THE EFFECT OF BOARD CHARACTERISTICS ON THE FINANCIAL PERFORMANCE OF FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE

BY

KENNETH KARAU MUIRURI

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DECLARATION

I declare that this project is my original work and has not been submitted to any other institution,
college or university for any academic award.
Sign Date
Kenneth Karau Muiruri
D63/79246/2015
This project has been submitted for review with my approval as the University Supervisor
Sign Date
Dr. Kennedy Okiro
Lecturer, Department of Finance and Accounting
School of Business, University of Nairobi

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DEDICATION

This research paper is dedicated to my family. Their support, encouragement and prayers made the completion of this study successful. I most importantly dedicate this work to the Almighty God who made this possible.

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LIST OF ABBREVIATIONS

ASX Australian Securities Exchange

BOD Board of Directors

CEO Chief Executive Officer

CMA Capital Market Authority

IPO Initial Public Offering

NSE Nairobi Securities Exchange

ROA Return on Asset

ROE Return on Equity

SPSS Statistical Package for Social Science

US United States

ABSTRACT

The characteristics of the board of directors have received considerable attention in recent years. This is because the function performed by the board is significant to firm performance as the board executes its responsibilities. Empirical evidence provides conflicting views as to the impact of board characteristics on the financial performance of a firm. Several studies have been conducted investigating the relationship between board structure and company performance with the assumption that the company's financial performance is mainly determined by board characteristics. Research conducted by different scholars on the impact of board characteristics on the financial performance of a firm remains inconclusive. The aim of the study was to establish the effect of board characteristics on financial performance of the quoted firms at the NSE. The population of the study was all the 64 firms quoted at the NSE as at 31st December 2017. Data was obtained from 53 out of the 65 listed companies giving a response rate of 82.81%. The independent variable for the study was board characteristics as measured by board composition and board size. The control variable was liquidity as measured by current ratio and firm size as measured by natural logarithm of total assets. Financial performance was the dependent variable which the study sought to explain and it was measured by ROA. Secondary data was collected for a 5 year time frame (January 2013 to December 2017) annually. The descriptive cross-sectional research design was employed for the study and the association between the study variables established using multiple linear regression model. Statistical package for social sciences version 22 was used to analyze the data. The results of the study produced R-square value of 0.287 which means that about 28.7 percent of the variation in the financial performance of companies quoted at NSE could be explained by the four selected independent variables while 71.3 percent in the variation of financial performance of was associated with other factors not covered in this research. The study also found that the independent variables had a strong correlation with financial performance (R=0.536). ANOVA findings show that the F statistic was significant at 5% level with a p=0.000. Therefore the model was fit to explain the association between the selected variables. The results further revealed that firm size and liquidity produced positive and statistically significant values for this study while board composition and board size were found to be statistically insignificant determinants of financial performance of firms at the NSE listing. The study's recommendations were that measures should be put in place to enhance firm size and liquidity as this will improve financial performance of firms at the NSE listing.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

In the modern world of commerce that we are in today, the role of a board of directors is under pressure as it seeks to undertake its challenging responsibilities. This is evident from the high expectations of firm stakeholders where a board of directors is expected to do more than just overseeing company performance (Benson, Finegold & Hetch, 2007). The board needs to provide strategic guidance and also aid in the running of the company during a crisis (Daily, Dalton & Canella, 2003). Considering the nature and importance of the tasks carried out by a firm's board of directors, it is important to identify the attributes that make them effective. In ensuring that the board performs its role effectively, a number of scholars have acknowledged the significance of a competent board of directors who can contribute intellectually towards the continuity of firm functions (Levrau & Van den Berghe, 2007).

This research paper was based on four theories namely: the agency theory, the stakeholder theory, the stewardship theory and the resource dependency theory. The agency theory can be said to be the fundamental theoretical basis of corporate governance as it recognizes the relationship that exist between shareholders and managers which can give rise to agency conflict and hence the need for corporate governance. The stewardship theory by Davis and Donaldson (1997) provides that the board is the custodian of the shareholders wealth and that the BOD feels rewarded if it attains organizational objectives and not by egoistic tendencies. Stakeholder theory as developed by Freeman (1984) provides an avenue of investigating the relationship between company performance, board diversity and representativeness in the operations of a company. The study is also based on the resource based view theory that investigates the duty of the board

in facilitating acquisition of resources demanded by the company. This theory provides that a board is a fundamental link between the company and the external resources required for profit maximization.

In Kenya, the Capital Markets Authority issued guidelines to be observed by the public listed companies. This was done through a Gazette Notice number 3362 of 2002. These guidelines were issued in an effort to improve corporate governance in the listed firms. With the responsibility of a firm placed on the board, features of the board have been identified as a critical factor in determining the financial output of firms. This research endeavored to investigate the linkage associating internal governance model of a company and its financial output by scrutinizing the effect of characteristics of the board on the financial performance of firms quoted at the NSE. Board characteristics to be employed in this research paper are; the composition of the board and the size of the board.

1.1.1 Board Characteristics

The characteristics of the board refer to the various unique attributes that a certain board of directors identifies with. Different boards have different combinations of features that suit them. Several attributes relating to boards include: size of the board, board diversity, composition of the board, CEO duality, the boards average age, independence of the board and recurrence of board meetings. In this research paper, two characteristics that are highly likely to have an effect on the financial output of firms listed in the NSE will be examined. These characteristics are: board composition and board size (Hillmans, Keim & Luel, 2000).

Murphy and McIntyre (2007) describe a board of directors as a team of individuals that partake in a company's development; therefore, it should be designed in such a way that it will supervise itself. For this research, board composition relates to the mix between independent directors, otherwise known as non-executive directors and executive directors. The ratio between independent directors and executive directors will be used to determine its impact on the financial output of the company. The concept of independence provides that the directors have "no material relationship with the company", meaning that they are not recent employees, family members nor part of interlocking directorship (Hermalin & Weisbach, 2003).

The Board size and its effect on a firm's financial performance has previously been examined with some researchers finding it relevant while others found no relevance. Yermack (1996) is a researcher who found that the Board size exceeding eight members was unlikely to be effective. Eisenberg, Sundgren and Wells (1998) also found an adverse relationship between the size of the BOD and the firms' market valuation in Finnish firms. Additionally, these scholars suggested that there was an ideal size of the BOD and that the size effect varies with the size of the firm.

1.1.2 Financial Performance

Financial performance is described as a standard of how effective a company employs its assets for its principal purpose to induce profits. Information of the financial performance of firms can be retrieved from annual financial reports that all listed firms in Kenya are compelled to publish. These reports are meant to furnish stakeholders with accurate and reliable information that presents a synopsis of the firm's financial performance. These records are audited and signed by the leadership of the firm along with a number of other documents relating to the firms disclosures. Annual reports comprise the statement of cash flow, the income statement and the statement of financial position (Bhagat& Black, 2001).

The statement of financial position gives a synopsis of how well the firm is administering its assets and liabilities. From this statement, a researcher can establish the amount of assets owned by the company and the amounts of assets financed by liabilities vis a vis those financed by shareholders' equity. The statement of comprehensive income gives an overview of operations for the entire year. It can also be used to compare the financial performance of previous years (Hall & Weiss, 1967).

The cash flow statement exhibits how variations in the balance sheets accounts and income statements influence cash and cash equivalents. Many analysts view the cash flow statement as the most significant financial statement as it bears reconciliation between the net income and cash flow. The cash flow statement also furnishes analysts with details on the use of the net income on financing, operating and investing activities.

Performance can be classified as either financial or non-financial (Hermalin & Weisbach, 2003). Financial performance is commonly measured using financial models such as Return on Equity (ROE) and Return on Asset (ROA). Return on Assets (ROA) depicts how efficient a firm is in employing its assets to create profits. It is a variable that can easily be employed to differentiate the financial performance of companies in the same industry or that of firms in different industries. It is expressed as a ratio of net income after tax divided by total assets employed during the financial year (Larson 1992). A higher ROA is favorable as that elucidates the firm is earning more money than the value of employed assets. Return on Equity is a measurement that seeks to establish the company's profitability in relation to the equity employed by the shareholders. It is expressed as a ratio of the net income after tax divided by the average common shareholder value (Hermanson, 1992). A higher ROE is favorable to the company. Other

financial measures of a firm performance include operating margin, working capital and cash flow.

1.1.3 Board Characteristics and Financial Performance

Several scholars have studied the design and effectiveness of corporate governance structures. A significant bit of the study underlines the fundamental role of a company's board, keeping in mind that it is the medium of supplementing the overall performance of the firm and the financial performance in particular. The study by Jensen (1993) indicates that firms with oversized boards are normally less effective. Yermack (1996) stresses this narrative empirically using a sample of companies based in the United States and noticed that leaner boards are associated with better company performance and increased company value. The study results by Adams and Mehran (2008) depict that a huge board has a gloomy influence on the performance of U.S. banks. The poor performance of these firms contributed to more frequent merger and acquisitions in the U.S. banking industry. Board composition has been perceived to have an influence on the financial output of firms globally. A study by Rosenstein and Wyatt (1990) indicated that an increase in the number of independent directors on the board contributed to the growth of the firm's value. Bhagat and Black (2001) also discovered the 934 large U.S companies in their study increased the number of independent directors when their financial performance was on the declining trajectory.

1.1.4 Nairobi Securities Exchange

The NSE was established in 1954. It was formerly known as Nairobi Stock Exchange, which was then changed to Nairobi Securities Exchange Limited in July 2011. The NSE currently has 65 listed companies with 13 sectors namely; investment services, telecommunication and technology, agricultural, construction and allied, investment trust on real estate, automobiles and

accessories, traded fund on exchange, banking, investment, energy, commercial and, manufacturing. The CMA is the body mandated with approving the listing of all public offers and listings of securities on any security exchange within the Kenyan jurisdiction. For companies to be listed at the NSE, the non-executive directors in their boards must be at least a third of all board members. The CMA also requires these firms to institute an audit committee. Companies are expected to operate within the code of Corporate Governance Practices for Issuers of Securities issued by the Capital Markets Authority via Gazette Notice 1420. The code provides the charter of the governance structure (NSE, 2017).

1.2 Research Problem

Considerable attention has been given to board characteristics in recent years. This is because the function performed by the board is significant to the firm performance as the board executes its responsibilities. Empirical studies investigating the effect of the characteristics of the board on the financial performance of companies provide conflicting views. Studies have been carried out investigating the linkage associating the structure of the board and company performance with the assumption that the firm's financial performance is largely influenced by board characteristics. Research conducted by different scholars on the influence of board characteristics on the financial performance of a firm remains inconclusive. Wang (2014) and Weir, Liang and McKnight (2002), could not ascertain if BOD characteristics had any influence on the financial output of a firm. However, in other studies conducted by Malgharni & Lofti (2013), Scholar (2013) and Nakano & Nguyen (2011), board characteristics were largely indicated to have an influence the financial performance of firms.

Board independence has been a fundamental concern especially in the local scene. For instance, East African Portland Cement managing director who is a government appointee together with five other directors resigned in 2015, with media reports suggesting government intervention. This action affected the performance of the firm drastically making the share price go down and fears were also raised of suspension from the NSE (Business Daily, 2013). Kiptum (2013) investigated the influence of the composition of the board on the financial performance of quoted companies in the NSE. The findings indicated that age, gender, independence and ethnicity considered in the model significantly influenced the financial performance of those firms as depicted by their positive mean values and respective standard deviations. A research paper by Wetukha (2013) investigation on the linkage between board composition and financial performance of quoted firms at the NSE indicated that the independence of the board, the size of the board, CEO duality and gender diversity have an influence on the financial output of the companies. However, research carried out by Wang (2014) concluded that board independence has no noteworthy influence on firm performance.

A research conducted by Nakano and Nguyen (2011) established that a direct relationship exists between some characteristics of the BOD and financial performance of firms. Research conducted by Chepkosgei (2013) investigated the influence of board composition on the financial performance of 43 Kenyan banks revealed that ratio of female directors, ratio of non executive directors, board size and occupational experience of directors could remarkably influence ROA and ROE. However, Weir, Liang and McKnight (2002) took a tangent after their conclusions elucidated that the characteristics of the board did not have any influence on the financial output of the company. The endless research done on this wide topic has produced divergent findings across board.

There is no optimum size for a firm's board but the ideal size should be motivated by how effective the board is as a team. There have been contrasting findings on the influence of board size on a firm's output. Shukeri (2012) concluded that board size had immediate influence the financial performance of firms. Firms with leaner BOD were found to show higher financial performance than firms with la larger BODs. Dalton and Daily (1999) established similar findings where they established that smaller BODs were associated with favorable financial performance of firms. However, findings from Andreas and Vallelado (2008) indicated that bigger BODs were more efficient in supervision and created more value for a firm. With these conflicting findings by previous researchers on this broad topic, this study sought to establish if indeed board characteristics have an effect on the financial performance of companies, specifically firms quoted at the (NSE). It sought to respond to the research question; what is the effect of board characteristics on the financial performance of companies quoted at the NSE?

1.3 Research Objective

The objective of this research paper was to determine the effect of board characteristics on the financial performance of companies quoted at the NSE.

1.4 Value of the Study

This research paper will provide extremely useful and indispensable information that will be of benefit to institutions, professional bodies, entrepreneurs and practitioners. It will also provide much needed insight regarding corporate governance practices to the board of directors who are the gatekeepers of corporate governance in organizations. Policy makers are bound to benefit from this study since new knowledge will be discovered on how corporate governance structures could promote growth of the private sector for the much needed prosperity.

The findings of this study will assist listed firms to understand the linkage between board characteristics and financial performance which is fundamental when in need of having a strong team of decision makers with a broad range of alternatives. The effectiveness of BODs of different firms will obviously differ because of adoption of varying attributes that will help them achieve their objectives. Most firms will develop these characteristics and make them ideal choices from internal mechanisms (Agrawaland, 1996).

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section analyzes the theoretical framework of this research paper. The empirical literature, determinants of financial performance and theories used in this research paper will be reviewed. A summary of the literature review will be given in the end of the chapter.

2.2 Theoretical Review

The theories that are used to form the theoretical framework of this study are: the agency theory, resource dependency theory, stewardship theory and stakeholder theory. These theories give elaborate insights on how the board characteristics may influence the financial performance of listed firms.

2.2.1 Agency Theory

Jensen and Meckling (1976) are the originators of the agency theory which is the fundamental theoretical basis of corporate governance. This theory provides that the shareholders are the principals and the management is referred to as the agent (Fernando, 2012). The principals define the long term plan of the firm and the agents are tasked with pursuing these plans. In many cases, these plans are not pursued as expected. The management, who are the agents end up acting on their own personal interests. The shareholders may be unable to control this dissonance because of lack of adequate disclosures decisions made by the management. Because of the conflicting interests between the principal and the agent, an agency problem arises. The cost inflicted on the agency problem is known as the agency cost. The fundamental purpose of corporate governance is setting up structures to facilitate disclosures, oversight, providing corrective systems and monitoring of firm activities so as to have coherence of objectives between the management and

the shareholders in order to minimize agency costs (Nambiro, 2007). The agency theory provides ways in which the agency loss can be reduced. A firm can introduce incentive schemes for its managers where they can be rewarded financially for maximizing shareholders' interests (Fernando, 2012). The independent statutory auditors can also help in reducing the agency costs by checking if the financial and non-financial disclosures give an honest and accurate representation of the financial health of the firm. Another viable mechanism to reduce agency costs is by having an efficient and independent board of directors. Directors are fiduciaries of the shareholders hence they should be accountable only to the shareholders (Nambiro, 2007).

2.2.2 Stakeholder Theory

This theory was developed gradually by Freeman (1984) who advocated the inclusion corporate accountability to the different types of stakeholders. This theory adds all interest groups into the corporate mix. These groups include management, employees, shareholders, customers, dealers, government and the society at large. The stakeholder theory provides a medium of investigating the linkage associating firm performance, diversity of the board and inclusion of all the stakeholder groups into the corporate mix (Hillman et al., 2001). A public-private partnership provides a stakeholder with a more relevant perspective on governance as it offers a system centered perspective on how the different interest groups are represented. Scholl (2001) discovered the public sector used the stakeholder theory to make its decisions and also suggested that stakeholder characteristics can shape policies. A big limitation of the stakeholder theory is that there is scant empirical evidence explaining the relationship between stakeholders a firm's performance. However, there are considerable theoretical arguments favoring promotion of stakeholders' interests. When the management considers stakeholders in their decision making,

the management can be able to accomplish its tasks effectively. This creates a contact between the two parties (Freeman, 1999)

2.2.3 Stewardship Theory

Davis and Donaldson (1997) define a steward as one whose aim is to shield and maximizes shareholders wealth through the efficient running of the firm. Donaldson and Davis (1991) believe that holders of various roles in the organization are seen as being influenced by their need to be successful, overcoming challenging work and to wield responsibility and authority and therefore earning respect and recognition from their colleagues. This theory considers management as custodians of the resources of an entity. Davis et al., (1997) agree that, unlike agents in the agency theory, stewards feel rewarded if they attain organizational objectives and not by egoistic tendencies hence this achievement also fulfills individual desires of the custodians. Stewardship theory proposes that the executive should be allowed some prerogative built on trust, which reduces the expense of supervising the conduct of the executive. Donaldson and Davis (1991) claim that an executive who has worked for a firm for a long period of time, ends up having his individual ego and the firm's goals merging. The biggest limitation to the adoption of the stewardship style of management is that it lies in the risk propensity of the shareholders. Its only the shareholders who are risk taking that will favour a stewardship governance mechanism (Fernando, 2012).

2.2.4 Resource Dependency Theory

This theory originated from Pfeffer (1972). This theory pays particular attention to the duty of the board in facilitating access to resources required by the company. This theory holds that the board is a critical linkage between the company and the extraneous resources required for performance maximization (Pfeffer, 1972, Hillman et al, 1972). Hillman, Canella and Paetzold

(2001) state that the board provides access to resources demanded by the company including: buyers, social groups, suppliers and public policy makers. In essence, directors can be grouped into four classes; business experts, insiders, community influencers and support specialists. Support specialists are public relation experts, bankers, insurance company representatives and lawyers. Insiders are the firm executives who make critical decisions, solve problems and formulate strategies for the company. Community influencers are leaders of social or community organizations, political leaders, and members of clergy.

2.3 Determinants of Financial Performance

The determinants of financial performance in a firm include: board characteristics, size of the firm and the firm's liquidity.

2.3.1 Board Characteristics

BOD characteristics vary from one firm to another. Studies around this subject are not conclusive in nature. For instance, Weir, Laing and McKnight (2002) and Wang (2014) found no proof that BOD features influence the performance of a firm. Other scholars however, took an opposing view and connected certain BOD characteristics with firm performance (Malgharni & Lotfi, 2013). However, the BOD's responsibility is vital to the performance of a firm since BODs have the crucial role of strategically leading the entity (Abdullah, 2004).

2.3.2 Size of the Firm

The magnitude of a company's operations is the volume of production capability and capacity the company has or the volume and range of services it can deliver simultaneously to its clientele (Humphery-Jenner& Powell, 2001). Previous studies have shown that company size can predict the future stock price. The study by Hvide and Moen (2007) concluded that larger firms have

better performance compared to smaller firms. The size of a company is a major determinant in ascertaining the profitability of a company owing to the theory known as economies of scale observed in the conventional neo-classical perspective of the corporation. It discloses that unlike smaller firms, items can be manufactured at a much lower costs by larger firms. According to this theory, a positive association between firm size and profitability is predicted (Hall & Weiss, 1967). Conflicting to this theory, other concepts of the firms have it that bigger corporate are managed by people pursuing egoistic objectives and as a result managerial utility maximization function may replace profit maximization of the firm's objective function (Humphery-Jenner & Powell, 2011).

2.3.3Liquidity

Liquidity is the extent to which debt coming due in the succeeding twelve months can be met in cash or assets that will be converted to cash. It shows the ability of how quickly an asset can be converted to cash and also reflects the ability of a company to utilize working capital when maintained at normal levels. Additionally, high levels of liquidity help the company in dealing with unexpected contingencies and also help in meeting the firm's debt obligations during periods of low returns (Myers, 1977).

2.4 Empirical Review

Scholer (2013) investigated the link, if any, between the independence of the BOD and the financial outcome of the firm run by that BOD in a two-tier framework suggested that Danish companies should view independence of their BODs with optimism since there appeared to be a high correlation between this independence and the performance of their companies. Wang (2014) also carried out such a study in China but ended up achieving conflicting results. He found that board independence had no impact on the financial performance of a company.

Kiptum (2012) investigated the impact of board composition on financial performance of quoted firms. The research design employed was descriptive since it provided information on characteristics of a population. The population of interest in this study constituted all listed firms at the Nairobi Securities Exchange for a five year duration from 2008 to 2012. Secondary data was used where annual financial reports provided financial information, board composition data was extracted from corporate governance disclosures of individual listed firms filed by the NSE and CMA library. This being a comparative study, multivariate analysis models which involved mean, mode, median and test of normality were used. The findings showed that board composition influences the financial performance and the study concluded that the age of directors, education level and board independence have a positive relationship with financial performance.

Dionne, Chun and Triki (2015) initiated a study on the significance of directors' financial literacy, directors' independence and their influence on corporate governance, it was found that these features increased a firm's value as in a way they mitigated risks associated with bad decisions. These findings were also buttressed by findings in the same study where it was found that in periods of erratic gold prices, educated speculators were more effective than average speculators in the industry. These results suggested that the SOX and the capital markets should require that directors have some financial literacy. Corporate governance association with financial performance of parastatals in Kenya was studied by Murage (2010). Findings from his research paper indicated that corporate governance has an impact on the return on assets hence concluding that parastatals would enhance their financial performance by practicing good governance.

Nordin (2008) investigated the compensation of directors and the effect it has on financial outcomes of Malaysia's both public and private companies. The results indicated that there was mixed link between directors' remuneration and the firms' performance. Vafaei, Mather and Ahmed (2012) looked at the linkage between the boards gender diversity and the financial performance of a firm. The research paper employed a cross sectional research design as it focused on providing information on characteristics of a population of listed firms. They used data from a population of 500 Australian Securities Exchange (ASX) listed for the period 2005-2010 and obtained it from annual reports and board composition data from corporate governance disclosures. They used a multivariate regression model in analyzing the data and their results indicated the percentage of women on boards has a positive influence on the financial performance of a firm. Agenda (2015) studied the link, if any, between the diversity of the BODs and the financial results announced by NSE's trading and manufacturing firms ran by these BODs. The findings indicated a strong link between these two variables. Additionally, board average age, gender, education, board independence and firm size had a weak positive effect to the financial performance of these firms. Lee (2009) in his study wanted to investigate the impact of firm size on a company's performance. He conducted a sample of 700 publicly listed firms in the US and he collected data through secondary means such as firm's annual reports. The period of his study was between 1987 and 2006 and he analyzed data using a multivariate regression model. The findings depicted that the absolute size of a firm is fundamental in explaining profitability. However, this correlation between these two variables was not linear hence further showing that profitability reduced in larger companies. A study conducted by Chogii (2009) tested the various corporate governance theories and their effects on firms' performance. He used secondary data from 2004-2007 and his population target was all firms listed at the NSE

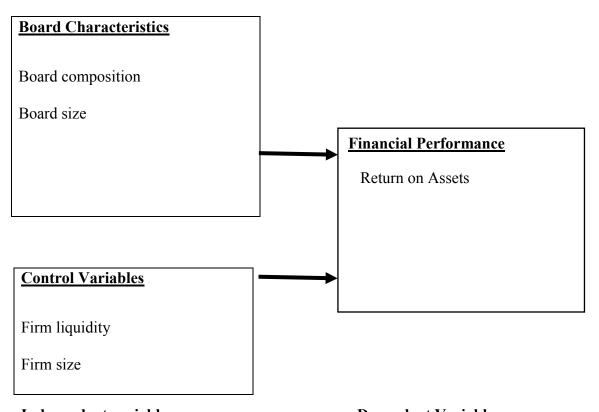
excluding commercial banks due to their unclear debt structure. He used two multivariate regression models which used Tobin Q and ROA as the measure of firms' performance against board size, outside directors' representation, as well as the control variables which were asset structure, firm size and debt structure. He found that board size was negatively linked to the financial performance of the listed corporations, the smaller the board size the more profitable a firm was. He also noted that corporations with an increased number of outside directors performed impressively.

A study carried out by Van Ness, Miesing and Kang (2010) on the effect of BOD characteristics including BOD composition, CEO duality, size of the BOD and BOD tenure revealed that these features had fundamental effect on the performance of a firm. Yazdanfar (2013) investigated board composition and its relationship with financial performance. His research paper used data from a sample of 12,530 micro firms from four different categories namely healthcare, transport, metal and retail trade industries having approximately 87,000 observations. It was found that firm growth, the size of the firm and lagged profitability had an effect on firm profitability as measured by ROA. The findings of yet another study carried out by Malgharni and Lotfi (2013) on the link between BOD composition and risk management of the firms listed in the Tehran Stock Exchange showed considerable positive correlation linking the size of the board, number of board meeting, financial literacy of the directors in the board, the CEO dual functions, controlling variables and risk management.

2.5 Conceptual Framework

The independent variables are the board characteristics which include: BOD composition and board size. The dependent variable is the firms' financial performance. This relationship is controlled by firm size and liquidity.

Figure 2.1: The Conceptual Model



Independent variables

Dependent Variable

Source: Researcher (2018)

2.6 Summary of Literature Review

There were four theories that were used to form the basis of this study. The theories used were: the agency theory, the stewardship theory, the resource dependency theory and the stakeholder theory. Factors that affect the financial performance of firms were also elaborated. They include:

firm size, liquidity of the firm, information technology and the unique combination of board characteristics in listed firms. The empirical review gave a broad insight on the linkage between the financial performance of listed corporations and the different characteristics of the board adopted by them.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The research methodology employed in this paper will be set out in this chapter. Elaborate details on the preferred research design used, the population of interest selected, data collection methods used and how the data will be analyzed is given in this chapter.

3.2 Research Design

A research design is the overall blueprint that a researcher chooses to blend the different elements of a research paper in a rational and objective manner. The purpose of a research design is to fortify the findings obtained to help the researcher to effectively tackle the research problem with completeness. A research deign contains a model for collection, measurement and analysis of data. The type of design to be used by a researcher is determined by the research problem (De Vaus, 2001). Large amounts of data are collected in descriptive studies for detailed analysis. Descriptive studies also ensure that the subject being observed is in a completely natural and unchanged environment unlike experiments where the normal behavior of the subject is adversely influenced. For these reasons, I will use a descriptive research design.

3.3 Target Population

A target population is a set of components in which an investigator intends to make conclusions from by using the sample statistics (Mugenda and Mugenda , 2003). The size of a target population is subject to limitation, observable and has some defined time restrictions. The parameters of the sample are assumed to be the same parameters for the population. This research project used the 64 corporations quoted at the NSE as at 31st December 2017 as the target population.

3.4 Data collection methods

This research paper employed secondary data retrieved from the financial reports of the corporations quoted at the NSE. Secondary data collected comprises of board composition, board size and Return on Assets. This information was attained with minimal difficulty since all listed firms are mandated by the CMA to publish their financial statements. The values that the researcher used to get the Return on Assets were obtained from the published financial reports of the firms quoted at the NSE. These values shall be obtained from the balance sheet and the income statement. ROA is obtained by dividing net income by total assets. Data on the composition of the board, that is, the number of independent and executive directors and also the number of directors that served in a particular company will be obtained from the corporate disclosures of the companies themselves. More information relating to these disclosures will be obtained from the CMA. The researcher will also obtain data from reports of various listed companies in business and trade journals. The data collected from these firms was for the year 2013 to 2017.

3.5 Diagnostic Tests

Linearity shows that variables are related by a mathematical equation y=bx where x and y are the variables and c is the constant. The linearity test was obtained through the F-statistic in ANOVA. Normality is a test for the presumption that the residual of the response variable are normally distributed around the mean. This was determined by Shapiro-walk test or Kolmogorov-Smirnov test. Autocorrelation is the measurement of the similarity between a certain time series and a lagged value of the same time series over successive time intervals. It was tested using Durbin-Watson statistic (Khan, 2008). Multicollinearity is said to occur when there is a nearly exact or

exact linear relation among two or more of the independent variables. This was tested by the determinant of the correlation matrices, which varies from zero to one (Burns & Burns, 2008).

3.6 Data Analysis

Due to the large volumes of data collected using the descriptive research design, descriptive analysis will be the most suitable method of analysis in this research paper. The descriptive analysis using tools that will be used are Microsoft Excel as well as SSPS (Statistical Package for Social Sciences). The data utilized was time series data for the years between 2013 to 2017.

The data was consequently summarized through employment of descriptive statistic tools which are: mean, median, frequency and standard deviation. To analyze, understand and interpret the collected data, tables will be used to display it. Regression will be employed to establish the correlation of the independent and dependent variables.

The regression model utilized in this study was:

$$Y = \alpha 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \epsilon$$

Where;

Y = Represents the dependent variable which is the Return on Assets. The ROA was used as an indicator of the overall firm's financial performance.

 $\alpha 0$ = this is a constant that represents the minimum change in Y without considering the predictor variables.

X1 = BOD composition which is computed by dividing the number of independent directors by the total number of directors in the company. X2 = size of the board which is computed by considering the natural logarithm of the number of directors that served individual companies in the duration under this research paper.

X3 =firm size which is computed by the natural logarithm of the value of total assets.

X4 = Firms liquidity over the period under study which is computed using the current ratio by dividing current assets by the current liabilities

 ε = Residual term which represents features that influence the financial performance of the firms but are not set out in the regression model.

 $\beta 1, \beta 2, \beta 3, \beta 4$ = these are beta coefficients that measure the rate of change in Y as a result of change in the independent variables.

X3 and X4 are the control variables in this study.

3.6.1 Tests of Significance

The researcher carried out parametric tests to determine the statistical significance of both the overall model and individual parameters. The F-test was used to establish the relevance of the overall model and it was obtained from Analysis of Variance (ANOVA). The statistical significance of the F-test was at five percent. A t-test was employed to determine the statistical significance of individual variables and it was at 5%. The overall model had a confidence level of 95%.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND

INTERPRETATION

4.1 Introduction

This section looked into the scrutiny of the collected data from the Capital Markets Authority

and individual companies' annual financial reports to determine the impact of the characteristics

of the board on financial performance of firms quoted at the NSE. Using correlation analysis,

descriptive statistics and regression analysis, the findings of this research were presented in table

forms as shown in the following sections.

4.2 Response Rate

This research paper targeted all the 64 firms quoted at the NSE as at 31st December 2017. Data

was obtained from 53 firms representing a response rate of 82.81%. From the respondents, the

researcher was able to obtain secondary data on board characteristics, firm size, liquidity and

financial performance of listed corporations at the NSE.

4.3 Diagnostic Tests

The researcher carried out diagnostic tests on the collected data. A test of Multicollinearity was

undertaken. Tolerance of the variable and the VIF value were used where values more than 0.2

for Tolerance and figures less than 10 for VIF show that there is no Multicollinearity. For

multiple regressions to be useful, the variables should not have a strong relationship. From the

findings, the all the variables had a tolerance values >0.2 and VIF values <10 as shown in table

4.1 depicting that no Multicollinearity exists among the independent variables.

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Table 4.1: Multicollinearity Test for Tolerance and VIF

Collinearity Statistics			
Tolerance	VIF		
0.310	1.326		
0.380	1.367		
0.706	1.417		
0.503	1.99		
	0.310 0.380 0.706		

Source: Research Findings (2018)

Shapiro-walk test and Kolmogorov-Smirnov test was employed in normality test. The null hypothesis for the test was that the secondary data was not normal. If the p-value recorded was more than 0.05, the researcher would reject it. The test findings are depicted in table 4.2.

Table 4.2: Normality Test

Financial	Kolmogorov-Smirnov ^a		Shapiro-Wilk			
performance	Statistic	Df	Sig.	Statistic	Df	Sig.
Board composition	.149	265	.300	.857	265	.853
Board size	.156	265	.300	.906	265	.822
Liquidity	.172	265	.300	.869	265	.723
Firm size	.165	265	.300	.880	265	.784
a. Lilliefors Significa	ance Correction	on				

Source: Research Findings (2018)

Both Kolmogorov-Smirnova and Shapiro-Wilk tests recorded o-values greater than 0.05 implying that the data used in research was distributed normally and therefore the null hypothesis was rejected. This data was therefore appropriate for use to conduct parametric tests such as Pearson's correlation, regression analysis and analysis of variance.

Autocorrelation tests were executed so as to examine correlation of error terms across time periods. Autocorrelation was checked for using the Durbin Watson test. A durbin-watson statistic of 1.862 indicated that the variable residuals were not serially correlated since the value was within the acceptable range of between 1.5 and 2.5.

Table 4.3: Autocorrelation Test

Mode	R	R Square	Adjusted R	Std. Error of	Durbin-
1			Square	the Estimate	Watson
1	.536 ^a	.287	.276	.01754978	1.862

a. Predictors: (Constant), Size of the firm, Composition of the board,

Liquidity, Size of the Board.

b. Dependent Variable: ROA

Source: Research Findings (2018)

4.4 Descriptive Analysis

Descriptive statistics gives a presentation of the average, maximum and minimum values of variables applied together with their standard deviations in this study.

Table 4.4 shows the descriptive statistics for the variables applied in this research paper. An investigation of all the variables was facilitated using SPSS software for the period of five years (2013 to 2017) for 53 companies quoted at the NSE that provided data for this research. The

mean, maximum and minimum and standard deviation for all the variables selected for this research are as shown in the table below.

Table 4.4: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std.
					Deviation
ROA	265	05320	.06700	.0218851	.02063164
Board Composition	265	.4000	.9167	.792738	.1079378
Board Size	265	4.000	16.000	8.98113	2.257064
Liquidity	265	.140	.948	.38064	.125179
Firm Size	265	6.794	8.703	7.66223	.508919
Valid N (listwise)	265				

Source: Research Findings (2018)

4.5 Correlation Analysis

The association between any two variables used in the study is established using correlation analysis. This relationship ranges between (-) strong negative correlation and (+) perfect positive correlation. Pearson correlation was employed to examine the level of link between the listed firms' financial performance and the independent variables for this study (board composition, board size, firm size and liquidity).

Table 4.5: Correlation Analysis

		ROA	Board	Board	Liquidity	Firm
			Composition	Size		Size
	Pearson	1	.050	.072	.182**	.513**
ROA	Correlation	1	.030	.072	.102	.313
	Sig. (2-tailed)		.419	.246	.003	.000
Board	Pearson	.050	1	.525**	009	.097
	Correlation	.030	1	.525	009	
Composition	Sig. (2-tailed)	.419		.000	.889	.115
	Pearson	0.72	**	1	.035	177**
Board Size	Correlation	.072	.525**	1		.177**
	Sig. (2-tailed)	.246	.000		.566	.004
	Pearson	.182**	009	.035	1	120*
Liquidity	Correlation	.182	009	.033	1	.128*
	Sig. (2-tailed)	.003	.889	.566		.038
	Pearson	512**	007	177**	120*	1
Firm Size	Correlation	.513**	.097	.177**	.128*	1
	Sig. (2-tailed)	.000	.115	.004	.038	

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

Source: Research Findings (2018)

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

c. Listwise N=265

This research discovered that liquidity and the size of the firm have a positive and consequential correlation with financial performance of companies quoted at the NSE as evidenced by (r = .182, p = .003; r = .513, p = .000) respectively. The study also found out that board composition and board size have a positive but insignificant correlation with financial performance as evidenced by (r = .050, p = .419; r = .072, p = .246) respectively. Although the independent variables had an association to each other, the association was not strong to cause Multicollinearity as all the r values were less than 0.70. This implies that there was no Multicollinearity among the independent variables and therefore they can be used as determinants of financial performance in regression analysis.

4.6 Regression Analysis

Financial performance was regressed against four predictor variables; board composition, board size, firm size and liquidity. The regression analysis was executed at a significance level of 5%. The critical value obtained from the F – table was measured against the one acquired from the regression analysis.

The study obtained the model summary statistics as reflected in table 4.6 below.

Table 4.6: Model Summary

Mode	R	R Square	Adjusted R	Std. Error of	Durbin-
1			Square	the Estimate	Watson
1	.536ª	.287	.276	.01754978	1.862

a. Predictors: (Constant), size of the firm, Composition of the board,

Liquidity, Size of the board

b. Dependent Variable: ROA

Source: Research Findings (2018)

R squared, being the coefficient of determination shows the deviations in the response variable due to variations in predictor variables. From the outcome in table 4.6 above, the value of R square was 0.287, a discovery that 28.7 percent of the deviations in financial performance of firms quoted at the NSE are caused by changes in board composition, board size, firm size and liquidity. Other variables not included in the model justify for 71.3 percent of the variations in financial performance of the corporations quoted at the NSE. Also, the results elucidated that a strong association exists among the selected independent variables and the financial performance as shown by the correlation coefficient (R) equal to 0.536. A durbin-watson statistic of 1.862 indicated that the variable residuals were not serially correlated since the value was within the accepted range of between 1.5 and 2.5.

Table 4.7: Analysis of Variance

Model		Sum of	Df	Mean	F	Sig.
		Squares		Square		
	Regression	.032	4	.008	26.215	.000 ^b
1	Residual	.080	260	.000	1	
	Total	.112	264			

a. Dependent Variable: ROA

b. Predictors: (Constant), Firm Size, Board Composition, Liquidity, Board Size

Source: Research Findings (2018)

The p value is 0.000 which is less than p=0.05. This implies that the model was statistically significant in predicting how the composition of the board, size of the board, firm size and liquidity affect the companies listed at the NSE' financial performance.

Coefficients of determination were used as indicators of the trajectory of the association linking the independent variables and the companies listed at the NSE' financial performance. The p-value under sig. column was seen to be an indicator of the significance of the association between the dependent and the independent variables. At ninety five percent level of confidence, the p value is less than the conventional value 0.05. As such, a p-value above 0.05 depicts that the dependent variables have a statistically insignificant association with the independent variables. The results are indicated in table 4.6

Table 4.8: Model Coefficients

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		В	Std. Error	Beta		
	(Constant)	126	.018		-7.073	.000
1	Board	.024	.012	.119	1.932	.054
	Composition	.021	.012	.117	1.732	.021
1	Board Size	.000	.001	.041	.656	.512
	Liquidity	.019	.009	.116	2.195	.029
	Firm Size	.020	.002	.502	9.367	.000

a. Dependent Variable: ROA

Source: Research Findings (2018)

From the above results, it is evident that firm size produced a positive and statistically significant effect (high t-values, p < 0.05). Liquidity was also found to have a significant and positive effect on financial performance as evidenced by a p value of less than 5%. Board composition and the size of the board were found to be insignificant determiners of financial performance for this study as evidenced by p values that are above 5%.

The following regression equation was estimated:

 $Y = -0.126 + 0.019X_1 + 0.020X_2$

Where,

Y = Financial performance measured by ROA

 X_1 = Firm liquidity

 X_2 = Firm size

On the estimated regression model above, the constant = -0.126 depicts that if selected dependent variables (board composition, board size, firm size and liquidity) were rated zero, the companies listed at the NSE' financial performance would be -0.126.A unit increase in firm size will lead to an improved financial performance of the Kenyan companies quoted at the NSE by 0.020 while a unit increase in liquidity will lead to an improved financial performance of corporations quoted at the NSE by 0.019.

4.7 Discussion of Research Findings

The research explored the relationship linking characteristics of the board and financial performance of the corporations quoted at the NSE. Board characteristic was the independent variable with two measures. Board composition as computed by the ratio of independent directors to total directors and size of the board as computed by the natural logarithm of the total number of board members. The control variable was firm liquidity as measured by current ratio

and firm size as computed by the natural logarithm of the value of total assets. Financial performance was the dependent variable that the study intended to explain and it was measured by ROA.

The Pearson correlation coefficients between the variables revealed that firm size and liquidity has a significant and positive correlation with financial performance of companies quoted at the NSE. This investigation also discovered that a positive and insignificant correlation exists between board composition and the size of the board with financial performance of corporations quoted at the NSE.

The model summary revealed that the independent variables: board composition, board size, firm size and liquidity explains 28.7% of the change in the dependent variable as shown by the R² value which means that the are other variables not factored in this model that account for 71.3% of variation in the companies listed at the NSE' financial performance. At 95% level of confidence, the model was fit as shown by an F-value of 26.215. This means that the overall multiple regression model was statistically significant and is an adequate model for explaining the influence of the chosen independent variables on the companies listed at the NSE' financial performance.

The results of this research concur with Kiptum (2012) investigated the impact of board composition on financial performance of quoted firms. A descriptive research design was employed in the research paper because it provided information on characteristics of a population. The population of interest in this study constituted all listed firms at the Nairobi Securities Exchange for a five year duration from 2008 to 2012. Secondary data was used where annual financial reports provided financial information, board composition data was extracted

from corporate governance disclosures of individual listed firms filed by the NSE and CMA library. This being a comparative study, multivariate analysis models which involved mean, mode, median and test of normality were used. The findings showed that board composition influences the financial performance and the study concluded that the age of directors, education level and board independence have a positive relationship with financial performance.

The study is also in agreement with Murage (2010) whose findings in his research paper on the association linking corporate governance and financial performance of Parastatals in Kenya indicated that corporate governance has an impact on the return on assets hence concluding that parastatals would enhance their financial performance by practicing good governance.

CHAPTER FIVE: SUMMARY, CONCLUSION AND

RECOMMENDATIONS

5.1 Introduction

This chapter gives a synopsis of the findings, conclusions, recommendations and the limitation

of the research. This section also elucidates the policy recommendations that policy makers can

implement to achieve the expected financial performance of the firms listed at the NSE. This

chapter also gives recommendations for further exploration which can be helpful to future

analysts.

5.2 Summary of Findings

This research paper endeavored to establish the effect of board characteristics on financial

performance of companies quoted at the NSE. The independent variables for this research were

board composition, board size and liquidity. A descriptive research design was employed for this

research. Secondary data was obtained from the Capital Markets Authority and was analyzed

using SPSS software version 22. The research used annual data for 53 firms quoted at the NSE

covering a five year time frame from January 2013 to December 2017.

From the results of correlation analysis, firm size and liquidity were found to have a significant

and positive correlation with financial performance of firms listed at the NSE. The research

outcomes further reveal that the composition of the board has a weak positive and statistically

insignificant correlation with financial performance of corporations quoted at the NSE. The

research also found out a positive and insignificant correlation exists between board size and

financial performance of companies quoted at the NSE.

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The co-efficient of determination R-square value was 0.287 which means that about 28.7 percent of the change in financial performance of the companies at the NSE listing can be elucidated by the four selected independent variables while 71.3 percent in the variation of financial performance was associated with other factors not covered in this research. The study also found a strong correlation linking the independent variables and the companies listed at the NSE' financial performance (R=0.536). ANOVA results indicate that the F statistic was at 5% significance level with a p=0.000. Therefore the model was fit in explaining the association between the selected variables

The regression results show that when all the independent variables selected for the study have zero value the listed firm's financial performance will be -0.126. A unit increase in firm size will lead to an increased financial performance of the Kenyan companies quoted at the NSE by 0.020 while a unit increase in liquidity will lead to an increased financial performance of corporations quoted at the NSE by 0.019. Board composition and board size do not have a noteworthy effect on financial performance.

5.3 Conclusion

It can be concluded from the findings that the companies listed at the NSE' financial performance is significantly influenced by liquidity and firm size. The study therefore concludes that a unit increase in the size of the firm precipitates a significant increase in financial performance of companies listed at the NSE while a unit increases also leads to a significant increase in financial performance. The study found that board composition and board size are statistically insignificant influencers of financial performance and therefore this study concludes that these variables do not influence to a large extent the corporations quoted at the NSE financial performance.

This study concludes that independent variables selected for this study: board composition, board size, firm size and liquidity influence to a large extent the listed firm' financial performance at the NSE. It is thus sufficient to conclude that these variables significantly influence the financial performance of firms quoted at the NSE as depicted by the p value in the ANOVA summary. The discovery that the four independent variables explain 28.7% of the variations in financial performance imply that the variables not incorporated in the model elucidate 71.3% of the variations in financial performance of firms at the NSE listing.

The results of this investigation concur with Kiptum (2012) investigated the impact of board composition on financial performance of quoted firms. A descriptive research design was employed in this research paper because it provided information on characteristics of a population. The population of interest in this study constituted all listed firms at the Nairobi Securities Exchange for a five year duration from 2008 to 2012. Secondary data was used where annual financial reports provided financial information, board composition data was extracted from corporate governance disclosures of individual listed firms filed by the NSE and CMA library. This being a comparative study, multivariate analysis models which involved mean, mode, median and test of normality were used. The findings showed that board composition influences the financial performance and the study concluded that the age of directors, education level and board independence have a positive relationship with financial performance.

5.4 Policy Recommendations

The study revealed that a positive association exists between financial performance and size of a firm. This study recommends that listed firm's management and directors should aim at increasing their asset base by coming up with measures and policies aimed at enlarging the firm's assets as this will eventually have an immediate impact on the company's financial

performance. From the findings of this study, big firms in terms of asset base are expected to perform better than small firms and therefore companies should strive to grow their asset base.

The research paper also found out that a positive linkage exists between financial performance and liquidity position. This study recommends that a comprehensive assessment of a firm's immediate liquidity position should be undertaken before investing in ay long term project as firm's liquidity has been found to be a significant determiner of financial performance.

5.5 Limitations of the Study

The range of this research was for five years 2013-2017. It has not been determined if the results would hold for a longer study period. Furthermore it is uncertain whether similar findings would result beyond 2017. A longer study period is more reliable as it will take into account major economic conditions such as booms and recessions.

The greatest limitation for the study was the quality of data as it is hard to make a conclusive deduction since the data employed might not present the true facts about the present reality. The data that has been used is only assumed to be accurate. The reality is that these measures change annually depending on the prevailing condition.

The study employed secondary data in the public domain, which had already been obtained, unlike the first-hand information presented by primary data. Primary data would have improved this study by helping the researchers get qualitative data from respondents on how they perceive the impact of board diversity on financial performance.

The study also considered selected determinants of and not all the factors affecting the financial performance of listed firms mainly due to limitation of data availability. There are other factors

that affect financial performance of listed firms which were not considered for this research as they were not quantifiable.

For data analysis purposes, the researcher utilized a multiple linear regression model. Due to the shortcomings involved when using regression models such as erroneous and misleading results when the variable values change, the researcher cannot be able to generalize the findings with certainty. If more and more data is added to the functional regression model, the hypothesized relationship between two or more variables may not hold.

5.6 Suggestions for Further Research

This research only looked into the characteristics of the board and financial performance of firms at the NSE listing and relied on secondary data. A research study where data collection depends on primary data by using interviews and in-depth questionnaires covering all the 64 companies listed at the NSE is recommended so as to compliment this research.

The study was not exhaustive of the independent variables affecting financial performance of firms quoted at the NSE and this research paper proposes that further studies be conducted to incorporate other variables like management efficiency, growth opportunities, industry practices, age of the firm, political stability and other macro-economic variables. Establishing the effect of each variable on financial performance will enable policy makers know what tool to use when controlling the financial performance.

The study concentrated on the last five years since it was the most recent data available. Future studies may use a range of many years e.g. from 2000 to date and this can be helpful to confirm or disapprove this study's findings.

The study limited itself by focusing on listed firms. The recommendations of this study are that further studies be conducted on other non-listed institutions operating in Kenya to affirm or disapprove the results of this research paper.

Finally, due to the inadequacies of the regression models, alternative models like the Vector Error Correction Model (VECM) can be employed to describe the different associations between the variables.

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APPENDICES

Appendix 1: Companies listed at the Nairobi Securities Exchange as at 31st December 2017

Agricultural

- 1. Eaagads Limited
- 2. Kapchorua Tea Company Limited
- 3. Kakuzi
- 4. Limuru Tea Company Limited
- 5. Rea Vipingo Plantations Limited
- 6. Sasini Limited
- 7. Williamson Tea Kenya Limited

Automobiles and Accessories

- 8. Car and General Kenya Limited
- 9. Sameer Africa Limited

Banking

- 10. Barclays Bank Limited
- 11. CFC Stanbic Holdings Limited
- 12. I&M Holdings Limited
- 13. Diamond Trust Bank Kenya Limited
- 14. HF Group Limited
- 15. KCB Group Limited
- 16. National Bank of Kenya Limited

- 17. NIC Bank Limited
- 18. Standard Chartered Bank Limited
- 19. Equity Group Holdings
- 20. The CO-operative Bank of Kenya Limited

Commercial and Services

- 21. Express Limited
- 22. Kenya Airways Limited
- 23. Nation Media Group
- 24. Standard Group Limited
- 25. TPS Eastern Africa (Serena) Limited
- 26. Scangroup Limited
- 27. Uchumi Supermarket Limited
- 28. Longhorn Publishers Limited
- 29. Atlas Development and Support Services
- 30. Deacons (East Africa)
- 31. Nairobi Business Ventures Limited

Construction and Allied

- 32. Athi River Mining
- 33. Bamburi Cement Limited
- 34. Crown Berger Limited
- 35. E.A. Cables Limited
- 36. E.A. Portland Cement Limited

Energy and Petroleum

- 37. Kenolkobil Limited
- 38. Total Kenya Limited
- 39. KenGen Limited
- 40. Kenya Power & Lighting Company Limited
- 41. Umeme Limited

Insurance

- 42. Jubilee Holdings Limited
- 43. Sanlam Kenya PLC
- 44. Kenya Re-Insurance Corporation Limited
- 45. Liberty Kenya Holdings Limited
- 46. Britam Holdings Limited
- 47. CIC Insurance Group Limited

Investments

- 48. Olympia Capital Holdings Limited
- 49. Centum Investments Company Limited
- 50. Trans-Century Limited
- 51. Home Afrika Limited
- 52. Kurwitu Ventures

Investment Services

53. Nairobi Securities Exchange Limited

Manufacturing and Allied

- 54. B.O.C. Kenya Limited
- 55. British American Tobacco Kenya Limited
- 56. Carbacid Investments Limited
- 57. East African Breweries Limited
- 58. Mumias Sugar Company Limited
- 59. Unga Group Limited
- 60. Eveready East Africa Limited
- 61. Kenya Orchards Limited
- 62. Flame Tree Group Holdings Limited

Telecommunication and Technology

63. Safaricom Limited

Real Estate Investment Trust (REITs)

64. StanlibFahari I-REIT

Exchange Traded Fund

65. New Gold Issuer (RP) Limited