properly incorporated in market prices. Several mechanisms can be used to overcome the problems associated with separation of ownership and control: alignment of shareholders' interest with managerial interests (compensation plans, stock options, bonus schemes); board monitoring by large shareholders and lenders; legal protection of (minority) shareholders from managerial expropriation through shareholder rights and the market for corporate control as an external device. The number of board of directors is assumed to have an influence on performance. The board is vested with responsibility for managing the firm and its activities.

The studies cited in the literature mostly concentrate on the developed countries whose strategic approach and corporate governance systems are not similar to that of Kenya. Local studies have been done on other mechanisms of corporate governance other than the board size and board composition. To the best of the researcher's knowledge, most of these studies were done almost ten years ago, thus a need to investigate the same under a new scenario. Also most of the studies generalize all the mechanisms of corporate governance. This study therefore, seeks to examine whether and to what extent board composition affects firm performance amongst listed firms in Kenya.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

Kothari (2003) asserts that the purpose of the research methodology is to give details regarding procedures used in conducting the study. The chapter details out the methodology used in the study. The sections presented here include research design, population, description of the sample and sampling technique, data collection and analysis.

### **3.2 Research Design**

The study applied a descriptive correlation design. According to Mugenda & Mugenda (1998) a descriptive research usually describes the phenomena or event under study. Descriptive survey designs were used in preliminary and exploratory studies to allow researchers to gather information, summarize, present and interpret for the purpose of clarification. The choice of the descriptive survey research design is based on the fact that in the study, the research is interested on the state of affairs already existing in the field and no variable would be manipulated. Conversely, correlational research determined the relationship between board composition and financial performance.

### **3.3 Population of the Study**

The target population was all firms listed at the NSE as at 31<sup>st</sup> December 2012. (Appendix 1)

### **3.4 Sample and Sampling Technique**

A cross-sectional survey was used for sampling the data. The study focused only on companies that have been listed continuously for the coverage period 2008 - 2012. This made a sample of 50 companies out of the population of listed companies numbering 62.

### **3.5 Data Collection Method**

Published and unpublished literature formed secondary source of data collection for corporate governance and financial performance on firms listed at the Nairobi Securities Exchange.

### **3.6 Data Analysis**

Descriptive statistics and multiple regression analysis were used to analyze the data obtained from the SPSS. The purpose of descriptive statistics was to enable the researcher to meaningfully

describe a distribution of scores or measurements, using a few indices. It also helped with the transformation of raw data into a form that will make it easy to understand and interpret (Mugenda & Mugenda, 1999). The multiple regression analysis was performed on Return on Assets to test the relationship between the independent variables with firm performance. The relationship was analyzed using Pearson correlation coefficient and regression analysis. The analysis was based on a confidence limit of 95 % reflected on two tailed significance level of 0.05. For any test to be significant the P -value should be less or equal to 0.05 or better using two ó tailed test. The specific econometric regression is as follows (Wintoki, 2007).

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$$

Where:-

Y ó Return on asset (ROA) ó calculated as the net income divided by total assets.

X<sub>1</sub> ó Non- Executive directors ó Proportion of non- executive directors on the board

X<sub>2</sub> ó Executive directors ó Proportion of executive directors who are officers of the corporation

X<sub>3</sub> ó Board size ó the total number of board members

X<sub>4</sub> ó CEO Duality ó Equals 1 if CEO is also the chairperson of the board, otherwise 0

X<sub>5</sub> ó Gender Diversity of the Board ó The percentage of women on board

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$  ó Beta coefficients ó represent the independent variables of interest (board attributes).

a ó is the constant

- Error term associated with exogenous noise and the unobservable feature

## CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

### 4.1 Introduction

The objective of the study was to investigate the effect of board composition on financial performance of listed firms at the Nairobi Securities Exchange. In order to achieve this objective, statistical analysis was done for 61 companies quoted in the period 2008-2012. There were 50 companies that were continuously listed in the NSE throughout this period and these were the ones used in this study Appendix 1. Computer software SPSS was used to determine the correlation matrix of the entire variables and descriptive statistics as indicated in Appendix 2 and Appendix 3.

This chapter represents data analysis and findings of the research. The research findings are in three sections with each section discussing findings on the application of governance, relationship between governance and performance, and application of corporate governance performance amongst the banking institutions.

### 4.2 Board Composition Practices

Table 4.1: Descriptive Statistics

	ROA	CEO DUALITY	EXECUTIVE DIRECTORS	OUTSIDE DIRECTORS	BOARD SIZE	GENDER DIVERSITY
N valid	0	50	50	50	50	50
Missing	0	0	0	0	0	0
Mean	8.51744	.060	.4024	.6448	8.424	1.168
Max	50.8738	1	11	7	12	2
Min	2.09668	0	2	2	3	0

Source: Authors Computations from primary



Table 4.1 provides the descriptive statistics for the key variables. The numbers represent average rates across the entire period of the survey. The average firm performance under the ROA performance measure is 8.52%. The mean proportion of outside directors presents in the board is approximately 64.5% indicating that an average board in a public company has a majority of outside directors ranging between two to seven with five being the average. Table 1 shows that a typical Kenyan board ranges from the smallest being three and the largest being twelve directors with a mean average of 8.424. Not all the 50 sampled firms have a separation between the Chairperson of the Board (COB) and the CEO. Although the CMA corporate governance guidelines (2002) discourage the practice of CEO duality, 6% of the firms sampled still practiced this. The number of female directors sitting on boards averages 1.168%, approximately 1% of board composition. This lower representation of female directors suggests that the involvement of women is still rare in Kenyan listed firms and that diversity could be an important corporate governance concept in other business facets as opposed to boardroom.

### 4.3 Board Composition and Firm Performance

#### 4.3.1 Correlation Matrix

Table 4.2: Correlation Matrix for Kenyan Board Composition Variables

	ROA	CEO DUALITY	EXECUTIVE DIRECTORS	OUTSIDE DIRECTORS	BOARD SIZE	GENDER DIVERSITY
Pearson Correlation	1.000	.151	.180	-.036	.079	.126
Sig. (1-tailed)	.	.148	.106	.401	.292	.191

Source: Authors Computations from primary

The study examines whether correlation among the variables affects our results to assure that our findings are not driven by model specifications errors using a Pearson's correlation test. Table 4.2 above reveals a number of significant correlation among the dependent and independent variables. The analysis shows that ROA is positively correlated with CEO duality, executive

directors, Board Size and gender diversity and negatively associated with outside directors. The results further show that only executive directors and Board Size ( $r = 0.605$  or 60.5%) and between Board size and gender diversity (0.619 or 61.9%) have the highest correlation. This means that they do not influence each other in their implication to the board composition. (Appendix 2)

### 4.3.2 Multiple Regression Result

The study used regression analysis to reinforce the result obtained from the Pearson correlation coefficient. The model was subjected to linear regression in order to determine the nature of relationship between the independent and the dependent variables. The findings are presented in Table 4.3 below

Table 4.3: Linking Financial Performance to Board Composition

$Y = a + \beta_1(\text{Duality}) + \beta_2(\text{Executive}) + \beta_3(\text{Outside}) + \beta_4(\text{Size}) + \beta_5(\text{Gender}) +$ $\text{ROA} = a + 0.222 X_1 + 2.612 X_2 + 2.390 X_3 - 2.818 X_4 - 0.026 X_5 +$			
Independent Variable	Regression Coefficients	t- Statistics	P-values
Constant	$a = .000$	.600	.552
CEO duality	$\beta_1 = .222$	1.533	.132
Executive Directors	$\beta_2 = 2.612$	2.618*	.012
Outside Directors	$\beta_3 = 2.390$	2.441*	.019
Board Size	$\beta_4 = -2.818$	-2.006*	.019
Gender diversity	$\beta_5 = -.026$	-.143	.887

Dependent variable = Financial Performance

\* Denotes significance at 5% level (P-values less than 0.05)

The findings of Table 4.3 above indicate that three of the five independent variables were found to be significant at 95% level of confidence. They include: executive directors; outside directors; and board size. This indicates that the extent of financial performance of listed firms in the stock exchange is influenced by their executive directors, outside directors and board size. However,

CEO duality and gender diversity were found to be insignificant at the 95% level of significance. This indicates that CEO duality and gender diversity have no influence on firm performance.

### 4.3.3 Test of Hypotheses

Making references about the population in regression, the study look at whether a significant relationship exists between the company's performance on one hand and each of the independent variables on the other. The hypothesis can be stated as follows under a two tailed test

$$H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$$

(There is no significant relationship between firm performance and the independent variables)

$$H_1: \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 \neq 0$$

(There is a significant relationship between firm performance and the independent variables)

Where  $\beta_i$  is coefficient for CEO duality, proportion of executive directors, board independence board size and gender diversity

From the above, where  $p < 0.05$ , the study fails to reject the null hypothesis and concluded that CEO duality and gender diversity have no significant power to explain changes in the company's performance and accept the alternative hypothesis. The study therefore concludes that executive directors, outside directors and size have significant power to explain changes in the company's performance. The calculated value of  $2.051 < 2.43$  (critical), the study rejects the null hypothesis and accepts the alternative hypothesis. A consideration of  $0.090 > 0.05$  leads to the same conclusion. Thus empirical results show no linear relationship between the company's performance and any one of the predictor variables.

The calculated R of 0.435 from Table 4.3.3 below shows that all the predictors taken together have little or no significant correlation with the dependent variable. Thus CEO duality, executive directors, outside directors, board size and gender diversity together have little, if any correlation with the company's performance. The Adjusted  $R^2$  0.097 is within the acceptable limit of 0.05 and therefore remained significant to the board composition tenets. The co-efficient of

determination ( $R = 0.189$ ) confirms that all these variables acting together have no significant explanatory power on the company's performance.

Table 4.4: Model Summary on Regression Analysis

R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Change Statistics					Durbin-Watson
			R Square Change	F Change	df1	df2	Sig. F Change	
.435 <sup>a</sup>	.189	.097	.189	2.051	5	44	.090	1.655

Source: Authors Computations from primary

The Durbin-Watson statistic is used to test the non-existence of autocorrelation. Field (2000) suggests that values less than 1 or greater than 3 should pose a problem. He adds that the closer to 2 the value is the better the model. Therefore, Durbin-Watson values, shown in Table 4.4 are acceptable and consequently the problem of autocorrelation is not significant in this study.

#### 4.4 Discussion

This study investigated the relationship between board composition and financial performance of listed firms in Kenya. Given the role of the board and its size of 8.424 members on average the study concludes that they perform effectively. This supports the findings of Yermack (1996) and suggests that smaller boards are more effective. In their study, Dalton and Kelsner (1987) reported a mean of 21.04 in Japan, 11.04 in the U.K and 12.96 in the US. The agency and resource dependency theory argue that larger board size creates greater firm value through an effective external linkage. However, Zahra & Pearce (1989) argue that there might be a threshold, above which board size may have a negative effect on company performance. Jensen (1993) notes that as groups increase in size they become less effective because the coordination and process problems overwhelm the advantages from having more people to draw from.

The study also found out the number of outsiders on the board to be 64.5%. This is consistent with previous studies carried out by Yun et al (1998) on Canadian firms who found the proportion of outside directors as 67%. In New Zealand, the proportion of outside directors

varied from 42% to 50.5% (Prevost et al, 2002). However, (fox et al, 1998) found a mean proportion of between 60% - 70% and 73% -76% for companies in the US and New Zealand respectively. This means therefore that Kenyan boards have a higher proportion of outside directors and are fulfilling the CMA guideline (2002) which compels listed firms to have at least a third of its directors as non-executive directors.

The study result has a 6% role duality almost comparable with previous study by Larcker & Tayan, (2011) who found about 10% to 20% of British and Canadian companies combined the CEO and COB. This supports the argument by Khanchel (2007) that role duality diminishes board independence, reduces the flexibility of the board of directors and consequently reduces the possibility that the board can properly execute its oversight role. In contrast, Dalton & Kelsner (1987) explained that dual roles foster a stronger and clearer leadership, and a better communication relationship between management and the board of directors from their result of 82% of US firms sampled.

Generally, greater female representation on boards not only increases the size of the human capital pool from which directors can be drawn, but also provides some additional skills and perspectives that may not be possible with all-male boards. The study indicates a 1% female representation on the board. This is consistent with Campbell & Minguez-Vera (2008) who suggested in Spain that the market does not punish firms that have included female directors on the boards since board gender diversity was found to have no effect on performance. On the contrast, the figure is lower than the proportion in the US (Adams & Ferreira) which stood at 14.8%, Australia, Canada, Japan, and Europe is estimated to be 8.7%, 10.6%, 0.4%, and 8.0%, respectively. This is a clear indication that listed firms in Kenya have not fully embraced the Government directive of having a third of all public appointments reserved to women.

## **CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS**

### **5.0 Introduction**

This chapter presents the discussion of findings, conclusions and recommendations derived from the findings of the study. The chapter also presents the limitations that were encountered in the process of gathering findings.

### **5.1 Summary of Findings and Conclusion**

The objective of the study was to examine the relationship between board composition and financial performance of listed firms at the N.S.E. In order to achieve this objective, statistical analysis was done for 50 companies quoted between the periods of 2008- 2012.

The study results confirm that there is no significant relationship between board composition in the form of CEO duality and gender diversity among directors and firm performance, implying that role duality and gender diversity cannot add potential economic value to the firm in Kenya. It also revealed that the board size, non-executive directors and proportion of executive directors have a significant positive influence on firm performance under accounting based performance measure of ROA, implying that a firm benefits from a pool of human resources and expertise. Therefore, it is supportive that outside independent directors of Kenyan firms are able to ensure the checks and balances of accountability and management activities.

### **5.2 Recommendations**

The study results found a positively correlation relationship between CEO duality, gender diversity, proportion of outside directors and board size and firm performance. The study therefore recommends a majority of board members be female to provide some additional skills and perspectives that may not be possible with all-male boards. The study also recommends the separation of the positions of chairperson of the board and the CEO. Additionally, the study recommends the executive directors should have regular, frequent meetings without the CEO or other non-executive members of management present.

The study result indicates a negative correlation but significantly positive relationship between outside directors and firm financial performance. Clearly, the presence of outside independent

directors alone will not solve the deficiencies exposed in corporate boardrooms and in extension, firm performance. What needs to be done is strengthen corporate boards beyond increasing the presence of outside independent directors. The environment in which corporate boards operate needs to be changed.

### **5.3 Limitations of the Study**

The study was limited to selected aspects of board composition namely CEO duality, gender diversity, outside directors, gender diversity and executive directors. Given that financial performance of the listed firms could be attributable to other factors that were not covered in this study, then the findings of the study would not necessarily be generalizable to the entire population of listed firms in Kenya.

### **5.4 Suggestions for further research**

Further research will be extremely beneficial in this area covering other mechanisms of board composition like the age of directors, tenure, or background of directors or duration of tenancy of the C.E.O. A study also on the same can be extended to privately owned firms in Kenya or conducted on quoted companies category-wise for example in the financial, industrial sector etc.

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<b>APPENDIX 1</b>	
<b>LISTED FIRMS AT THE NAIROBI SECURITIES EXCHANGE AS AT 31.12.2012</b>	
<b>AGRICULTURAL</b>	
1	Kapchorua Tea Co. Ltd
2	Kakuzi
3	Limuru Tea Co. Ltd
4	Rea Vipingo Plantations Ltd
5	Sasini Ltd
6	Williamson Tea Kenya Ltd
<b>COMMERCIAL AND SERVICES</b>	
7	Express Ltd
8	Kenya Airways Ltd
9	Nation Media Group
10	Standard Group Ltd
11	TPS Eastern Africa (Serena) Ltd
12	Scangroup Ltd
13	Longhorn Kenya Ltd
<b>TELECOMMUNICATION AND TECHNOLOGY</b>	
14	AccessKenya Group Ltd
15	Safaricom Ltd
<b>AUTOMOBILES AND ACCESSORIES</b>	
16	Car and General (K) Ltd
17	Sameer Africa Ltd
18	Marshalls (E.A.) Ltd
<b>BANKING</b>	
19	Barclays Bank Ltd

20	CFC Stanbic Holdings Ltd
21	Diamond Trust Bank Kenya Ltd
22	Housing Finance Co Ltd
23	Kenya Commercial Bank Ltd
24	National Bank of Kenya Ltd
25	NIC Bank Ltd
26	Standard Chartered Bank Ltd
27	Equity Bank Ltd
28	Co-operative Bank of Kenya Ltd
<b>INSURANCE</b>	
29	Jubilee Holdings Ltd
30	Pan Africa Insurance Holdings Ltd
31	Kenya Re-Insurance Corporation Ltd
32	CIC Insurance Group Ltd
<b>INVESTMENT</b>	
33	Centum Investment Co Ltd
34	Trans-Century Ltd
<b>MANUFACTURING AND ALLIED</b>	
35	B.O.C Kenya Ltd
36	British American Tobacco Kenya Ltd
37	Carbacid Investments Ltd
38	East African Breweries Ltd
39	Mumias Sugar Co. Ltd
40	Unga Group Ltd
41	Eveready East Africa Ltd
<b>CONSTRUCTION AND ALLIED</b>	

42	Athi River Mining
43	Bamburi Cement Ltd
44	Crown Berger Ltd
45	E.A.Cables Ltd
46	E.A.Portland Cement Ltd
<b>ENERGY AND PETROLEUM</b>	
47	KenolKobil Ltd
48	Total Kenya Ltd
49	KenGen Ltd
50	Kenya Power & Lighting Co Ltd

Source: NSE Data (2012).

## Appendix 2: Descriptive Statistics: Model 1

**Descriptive Statistics**

	Mean	Std. Deviation	N
ROA	8.51744	10.240255	50
CEODLTY	.060	.2399	50
BINTAL	4.024	2.3732	50
BIANDCE	4.448	2.3424	50
SIZE	8.424	2.8069	50
GENDVTY	1.168	1.1017	50

**Correlations**

		ROA	CEODLT Y	BINTAL	BIANDCE	SIZE	GENDVTY
Pearson Correlation	ROA	1.000	.151	.180	-.036	.079	.126
	CEODLTY	.151	1.000	-.254	-.158	-.342	-.193
	BINTAL	.180	-.254	1.000	-.276	.605	.440
	BIANDCE	-.036	-.158	-.276	1.000	.590	.331
	SIZE	.079	-.342	.605	.590	1.000	.619
	GENDVTY	.126	-.193	.440	.331	.619	1.000
Sig. (1-tailed)	ROA	.	.148	.106	.401	.292	.191
	CEODLTY	.148	.	.038	.137	.008	.089
	BINTAL	.106	.038	.	.026	.000	.001
	BIANDCE	.401	.137	.026	.	.000	.009
	SIZE	.292	.008	.000	.000	.	.000
	GENDVTY	.191	.089	.001	.009	.000	.
N	ROA	50	50	50	50	50	50
	CEODLTY	50	50	50	50	50	50
	BINTAL	50	50	50	50	50	50
	BIANDCE	50	50	50	50	50	50
	SIZE	50	50	50	50	50	50
	GENDVTY	50	50	50	50	50	50



Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	CEODLTY, BINTAL, BIANDCE, GENDVTY, SIZE, <sup>b</sup>	.	Enter

a. Dependent Variable: ROA

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.435 <sup>a</sup>	.189	.097	9.731546	.189	2.051	5	44	.090	1.655

a. Predictors: (Constant), GENDERDIVERSITY, CEODUALITY, EXTERNALDIRECTORS, INTERNALDIRECTORS, BOARDSIZE

ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	971.347	5	194.269	2.051	.090 <sup>b</sup>
	Residual	4166.931	44	94.703		
	Total	5138.278	49			

a. Dependent Variable: ROA

b. Predictors: (Constant), GENDERDIVERSITY, CEODUALITY, EXTERNALDIRECTORS, INTERNALDIRECTORS, BOARDSIZE

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.018	5.031		.600	.552
1 CEODLTY	9.484	6.184	.222	1.533	.132
1 BINTAL,	11.270	4.305	2.612	2.618	.012
1 BIANDCE	10.447	4.281	2.390	2.441	.019
1 SIZE	-10.281	4.221	-2.818	-2.006	.019
1 GENDVTY	-.241	1.683	-.026	-.143	.887

**Coefficients<sup>a</sup>**

Model	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	-7.122	13.157					
1 CEODLTY	-2.980	21.948	.151	.225	.208	.878	1.139
1 BINTAL,	2.594	19.947	.180	.367	.355	.019	54.013
1 BIANDCE	1.820	19.074	-.036	.345	.331	.019	52.016
1 SIZE	-18.787	-1.775	.079	-.345	-.331	.014	72.623
1 GENDVTY	-3.633	3.150	.126	-.022	-.019	.562	1.778

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	CEODLTY	BINTAL	BIANDCE	SIZE	GENDV TY
1	1	4.369	1.000	.00	.00	.00	.00	.00	.01
	2	1.000	2.091	.00	.79	.00	.00	.00	.01
	3	.312	3.744	.01	.05	.00	.01	.00	.23
	4	.270	4.024	.03	.02	.01	.00	.00	.47
	5	.049	9.421	.95	.14	.01	.01	.00	.23
	6	.001	71.980	.00	.00	.98	.98	1.00	.05

a. Dependent Variable: ROA

**Descriptives**

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
CEODLTY	50	.0	1.0	.059	.2376
BINTAL	50	1.0	11.0	4.043	2.3533
BIANDCE	50	.0	10.0	4.361	2.4010
SIZE	50	3.0	16.0	8.357	2.8197
GENDV TY	50	.0	4.0	1.168	1.1017
ROA	50	-19.671	33.306	8.47171	10.142595
Valid N (listwise)	50				

### Appendix 3: Regression Output: Model 2

**Descriptive Statistics**

	Mean	Std. Deviation	N
ROA	8.51744	10.240255	50
CEODLTY	.060	.2399	50
BINTAL	4.024	2.3732	50
BIANDCE	4.448	2.3424	50
SIZE	8.424	2.8069	50
GENDVTY	1.168	1.1017	50

**Correlations**

		ROA	CEODLT Y	BINTAL	BIANDCE	SIZE	GENDVTY
Pearson Correlation	ROA	1.000	.151	.180	-.036	.079	.126
	CEODLTY	.151	1.000	-.254	-.158	-.342	-.193
	BINTAL	.180	-.254	1.000	-.276	.605	.440
	BIANDCE	-.036	-.158	-.276	1.000	.590	.331
	SIZE	.079	-.342	.605	.590	1.000	.619
	GENDVTY	.126	-.193	.440	.331	.619	1.000
Sig. (1-tailed)	ROA	.	.148	.106	.401	.292	.191
	CEODLTY	.148	.	.038	.137	.008	.089
	BINTAL	.106	.038	.	.026	.000	.001
	BIANDCE	.401	.137	.026	.	.000	.009
	SIZE	.292	.008	.000	.000	.	.000
	GENDVTY	.191	.089	.001	.009	.000	.
N	ROA	50	50	50	50	50	50
	CEODLTY	50	50	50	50	50	50
	BINTAL	50	50	50	50	50	50
	BIANDCE	50	50	50	50	50	50
	SIZE	50	50	50	50	50	50
	GENDVTY	50	50	50	50	50	50

Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	CEODLTY, BINTAL, BIANDCE, GENDVTY, SIZE, <sup>b</sup>		Enter

a. Dependent Variable: ROA

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.435 <sup>a</sup>	.189	.097	9.731546	.189	2.051	5	44	.090

a. Predictors: (Constant), GENDERDIVERSITY, CEODUALITY, EXTERNALDIRECTORS, INTERNALDIRECTORS, BOARDSIZE

ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	971.347	5	194.269	2.051	.090 <sup>b</sup>
	Residual	4166.931	44	94.703		
	Total	5138.278	49			

a. Dependent Variable: ROA

b. Predictors: (Constant), GENDERDIVERSITY, CEODUALITY, EXTERNALDIRECTORS, INTERNALDIRECTORS, BOARDSIZE

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.018	5.031		.600	.552
CEODLTY	9.484	6.184	.222	1.533	.132
BINTAL,	11.270	4.305	2.612	2.618	.012
BIANDCE	10.447	4.281	2.390	2.441	.019
SIZE	-10.281	4.221	-2.818	-2.006	.019
GENDVTY	-.241	1.683	-.026	-.143	.887

Coefficients<sup>a</sup>

Model	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	-7.122	13.157					
CEODLTY	-2.980	21.948	.151	.225	.208	.878	1.139
BINTAL,	2.594	19.947	.180	.367	.355	.019	54.013
BIANDCE	1.820	19.074	-.036	.345	.331	.019	52.016
SIZE	-18.787	-1.775	.079	-.345	-.331	.014	72.623
GENDVTY	-3.633	3.150	.126	-.022	-.019	.562	1.778

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	CEODLTY	BINTAL	BIANDCE	SIZE	GENDV TY
1	1	4.369	1.000	.00	.00	.00	.00	.00	.01
	2	1.000	2.091	.00	.79	.00	.00	.00	.01
	3	.312	3.744	.01	.05	.00	.01	.00	.23
	4	.270	4.024	.03	.02	.01	.00	.00	.47
	5	.049	9.421	.95	.14	.01	.01	.00	.23
	6	.001	71.980	.00	.00	.98	.98	1.00	.05

a. Dependent Variable: ROA

**Descriptives**

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
CEODLTY	50	.0	1.0	.059	.2376
BINTAL	50	1.0	11.0	4.043	2.3533
BIANDCE	50	.0	10.0	4.361	2.4010
SIZE	50	3.0	16.0	8.357	2.8197
GENDV TY	50	.0	4.0	1.168	1.1017
ROA	50	-19.671	33.306	8.47171	10.142595
Valid N (listwise)	50				