THE EFFECT OF BOARD COMPOSITION ON FINANCIAL PERFOMANCE OF LISTED COMPANIES IN THE NAIROBI SECURITIES EXCHANGE

BY

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DECLARATION

This research project is my original work and has not been presented in any other university or college for an award of degree, diploma or certificate.

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

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DEDICATION

This project work is dedicated to my family, wife Grace, son Brian, daughters Mercy, Faith and Joylin for their encouragement and support and for bearing with me during the many months that I was absent from home.

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My appreciation goes to the Almighty God for granting me courage, good health and inspiration that was essential for this demanding study. Special thanks go to my supervisor, Mr. Herick Ondigo, who despite his busy schedule was always readily available to advice and guide me professionally throughout the study. I would also like to acknowledge the guidance and advice from Dr. Josiah Aduda the chairman, department of Finance and Accounting and all the lecturers at the University of Nairobi.

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LIST OF ABBREVIATIONS

CBK-Central Bank of Kenya

CDSC-Central Depository and Settlement Corporation

CEO-Chief Executive Officer

CMA-Capital Markets Authority

DPS-Dividends per Share

EPS-Earnings per Share

GoK-Government of Kenya

IFC-International Finance Corporation

IPO-Initial Public Offer

NEDs-Non Executive Directors

NSE-Nairobi Securities Exchange

RAO-Return on Assets

ROAM-Return on Assets Managed

ROCE-Return on Capital Employed

ROE-Return on Equity

ROS-Return on Sales

TMT-Top Management Teams

US-United States of America

ABSTRACT

Recent global events concerning high-profile corporate failures such as Enron in the US have put back on the policy agenda and intensified debate on the efficacy of board composition as a means of increasing corporate financial performance. The main objective of the study was to establish the effect of board composition on financial performance of companies listed in Nairobi Securities Exchange.

Therefore a descriptive research design was used to study whether there is an effect of board composition on financial performance of firms listed in Nairobi Securities Exchange. The population of interest in this study constituted all listed companies quoted at the NSE for the period of five years from 2008 to 2012. Secondary financial data sources was used for the study, where annual financial reports of individual listed firms' was used over the five year period where profitability was extracted and used as a measure of financial performance.

The findings showed that Board Composition variables i.e. age, gender, independence and ethnicity considered in the model are significantly associated with financial performance as indicated by their positive mean values and respective standard deviations. From skewness, the study observed that all the variables are positively skewed which clarified that the variables are asymmetrical. Skewness value of all the variables is very near to zero so it is relatively symmetrical. Kurtosis values indicated that all variables have platy-kurtic distribution and it is concluded that variables are not normally distributed.

The study recommends that board composition should be based on age, gender and independence to steer managerial functions as opposed to ethnicity. The study further recommends that female gender should be considered in directorship positions since they are proved statistically to perform better in such positions. The study further recommends that stakeholders in listed companies should take in to account the body composition issues i.e. gender, ethnicity and age when electing board of directors.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Board composition in corporate governance has been identified to be critical in corporate performance especially in emerging and transition economies (Klein, 1998; Bhagat and Black, 2000). However, at varying levels of agency interactions, market institutional conditions that reduce informational imperfections and facilitate effective monitoring of agents impinge on the efficiency of corporate performance. Board composition has assumed the centre stage for enhanced corporate financial performance. What then is board composition? Board composition can be defined as "the combination of executive directors (including the chief executive officer) and non-executive directors in the board. Sometimes non-executive directors are appointed from outside and they may not have any material interest into the firm also known as independent directors. (Hutchinson, 2002; Young, 2003; Weisbach, 2008). Corporate governance is concerned with the relationship between the internal governance mechanisms of corporations and society's conception of the scope of corporate accountability (Ayogo, 2005). It has also been defined by Park and Shin (2003) to include 'the structures, processes, cultures and systems that engender the successful operation of organizations'.

Many researchers, such as Musila (2007), have argued that the erosion of investor confidence in Kenya has been brought about by companies' board composition standards and a lack of transparency in the financial system. This is evidenced by the collapse of firms listed in the NSE such as Uchumi and many stock brokerage firms in a period of just less than ten years. Therefore, the restoration of confidence in the economy by investors will rely on improvements

in board composition standards, including the adoption of transparency as an important strategy in corporate management. With the economic recovery of most East African countries, attention has understandably been drawn to addressing and researching the underlying issues and factors that can lead to a crisis like that witnessed in the US (Jensen, 2001).

In 1984, a study on the Development of Money and Capital Markets in Kenya was jointly undertaken by the Central Bank of Kenya (CBK) and the International Finance Corporation (IFC) with the objective of making recommendations on measures that would ensure active development and strengthening corporate performance in the financial sector. This became a blueprint for structural reforms in the financial markets. The Government further re-affirmed its commitment to the creation of a regulatory body for the capital markets in the 1986 Sessional Paper on "Economic Management of Renewed Growth" (Mbaru, 2008). In November 1988, the Government set up Capital Markets Development Advisory Council and charged it with the role of working out the necessary modalities including the drafting of a bill to establish the Capital Markets Authority (the Authority).In November1989, the bill was passed in parliament and subsequently received Presidential assent (The Capital Markets Authority was set up in 1989 through an Act of Parliament (Cap 485A, Laws of Kenya)). The Authority was eventually constituted in January 1990 and inaugurated on 7th March 1990.

The Authority is a body corporate with perpetual succession and a common seal. When the CMA was established in 1988, it was in all likeness just another state body that was meant to protect public interest while drawing its funding from Treasury. The authority remained a nondescript entity throughout the 1990s which some analysts have termed as Kenya's lost decade as the economy came down on its knees owing to mismanagement and investor fear wrought by

political uncertainty. But come the year 2003, the change in government revived economic activity and had the visible effect of boosting investors' confidence and money flowed freely to the stock exchange as the newly rich sought avenues for investing their disposable incomes. What followed was a strong market bull run that set new NSE 20 share index (6,000 points) and market capitalization (Sh1.2 trillion) records in early 2007 and late 2008 respectively (Mbaru, 2008).

The initial signs that all was not well appeared as early as 2006.This is when Uchumi was placed under receivership and eventually delisted from the NSE almost immediately (CMA Report, 2008). This study therefore seeks to find out the effect of board composition on corporate performance of firms listed in the NSE.

1.1.1 Board Composition

The board should therefore be structured and composed of in such a way that it will act to monitor itself. Rashid (2011) states that "corporate governance literature debated within two extreme streams of board practices examining whether the board composition in the form of representation of outside independent directors and structural dependence of the board influence the firm financial performance. The available literature on the relationship between the board composition and firm financial performance reflects mixed results. The idea of endogenous relationship between board composition and corporate performance was advanced by Hermalin & Weisbach (2000), that is, board composition and corporate performance jointly influence each other rather the board composition influencing corporate performance or corporate performance influencing board composition. Davidson & Rowe (2004) note that board composition and financial performance influence each other but the effect is not immediate.

Universally acceptable to all corporate performance measures are hard to come by. Davidson & Rowe (2004) noted that, “There are several measurement issues such as differences in accounting and reporting across different industries that may make finding a relation between board composition and financial performance difficult at best.” While Sahin, Basfirinci & Ozsalin (2011) measure corporate performance in terms of financial performance and social responsibility performance, commonly used measures of firm performance are Return on Assets (ROA) and Tobin’s Q (a market based performance measure) (Rashid, De Zoysa, Lodh & Rudkin, 2010). Eklund, Palmberg & Wiberg (2009) used market value (defined as the total value ofoutstanding shares plus total debt) as a measure of performance.In this study the measures adopted are:return on equity (ROE), return on capital employed (ROCE), return on asset managed (ROAM), earnings per share (EPS) and dividends per share (DPS).

Murage (2010), in relationship between Corporate Governance and Financial performance of parastatals in Kenya, concluded that large boards enhanced corporate performance and that when such boards were dominated by non-executive directors, it enhanced firm value. While the CEO duality did not significantly impact on financial performance measure of ROA, in his study, it had a positive relationship with financial performance in conflict with other studies. Aduda, Chogii & Magutu (2013) in their study “an empirical test of competing corporate governance theories on the performance of firms listed at the nairobi securities found that the overall regression models for firm performance for both the Return on Assets (RAO) and Tobin Q ratio are significant, which means that the independent variables of board size, outside directors, inside directors, and CEO duality are important predictors of firm performance.

My study endeavors to carry out an investigation, analysis, documentation and come up with recommendations on the relationship between board composition and company financial performance, using Kenyan corporate entities listed at NSE. This is to determine if the Kenyan situation is in line with global trend or if we can find a definite pattern of relationship between board composition and corporate financial performance for the Kenya corporate world. Corporate governance literature debated within two extreme streams of board practices examining whether the board composition in the form of representation of outside independent directors and structural independence of the board influence the firm financial performance.

1.1.2 Financial Performance

Finance is always being disregarded in financial decision making since it involves investment and financing in short-term period. Further, it also acts as a restrain in financial performance, since it does not contribute to return on equity (Rafuse, 1996). A well designed and implemented financial management is expected to contribute positively to the creation of a firm's value (Padachi, 2006). The dilemma in financial management is to achieve the desired trade-off between liquidity, solvency and profitability (Lazaridis, 2006).The subject of corporate financial performance has received significant attention from scholars in the various areas of business and strategic management. It has also been the primary concern of business practitioners in all types of organizations since financial performance has implications to organization's health and ultimately its long term survival. High performance reflects management effectiveness and efficiency in making use of company's resources and this in turn contributes to the country's economy at large. (Naser and Mokhtar, 2004).

There have been various measures of financial performance. For example return on sales reveals how much a company earns in relation to its sales, return on assets determines an organization's efficiency in ability to make use of its assets and return on equity reveals the return investors expect to earn for their investments. The advantages of financial measures are the simplicity of calculation and also that their definitions are agreed worldwide. Traditionally, the success of a company has been evaluated by the use of financial measures (Tangen, 2003).

Liquidity measures the ability of the business to meet financial obligations as they fall due, without disrupting the normal, ongoing operations of the business. Liquidity can be analyzed both structurally and operationally. Structural liquidity refers to balance sheet measures of the relationships between assets and liabilities and operational liquidity refers to cash flow measures. Solvency measures the amount of borrowed capital used by the business relative to the amount of owner's equity capital invested in the business. In other words, solvency measures provide an indication of the business' ability to repay all indebtedness if all its assets were sold. Solvency measures also provide an indication of the business' ability to withstand risks by providing information about the operation's ability to continue operating after a major financial adversity (Harrington and Wilson, 1989).

Profitability measures the extent to which a business generates a profit from the factors of production: labor, management and capital. Profitability analysis focuses on the relationship between revenues and expenses and also on the level of profits relative to the size of investment in the business. Four useful measures of profitability are the rate of return on assets (ROA), the rate of return on equity (ROE), operating profit margin and net income (Hansen and Mowen,

2005). Repayment capacity measures the ability to repay debt from both operating and non operating income. It evaluates the capacity of the business to service additional debt or to invest in additional capital after meeting all other cash commitments. Measures of repayment capacity are developed around an accrual net income figure. The short-term ability to generate a positive cash flow margin does not guarantee long-term survival ability (Jelic and Briston, 2001).

Financial efficiency measures the degree of efficiency in using labor, management and capital. Efficiency analysis deals with the relationships between inputs and outputs. Because inputs can be measured in both physical and financial terms, a large number of efficiency measures in addition to financial measures are usually possible (Tangen, 2003).

1.1.3 Effect of Board Composition on Financial Performance

Boards are considered a link between the firm and the essential resources that a firm needs from the external environment for superior performance. Appointment of outsiders on the board helps in gaining access to resources critical to firm success (Johnson et al., 1996).

Resource dependency theorists extended the argument by positing that board members with different skills, different cultural background, different gender, among others, will act as strategic resource to the firm which may result to superior performance (Johnson et al., 1996).

It is further argued that board composition diversity promotes the functional ability of the board, particularly its ability to engage in complex problem solving, strategic decision making, and management monitoring (Forbes and Milliken, 1999).

Theoretically, there are a number of arguments in favor of board composition. For example, Carter et al. (2003) identified five positive arguments for board composition in a principal agent

framework. They opine that a more diverse board is able to make decisions based on the evaluation of more alternatives compared to a more homogenous board. A diverse board is seen to have a better understanding of the market place of the firm, which increases innovation and creativity. Board composition diversity may also improve the image of the firm considering that positive image has positive effects on customers' behavior.

1.1.4 Nairobi Securities Exchange

NSE was formed in 1954 as a voluntary organization of brokers and today it is one of the most active markets in Africa. It has played a very vital role in championing the increase in investor confidence by modernizing its infrastructure. It has led to promotion and enhancement of culture of thrift and saving by providing alternatives avenues for investment and assists in the transfer of these savings to investment in productive enterprises and quoted stocks.

The Kenyan government realized the need to design and implement policy reforms to foster sustainable economic development with an efficient and stable financial system in the 1980s.It set out to enhance the role of the private sector in the economy, reduce the demand for public enterprise on the exchequer, rationalize operations of the public enterprise sector to broaden the base of ownership and enhance capital market in the formation of a regulatory body "the capital market authority" in 1989, to assist in the creation of an environment conclusive to the growth and development of country's capital markets (Statistical Abstract, 1990).

The NSE is poised to play an increasing role in the Kenyan economy and that is why the Government of Kenya (GOK), the Capital Market Authority (CMA) and the Central Bank of Kenya (CBK) have over the years played a principal role in developing and strengthening the

NSE to enable it take up the various roles and functions. Measures taken include enactment of legislation, rules, policies and guidelines, adjustment in macroeconomic variables such as taxation rates, interest rates, exchange rates and working towards managing inflation in the economy, setting up institutions such as Central Depository and Settlement Corporation (CDSC) and Investor Compensation Fund (ICF).

In 2006 the NSE initiated the automated trading systems which have resulted in high trading volumes. The implementation of automated trading system provided for longer trading hours, increased trading efficiency and price discovery (Economic Survey, 2007). The growth of NSE in the past five years has been attributed to positive growth rate registered by the Kenyan economy and the changing international perception of Kenya as a secure investment destination. The effect of post election violence of the 2008 election outcome that led to slower economic growth and reduced investment has not hampered the growth of NSE. In the beginning of 2010, the NSE introduced the NSE All–share index which is complementary to NSE 20 share index in an effort to provide investors with a comprehensive measure of the performance of the stock market. Nairobi Securities Exchange is one of the leading developing markets in the world and investing in stocks has been hyped so much that the mention of the initial public offer (IPO) reflexively elicits expectation of more money.

1.2 Research Problem

Recent global events concerning high-profile corporate failures such as Enron in the US have put back on the policy agenda and intensified debate on the efficacy of board composition as a means of increasing corporate financial performance. Geneen (2008) in a study found that among the board of directors of fortune 500 companies, 95% are not doing what they are legally,

morally, and ethically supposed to do. It is criticized that (1) the board is a rubber stamp, (2) the board is dominated by CEO, and (3) the board is plagued with the conflicts of interests (Weidenbaum, 1986); board responds to the wishes of a controlling shareholders (Jesover and Krikpatrick, 2005).An important question of who will monitor the monitors thus arises. Although it is argued that the shareholders will monitor the board by exercising their ownership right by appointing and removing board members, shareholders may not be aware of the inside activities of the firm due to information asymmetry.

Failure to manage their businesses in a professional manner and serious governance malpractices has seen some stock brokers so far experience significant financial difficulties forcing the Capital Markets Authority to place them under receivership/statutory management (CMA Report, 2009). The firms listed in the NSE are supposed to serve as investment vehicles for the public and they are supposed to be managed professionally in order to attract investor confidence and safeguard the publics' interest. The placement of Uchumi under receivership in 2006 and eventual delisting from the NSE is just but an example. The responsibility for collapse of Uchumi then was placed right under the board of directors who were accused of ignoring governance structures and engaging in malpractices. When a new board of directors was appointed to the board of Uchumi the company has witnessed improved financial performance and has been listed again at the NSE. This emphasizes the important role board composition plays in company financial performance and hence my interest in the effect of board composition on financial performance of companies listed in the NSE.

There are some studies that have been conducted in Kenya on stock market focusing on various aspects of corporate governance of listed companies. They include Mwangi (1977) who looked at Corporate Governance in developing countries-A case of Kenya, Gitobu (2000) studied the relationship between Corporate Governance and Firms performance, Munene (2007) did a study of the Relationship between Board Composition and Firms performance-A case study of the NSE while Munga (2012) examined the impact of Board diversity on Nairobi Stock Exchange and Kenya's manufacturing Firms, among others.

Majority of the studies have examined the composite stock indices in relation to board composition of companies listed at the Nairobi Securities Exchange and examined whether companies incorporate available information, but did not determine what tasks the companies respond to in relation to board composition and to how important these tasks are to the financial performance of firms listed in Nairobi Securities Exchange and also did not establish the direction and magnitude of the interaction between board composition tasks and firms financial performance at the Nairobi Securities Exchange. In spite of all these alternative studies that have been carried out, a gap in the literature relating examining the effect of board composition on financial performance of firms listed in Nairobi Securities Exchange exist because there are still no conclusive results that have been arrived at.

Therefore, this study seeks to fill this gap by critically evaluating the effect of board composition and financial performance of companies listed in the Nairobi Securities Exchange and determining what tasks in relation to board composition the companies respond to and how important these tasks are to the financial performance of firms listed in Nairobi Securities

exchange by answering the research question: Does board composition affect financial performance of companies listed in Nairobi Securities Exchange in Kenya?.

1.3 Objective of the Study

To establish the effect of board composition on financial performance of companies listed in Nairobi Securities Exchange.

1.4 Value of the Study

To Nairobi Securities Exchange listed companies, this study seeks to provide an understanding of the linkage between board composition and financial performance in Nairobi securities Exchange listed companies which is paramount to the need to have a robust team of decision makers with a broad range of perspectives and abilities, crucial to their financial success and in building trust among companies stakeholders.

To policy makers, the findings of this study will provide a basis upon which relevant decision and policy makers in the listed companies may re-evaluate and adjust their board membership to meet the fundamentals of firm management for improved financial performance, sustainability and longevity of the unique roles the sector plays in providing a sense of calmness amidst vast economic uncertainties. Future studies may build on the findings of this study as a source of empirical information regarding the relationship between board composition and the financial performance in the Nairobi Securities exchange listed companies in Kenya.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter will be organized into four parts. Section 2.2 discusses the theoretical literature specifically discussing the theories the study is based on. Section 2.3 details on the components of Board Composition. Section 2.4 deals with measurement of Financial Performance. Section 2.5 deals with empirical literature on the board composition and seeks to establish the effect of Board Composition on corporate Financial Performance in NSE listed firms in Kenya. Lastly section 2.6 presents a summary of the literature review.

2.2 Theoretical Review

The following theories guide the relationship between board composition and corporate financial performance literature.

2.2.1 Agency Theory

The theoretical framework upon which this study will be based on is the agency theory, which posits that in the presence of information asymmetry the agent (in this case, the directors and managers) is likely to pursue interests that may hurt the principal, or shareholder (Fama, 2000). At first the theory was applied to the relationship between managers and equity holders with no explicit recognition of other parties interested in the well-being of the firm. Subsequent research efforts widened the scope to include not just the equity holders but all other stakeholders,

including employees, creditors, government, etc. This approach, which attempts to align the interests of managers and all stakeholders, has come to be regarded as the stakeholder theory.

The stakeholder theory has been a subject of some investigation. Jensen (2001) provides a comprehensive review of corporate governance, with a particular focus on the stakeholder theory. The authors note the presence of many parties interested in the well-being of the firm and that these parties often have competing interests. While equity holders might welcome investments in high yielding but risky projects, for example, such investments might jeopardize the interests of debt holders especially when the firm is teetering on the edge of bankruptcy. The review also emphasizes the role of non-market mechanisms, citing as an example the need to determine an optimal size of the board of directors especially in view of the tendency for board size to exhibit a negative correlation with firm performance. Other non-market mechanisms reviewed by Young (2003) include the need to design a committee structure in a way that allows the setting up of specialized committees with different membership on separate critical areas of operations of the firm. Such a structure would allow, for example, productivity-oriented committees and monitoring-oriented ones.

In an article extending the stakeholder theory, Jensen (2001) also recognizes the multiplicity of stakeholders. He concurs with Young that certain actions of management might have conflicting effects on various classes of stakeholders. This implies that the managers have a multiplicity of objective functions to optimize, something that Jensen sees as an important weakness of the stakeholder theory "because it violates the proposition that a single-valued objective is a prerequisite for purposeful or rational behavior by any organization" (Jensen, 2001).

In search of a single valued objective function that conforms to rationality, Jensen suggests a refinement of the stakeholder theory – the enlightened stakeholder theory. For him, the enlightened stakeholder theory offers at least two advantages. First, unlike the earlier version with multiple objectives, the modified form of the theory proposes only one objective that managers should pursue: the maximization of the long-run value of the firm. If the interest of any major stakeholder was not protected, the objective of long-run value maximization would not be achieved. A second, related, appeal of the enlightened stakeholder theory is that it offers a simple criterion to enable managers to decide whether they are protecting the interests of all stakeholders: invest a dollar of the firm's resources as long as that will increase by at least one dollar the long-term value of the firm. There is an important caveat, however. Jensen himself cautions that the criterion may be weakened by the presence of a monopoly situation or externalities.

2.2.2 Upper Echelon Theory

The upper echelons theory developed by Hambrick and Mason (1984) hypothesizes that demographic characteristics of decision makers partially predict their strategic orientations. It proposes that organizational outcomes are related to top level decision makers possessing particular demographic profiles, and so 'if you want to understand why organizations do the things they do, or why they perform the way they do, we must consider the biases and dispositions of the most powerful actors- their top executives' (Hambrick, 2007: 334).

The core assumption of Hambricks and Manson's (1984) perspective is the belief that demographic characteristics of corporate executives serve as surrogates for their cognitive orientation, beliefs, values, perceptions and knowledge base, with implications for financial performance. According to Hambrick (2007), executives act based on their personalized interpretations of a given strategic situations they are confronted with, and the personalized interpretations are a function of their experiences, values, beliefs and personalities.

Although upper echelons theory was based on top management teams, this study contends that boards of directors are 'the apex of corporate power' (Zahra and Pearce, 1989: 296), and so are involved in firms decisions. Due to changing role of the board of directors from control to service and strategic roles, their involvement in firms' strategic decisions is critical. Taking cognizance of this, upper echelons theory views firms' leaders as a critical component in influencing organizational outcomes (Hambrick and Mason, 1984), and therefore, 'organizational outcomes- both strategies and effectiveness- are viewed as reflections of values and cognitive bases of powerful actors in the organization' (193) and in this case the board of directors. They argued that demographic characteristics (e.g. age, formal education, career experiences, and functional background) shape the lenses through which they view strategic opportunities.

Proponents of the theory hypothesized that strategic choices cannot be separated from inherent demographic characteristics of decision makers. While most studies on corporate executives and corporate strategy have emphasized more on CEO and/or Top Management Teams (TMT), this study follows Finkelstein and Hambrick's (1996) suggestion that research needs to extend to

board of directors because boards of directors have a significant influence in strategic decisions of the firm. Boards of directors provide advisory roles, and play a major role in reviewing, approving, and facilitating strategic decisions. Golden and Zajac (2001) argues that demographic features of board of directors may influence the inclination of the company in terms of financial performance. This is particularly important because corporate governance will require the involvement of the board; in terms of advising, review, and approval of strategic decisions.

2.2.3 Resource Dependency Theory

Resource dependency theory considers agents (management as well as the board) as a resource since they would provide social and business networks and influence the environment in favor of their firm (Pearce and Zahra 1992; Johnson, et al., 1996; Carpenter and Westphal, 2001). Appreciation of different theoretical perspectives will give insights into the contribution of boards to firm's financial performance. The United Kingdom Cadbury Report (Cadbury, 1992) defined corporate governance as "the system by which companies are directed and controlled". Due to large number of recent corporate collapses good corporate governance has emerged as a global issue. A number of theoretical perspectives are used in explaining corporate governance and problems.

2.3 Components of Board Composition

The traditional understanding of board composition is through the paradigm of discrimination-and-fairness, both through programs such as affirmative action - attempting to select from under-represented groups - and through a numbers-based approach where statistics are the most

important tool(Thomas and Ely, 1996). As looked at earlier in the study however, there are several other aspects that need consideration, in assessing how board composition really is.
Board gender, age, ethnic composition and board independence as determinants of firm financial performance are hereby discussed.

2.3.1 Board Gender

Gender composition in the boardroom and in top executive positions has been the focus of public debate, academic research, government considerations and corporate strategy for more than a decade now, with interesting but mixed results. Previously considered a social issue and an issue of image, gender composition is increasingly approached as a value-driver in organizational strategy and corporate governance, and as such has become a challenging issue in recent academic research. Positive performance effects of board gender composition imply that a higher number of women in corporate top positions or on board of directors will relate to increased firm productivity and profitability (Marinova et el, 2010).

Examining the relationship between the percentage of women and minorities on boards of directors and firm value, a significantly positive effect is also found by Carter et al. (2003, 2008). Dwyer, Richard and Chadwick (2003) drew the attention to the moderating role of the firm's strategic orientation and organizational culture. In their study of 535 US banks they found that firms that focused on growth experienced positive performance effects from gender composition. In addition, a positive association was observed to some extent in a clan culture context which is characterized by core values such as teamwork and participation. However, the performance effects of gender composition appeared to be significantly negative within the setting of an adhocracy culture, which is characterized by an external orientation and a focus on individuality

and competition. More negative results were seen in a recent panel study of top 1500 public US companies, where Dezso and Ross (2008) found that having a female CEO had no positive effect on firm performance, while female participation below the CEO level was positively associated with firm performance for companies pursuing an innovation intensive strategy.

Whereas in the US study findings on the value of gender composition on firm financial performance are predominantly positive, it is mixed results in Europe. Rose (2007) for instance used a sample of Danish firms listed on the Copenhagen Stock Exchange during 1998-2001, and found that female board representation had no impact on firm financial performance. Smith et al. (2006) in a panel data study of 2,500 of the biggest Danish firms showed that the share of women among top executives and on boards of directors tended to have a significantly positive effect on firm financial performance, controlling for firm characteristics, as well as for the direction of causality. Furthermore their results revealed that the positive performance effects were mainly accounted for by female managers with university education, and were also related to female board members elected by the staff.

2.3.2 Board Age

In a study performed by Wegge et al. (2008), the effect of age composition upon firms financial performance was examined. Reviewing previous studies on age and gender composition, they found the familiar mixed results. A field study was then conducted on work groups amongst some 4000employees in the public sector. Age heterogeneity improved the ability of groups to solve tasks with high complexity. For groups working on simple tasks, however, age heterogeneity increased the number of self-reported health problems - which in turn indicates that groups of diverse ages should be utilized particularly for innovation or solving complex

problems (Dagsson, 2011).Wegge et. al (2008.) further explain some of the positive results of age composition as being the result of extended job tenure of the participants.

According to Dagsson et al, (2011) the only empirical study of the relationship between age composition on the board of directors and firm financial performance is McIntyre et al. (2007). Their review of relevant literature on the role and function of the board particularly notes the increasing use of organizational behavior theory to predict board function and improve board processes. From this they argue that governance research should concentrate on "creating and testing a theoretically sound model of Board effectiveness, rather than trying to relate team attribute variables to firm financial performance"

2.3.3 Board Ethnicity

The phenomenon of the ethnic composition of corporate boards encompasses at least two significant, and interrelated, propositions. The first viewpoint holds that those competent women and ethnic minorities with the human capital, external networks, information, and other characteristics of importance to the corporation deserve opportunities to serve on corporate boards and in upper management. The second proposition suggests that ethnic composition of directors results in better governance which causes the business to be more profitable (Carter et al, 2010).

2.3.4 Board Independence

John and Senbet (1998) argue that a board is more independent if it has more non-executive directors (NEDs). As to how this relates to firm performance, empirical results have been inconclusive. In one breath, it is asserted that executive (inside) directors are more familiar with

a firm's activities and, therefore, are in a better position to monitor top management. On the other hand, it is contended that NEDs may act as "professional referees" to ensure that competition among insiders stimulates actions consistent with shareholder value maximization (Fama, 2000). Cotter *et al.* (1997) support this view underscoring the important role of outside directors in protecting shareholders' interest through effective decision control.

Some authors have also found that there is no significant relationship between proportion of NEDs and firm performance (Bhagat and Black, 2002). It has been shown that the effectiveness of a board depends on the optimal mix of inside and outside directors (Baums, 1994). However, available theory is scanty on the determinants of optimal board composition (Weisbach, 2002).

2.4 Measurement of Financial Performance

There are various measures of financial performance. For example return on assets (ROA) determines an organization's efficiency in ability to make use of its assets and return on equity (ROE) reveals the return investors expect to earn for their investments and return on sales (ROS) reveals how much a company earns in relation to its sales. The advantages of financial measures are the simplicity of calculation and also that their definitions are agreed worldwide. Traditionally, the success of a company has been evaluated by the use of financial measures (Tangen, 2003). Four useful measures of profitability are the rate of return on assets (ROA), the rate of return on equity (ROE), operating profit margin and net income (Hansen and Mowen, 2005).

Liquidity measures the ability of the business to meet financial obligations as they fall due, without disrupting the normal, ongoing operations of the business. Liquidity can be analyzed both structurally and operationally. Structural liquidity refers to balance sheet measures of the relationships between assets and liabilities and operational liquidity refers to cash flow measures.

Solvency measures the amount of borrowed capital used by the business relative to the amount of owner's equity capital invested in the business. In other words, solvency measures provide an indication of the business' ability to repay all indebtedness if all its assets were sold. Solvency measures also provide an indication of the business' ability to withstand risks by providing information about the operation's ability to continue operating after a major financial adversity (Harrington and Wilson, 1989).

Profitability measures the extent to which a business generates a profit from the factors of production: labor, management and capital. Profitability analysis focuses on the relationship between revenues and expenses and also on the level of profits relative to the size of investment in the business.

Repayment capacity measures the ability to repay debt from both operating and non operating income. It evaluates the capacity of the business to service additional debt or to invest in additional capital after meeting all other cash commitments. Measures of repayment capacity are developed around an accrual net income figure. The short-term ability to generate a positive cash flow margin does not guarantee long-term survival ability (Jelic and Briston, 2001).

Financial efficiency measures the degree of efficiency in using labor, management and capital. Efficiency analysis deals with the relationships between inputs and outputs. Because inputs can be measured in both physical and financial terms, a large number of efficiency measures in addition to financial measures are usually possible (Tangen, 2003).

2.5 Empirical Review

The debate of whether board composition in the form of representation of outside independent directors may add value to the firm's financial performance is widely covered in the corporate governance literature. Kesner ,*Victor and Lamont, (*1986) stated that outside directors can freely evaluate management's performance and act to remedy inappropriate and unacceptable situations. Byrd & Hickman(1992) stated that outside directors may contribute both expertise and objectivity in evaluating the manager's decisions. It has been shown that the effectiveness of a board depends on the optimal mix of inside and outside directors (Baums, 1994).According to Finkelstein & Hambrick (1996), the outside directors are more vigilant as they mainly focus on the firm's financial performance, may dismiss the CEO following poor performance to maintain their personal reputation as directors.

Cotter *et al.* (1997) support the view of board independence underscoring the important role of outside directors in protecting shareholders' interest through effective decision control. John and Senbet (1998) argue that a board is more independent if it has more non-executive directors (NEDs). As to how this relates to firm performance, empirical results have been inconclusive. In one breath, it is asserted that executive (inside) directors are more familiar with a firm's activities and, therefore, are in a better position to monitor top management. On the other hand, it is

contended that NEDs may act as “professional referees” to ensure that competition among insiders stimulates actions consistent with shareholder value maximization.

The issue of structure of the board of directors as a corporate governance mechanism has received considerable attention in recent years from academics, market participants, and regulators. It continues to receive attention because theory provides conflicting views as to the impact of board structure on the control and performance of firms, while at the same time the empirical evidence is inconclusive. To date, the relationship between board structure (as opposed to board processes) and company performance has been the most studied aspect among all board investigations (Bhagat and Black, 1999). In these studies, it is often assumed that a company's financial performance is mainly determined by board characteristics.

Dalton and Daily (1999) stated that in the absence of the outside directors the insider dominated board in one hand will get enormous powers and the board may abuse such powers; on the other hand without the expertise of the outside directors, the board may not be effective.

Some authors have also found that there is no significant relationship between proportion of NEDs and firm performance (Bhagat and Black, 2002). However, available theory is scanty on the determinants of optimal board composition (Weisbach, 2002). Hermalin and Weisbach (2003) argued that the higher the proportions of outside directors and smaller board are tend to make decisions, such as acquisitions, executive compensation and CEO replacement.

Board composition refers to the combination of executive directors (including the chief executive officer) and non-executive directors in the board. Sometimes non-executive directors are

appointed from outside and they may not have any material interest into the firm also known as independent directors. They are appointed due to huge qualifications, expertise and experience and they may effectively influence the board's decision and ultimately add value to the firm (Fields and Keys, 2003). Independent directors can play a useful role in relation to strategic planning risk management (Farrar, 2005).

The board of directors is charged with oversight of management on behalf of shareholders. Agency theorists argue that in order to protect the interests of shareholders, the board of directors must assume an effective oversight function. It is assumed that board performance of its monitoring duties is influenced by the effectiveness of the board, which in turn is influenced by factors such as board composition and quality, size of board, duality of chief executive officer, board diversity, information asymmetries and board culture (Brennan, 2006).Ozawa (2006) stated that outside directors can resolve the problem of information asymmetry.

Local studies have also concentrated on the influence of board composition on financial performance. According to Ayogo, (2005) in his study on Corporate Governance in Kenya and the Record and Policies for good Governance" argued that corporate governance is concerned with the relationship between the internal governance mechanisms of corporations and society's conception of the scope of corporate accountability. Many researchers, such as Musila (2007), in his study on Leadership Structure: Separating the CEO and Chairman of the Board" have argued that the erosion of investor confidence in Kenya has been brought about by companies' board composition standards and a lack of transparency in the financial system.

Murage (2010), in his study on the Relationship between Corporate Governance and Financial performance of Parastatals in Kenya, concluded that large boards enhanced corporate performance and that when such boards were dominated by non-executive directors, it enhanced firm value. While the CEO duality did not significantly impact on financial performance measure of ROA, in his study, it had a positive relationship with financial performance in conflict with other studies. Ongore and K'Obonyo (2011),in their study on Effects of Selected Corporate Governance Characteristics on Firm Performance concluded that the role of boards was found to be of very little value, mainly due to lack of adherence to board member selection criteria.

Rashid, (2011) in his study on Board Composition Board Leadership Structure and Firm Performance: states that "corporate governance literature debated within two extreme streams of board practices examining whether the board composition in the form of representation of outside independent directors and structural dependence of the board influence the firm financial performance. He further argues that board composition and corporate performance jointly influence each other rather the board composition influencing corporate performance or corporate performance influencing board composition. He noted that board composition and financial performance influence each other but the effect is not immediate.

Letting,Aosa and Machuki, (2012) in their study on Board Diversity and Performance of Companies Listed in Nairobi Stock Exchange concluded that when using the Ordinary Least Squares (OLS) regression, their results show that there is a weak positive association between board diversity and financial performance.On overall, their results indicate a statistically not

significant effect of board diversity on financial performance except for the independent effect of board study specialization on dividend yield.

2.6 Summary of the Literature Review

The available literature on the relationship between the board composition and firm performance reflects mixed results. The idea of endogenous relationship between board composition and corporate financial performance was advanced by Hermalin & Weisbach (2000), that is, board composition and corporate performance jointly influence each other rather the board composition influencing corporate performance or corporate performance influencing board composition. Davidson & Rowe (2004) note that board composition and financial performance influence each other but the effect is not immediate.

There are some studies that have been conducted in Kenya on stock market focusing on various aspects of corporate governance of companies listed companies. They include Munga (1974), Mwangi (1977), Gitobu (2000), Munene (2007) among others. In spite of all these alternative studies that have been carried out, a gap in the literature relating examining the effect of board composition on financial performance of firms listed on Nairobi Securities Exchange exist because there are still no conclusive results that have been arrived at. Majority of these studies have examined the composite stock indices in relation to board composition of companies listed at the Nairobi Securities Exchange and examined whether companies incorporate available information, but did not determine what tasks the companies respond to in relation to board composition and to how important these tasks are to the financial performance of firms listed on Nairobi Securities Exchange and also did not establish the direction and magnitude of the

interaction between board composition tasks and firms financial performance at the Nairobi Securities Exchange. Therefore, this study seeks to fill these gaps.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methods that the researcher employed to facilitate execution of the study to satisfy study objectives. These steps include; research design, population of interest, sample and sampling techniques, data collection instruments, procedures and data analysis.

3.2 Research Design

Research design is the plan and structure of investigation so conceived as to obtain answers to research questions. The plan is the overall scheme or program of the research (Robson, 2002). A descriptive research design was used in this study. The major purpose of descriptive research design was to provide information on characteristics of a population or phenomenon (Mugenda & Mugenda, 2003). Descriptive research was used as a pre-cursor to quantitative research designs as it provides the general overview giving some valuable pointers as to what variables are worth testing quantitatively.

3.3 Population

A population is an entire group of individuals, events or objects having common characteristics that conform to a given specification (Mugenda & Mugenda, 2003). The population of interest in this study constituted all listed companies quoted at the NSE for the period of five years from 2008 to 2012. The study was limited to listed companies due to lack of readily available data

from private companies not listed in NSE. Currently we have a total of sixty one firms listed in NSE (Apendix1).

3.4 Data Collection

Secondary financial data sources was used for the study, where annual financial reports of individual listed firms' was used over the five year period where profitability was extracted and used as a measure of financial performance. Board composition data was obtained from corporate governance disclosure of individual listed firms in NSE. The data is filed by NSE and CMA library that also files details of the board of directors like the age, name, position and whether independent or dependent director was obtained which is a requirement by the companies listed to file with them is readily accessible and reliable.

3.5 Data Analysis

Being a comparative study, multivariate and univariate analysis models was used. Univariate analysis involved summary or descriptive statistics such as mean, frequencies, test of normality, mode, median, quartiles among others. This basically helped in characterizing different board composition across listed firms. Test of significance, $R^{2,}$ ANOVA and T-test will was used to establish the significance of the difference in financial performance means between the boards over the five-board term period.

3.5.1 Analytical Model

The study used multiple linear regression models. The multiple linear regression models sought to establish the relationship between board composition and financial performance of NSE listed companies through regressing factors such as gender, age, ethnicity and board independence within the period of interest. The regression model that was employed was:

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon}$$

Where,

Y = Firms financial performance as determined by return on assets (ROA);

β_0 = constant or intercept-defines value of return on asset without inclusion of predictor variables

$\beta_1 - \beta_4$ = regression coefficients; that is, rate of change of dependent variable (financial performance) as a function of changes in the independent variable (board composition variables);

X_1 = gender of the board of directors;

X_2 = age of the board members;

X_3 = ethnicity of the board of directors;

X_4 = Board independence (Number of executive and Non-executive directors);

ε = the "error" term reflecting other factors that influence financial performance.

The study used Statistical Package for Social Science (SPSS) to determine the nature and strength of the relationship between board composition and financial performance of the NSE listed companies. The tests of significance used are regression analysis expected to yield the coefficient of determination (R^2), analysis of variance along with the relevant *t* – tests, *f* -tests, *z* – tests and *p* – values. The choice of these techniques is guided by the variables, sample size and the research design. The inferential statistical techniques were done at 95% confidence level (α = 0.05).

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

In this chapter, the study provided two types of data analysis; namely descriptive analysis and inferential analysis. The descriptive analysis helps the study to describe the relevant aspects of the phenomena under consideration and provide detailed information about each relevant variable. For the inferential analysis, the study used the Pearson correlation and the regression analysis statistics. While the Pearson correlation measures the degree of association between variables under consideration, the regression estimates the relationship between board composition and financial performance. Furthermore, Test of significance, $R^{2,}$ ANOVA and T-test were also used to establish the significance of the difference in financial performance of the companies.

4.2 Descriptive Statistics

The descriptive statistics of the variables used in the analysis of the sample was very crucial for the study. Table 4.1 shows the mean, median, minimum and maximum value, standard deviation, asymmetry, and kurtosis of the board composition variables and financial performance. This was to ascertain the significance of the distribution of the variables associated with board composition and financial performance.

Table 4.1 The overall performance of board composition and financial performance variables

Variable	Mean	Median	Minimum	Maximum	Std.Dev.	Asymmetry	Kurtosis
GENDER (FEM_BOARD)	5.11	19.00	1.00	49.00	0.075	1.775	4.389
BOARD INDEPENDENCE	5.06	15.20	0.00	57.14	0.092	2.693	7.295
AGE	7.158	6.915	4.463	10.520	2.659	0.926	0.453
ETHINICITY	30.58	28.02	9.71	152.82	0.149	1.059	9.493
ROA	0.30	0.99	0.10	1.00	0.145	1.018	20.128

Source: *Research Findings*

Table 4.1 presents the descriptive statistics of the variables used in the analysis: gender of the board of directors; Board independence, natural logarithm of age distribution (AGE), standard deviation of ethnicity and return on asset ratio (ROA). The findings shows that board composition as represented by its variables of age, gender, independence and ethnicity, is significantly associated with financial performance as indicated by the positive mean values and their respective standard deviations. From skewness, the study observed that all the variables are positively skewed which indicated that the variables are asymmetrical. Skewness value of all the variables is very near to zero so it is relatively symmetrical. Kurtosis values indicated that all variables have platy-kurtic distribution and it is concluded that variables are not normally distributed.

4.3 Correlation Analysis

The study further determined the correlation between the independent variables used in the study i.e. board composition variables and financial performance indicators. For this analysis Pearson correlation was used to determine the degree of association within the independent variables and also between independent variables and the dependent variable. The analysis of these

correlations seems to indicate that each independent variable in board composition has its own particular informative value in the ability to explain financial performance (Table 4.2).

Table 4.2 Correlation coefficients of the board composition variables and financial performance indicators

VARIABLE	FEM_BOARD	BOARD INDEPENDENCE	AGE	ETHINICITY	ROA
FEM_BOARD	1				
BOARD INDEPENDENCE	0.3693	1			
AGE	0.2484	0.3385	1		
ETHINICITY	0.1074	0.2028	0.4201	1	
ROA	0.621	0.6346	0.7840	0.0143	1

Source: *Research Findings*

Table 4.2 shows the correlations between the independent variables considered in the regressions: gender of the board of directors; Board independence, age distribution (AGE), ethnicity and return on asset ratio (ROA). The significance of the coefficients was calculated at the level of 95%. The study findings indicate that board composition variables i.e. gender, board independence and age are statistically significance to firms' financial performance indicators as indicated by the positive and strong Pearson correlation coefficients whereas ethnicity is statistically insignificant with financial performance indicators as indicated by their weak and negative Pearson correlation coefficients. This implies that gender distribution and age may positively influence financial performance of companies listed on NSE but ethnicity does not influence the financial performance of the companies. This implies that financial performance is influenced by the management ability, skills and professionalism and also young and energetic managers are in position to perform better as compared to older managers. However ethnicity plays insignificant role in influencing financial performance of the listed companies.

Table 4.3: Regression coefficients of the Board Composition variables and financial performance indicators

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	7.13	0.443		2.311	0.034
FEM_BOARD	0.444	0.254	0.021	0.352	0.092
BOARD INDEPENDENCE	0.738	0.262	0.022	2.511	0.042
AGE	0.612	0.372	0.038	2.324	0.031
ETHINICITY	0.223	0.242	0.032	2.034	0.024

Source: *Research Findings*

The regression model $\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon}$

Becomes $Y = 7.13 + 0.444X_1 + 0.738\ X_2 + 0.612\ X_3 + 0.223\ X_4$

According to the regression equation established, taking all factors into account (gender of the board of directors; Board independence, age distribution (AGE) and ethnicity financial performance measured by ROA will be 7.13. The Standardized Beta Coefficients give a measure of the contribution of each variable to the model. A large value indicates that a unit change in this predictor variable has a large effect on the criterion variable. The t and Sig (p) values give a rough indication of the impact of each predictor variable – a big absolute t value and small p value suggests that a predictor variable is having a large impact on the criterion variable.

4.4 Regression Analysis

From the results shown in table 4.4, the model shows a goodness of fit as indicated by the coefficient of determination (R^2) with a value of 0.7338. This implies that the independent variables, gender of the board of directors, board independence, age distribution (AGE) and ethnicity explain 73.38 percent of the variations of financial performance of companies listed on NSE.

The study therefore identifies gender of the board of directors; Board independence, age distribution (AGE) and ethnicity as critical factors for enhancing financial performance of the companies listed on NSE.

Table 4.4: Regression Model Summary of the board composition variables and financial performance indicators

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.8566	0.7338	0.7011	0.7638

Source: *Research Findings*

Predictors: (Constant), gender of the board of directors; Board independence, age distribution (AGE) and ethnicity.

Further the study carried out the hypothesis testing between board composition variables and financial performance. It assumed the null hypothesis that there is no relationship between board composition and financial performance of companies listed on NSE in Kenya. The study findings are as shown below.

Table 4.5 Board composition Vs Financial performance

		Financial performance
Board composition variables	Pearson Correlation	0.780
	Sig. (2-tailed)	0.000
	N	61

Source: *Research Findings*

A Pearson coefficient of 0.780 and p-value of 0.000 shows a strong, significant, positive relationship between board composition and financial performance of companies listed on NSE in Kenya. Therefore basing on these findings the study rejects the assumption that there is no relationship between board composition and financial performance of companies listed on NSE

in Kenya and affirms that there exists a relationship between board composition and financial performance of companies listed on NSE in Kenya.

4.5 Interpretation of Findings

The descriptive statistics of the variables used in the analysis of the sample was very crucial for the study. The study presents the descriptive statistics of the variables used in the analysis: gender of the board of directors; Board independence, natural logarithm of age distribution (AGE), standard deviation of ethnicity and return on asset ratio (ROA). The findings show that board composition is significantly associated with financial performance as indicated by the positive mean values and their respective standard deviations. From skewness, the study observed that all the variables are positively skewed which clarified that the variables are asymmetrical. Skewness value of all the variables is very near to zero so it is relatively symmetrical. Kurtosis values indicated that all variables have platy-kurtic distribution and it is concluded that variables are not normally distributed.

The study further determined the correlation between the independent variables used in the study i.e. board composition variables and financial performance indicators. For this analysis Pearson correlation was used to determine the degree of association within the independent variables and also between independent variables and the dependent variable. The analysis of these correlations seems to support the hypothesis that each independent variable in board composition has its own particular informative value in the ability to explain financial performance. The significance of the coefficients was calculated at the level of 95%. The study findings indicate that board composition variables i.e. gender, board independence and age are statistically significance to firms' financial performance indicators as indicated by the positive and strong

Pearson correlation coefficients whereas ethnicity is statistically insignificant with financial performance indicators as indicated by their weak and negative Pearson correlation coefficients. This implies that gender distribution, board independence and age may positively influence financial performance of companies listed on NSE but ethnicity does not influence the financial performance of the companies. This implies that financial performance is influenced by the management gender and independence and also young and energetic managers are in position to perform better as compared to older managers. However ethnicity plays insignificant role in influencing financial performance of the listed companies.

According to the regression equation established, taking all factors into account (gender of the board of directors; Board independence, age distribution (AGE) and ethnicity, financial performance as measured by ROA will be 7.13. The Standardized Beta Coefficients gave a measure of the contribution of each variable to the model. A large value indicated that a unit change in this predictor variable has a large effect on the criterion variable. The t and Sig (p) values gave a rough indication of the impact of each predictor variable – a big absolute t value and small p value suggests that a predictor variable is having a large impact on the criterion variable.

From the results, the model showed a goodness of fit as indicated by the coefficient of determination R^2 (0.7338). This implies that the independent variables gender of the board of directors; Board independence, age distribution (AGE) and ethnicity explain 73.38 percent of the variations of financial performance of companies listed on NSE. The study therefore identified gender of the board of directors; Board independence, age distribution (AGE),gender and ethnicity as critical factors for enhancing financial performance of the companies listed on NSE.

Further the study carried out the hypothesis testing between the board composition variables and financial performance. A Pearson coefficient measure showed a strong, significant, positive relationship between board composition and financial performance of companies listed on NSE in Kenya. Therefore basing on these findings the study rejected the hypothesis that there is no relationship between board composition and financial performance of companies listed on NSE in Kenya and confirmed that there exists a relationship between board composition and financial performance of companies listed on NSE in Kenya.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the study and makes conclusion based on the results. The implications from the findings and areas for further research are also presented. This section presents the findings from the study in comparison to what other scholars have said as noted under literature review.

5.2 Summary

The objective of the study was to establish the effect of board composition on financial performance of companies listed in Nairobi Securities Exchange. Therefore a descriptive research design was used to study whether there is an effect of board composition on financial performance of firms listed in Nairobi Securities Exchange. The population of interest in this study constituted all listed companies quoted at the NSE for the period of five years from 2008 to 2012. Secondary financial data sources was used for the study, where annual financial reports of individual listed firms' was used over the five year period where profitability was extracted and used as a measure of financial performance.

The findings showed that board composition variables i.e. age, gender, independence and ethnicity considered in the model are significantly associated with financial performance as indicated by their mean values and respective standard deviations. From skewness, the study observed that all the variables are positively skewed which clarified that the variables are asymmetrical. Skewness value of all the variables is very near to zero so it is relatively

symmetrical. Kurtosis values indicated that all variables have platy-kurtic distribution and it is concluded that variables are not normally distributed.

5.3 Conclusion

The findings showed that board composition variables considered in the model are significantly associated with financial performance as indicated by the positive mean values and their respective standard deviations. From skewness, the study observed that all the variables are positively skewed which clarified that the variables are asymmetrical. Skewness value of all the variables is very near to zero so it is relatively symmetrical. Kurtosis values indicated that all variables have platy-kurtic distribution and it is concluded that variables are not normally distributed.

The analysis of the correlations results seemed to support the hypothesis that each independent variable in board composition has its own particular informative value in the ability to explain financial performance. The significance of the coefficients was calculated at the level of 95%. The study findings indicate that board composition variables i.e. gender, board independence and age are statistically significance to firms' financial performance indicators as indicated by the positive and strong Pearson correlation coefficients whereas ethnicity is statistically insignificant with financial performance indicators as indicated by their weak and negative Pearson correlation coefficients.

According to the regression equation established, taking all factors into account (gender of the board of directors; Board independence, age distribution (AGE) and ethnicity financial performance measured by ROA will be 7.13. A Pearson coefficient measure showed a strong, significant, positive relationship between board composition and financial performance of

companies listed on NSE in Kenya. Therefore basing on these findings the study rejected the null hypothesis that there is no relationship between board composition and financial performance of companies listed on NSE in Kenya and accepted the alternative hypothesis that there exists a relationship between board composition and financial performance of companies listed on NSE in Kenya.

5.4 Policy Recommendations

The study recommends that stakeholders in listed companies should take into account the body composition issues i.e. gender, ethnicity and age when electing board of directors. That is the body should have equal distribution in terms of age, ethnicity and gender to minimize stakeholders conflicts and improve on overall firm performance. The study recommends that board composition should be based on age, gender and independence to steer managerial functions as opposed to ethnicity. The study further recommends that female gender should be considered in directorship positions since they are proved statistically to perform better in such positions. Requirements for one to be elected to the board of directors should be well stipulated in terms of age, gender and ethnicity balance. This will facilitate satisfaction in management and therefore improved management of the NSE listed companinies.

5.5 Limitations of the Study

The findings of this study may not be generalized to all listed firms but can be used as a reference to listed firms in developing countries since they face almost the same challenges due to the same prevailing economic situations as opposed to listed firms in developed countries. The results thus cannot be generalized to all listed companies in NSE. This is because different companies may have different strategies for managing board composition issues.

Since the main purpose of this study is to identify the relationship between board composition and financial performance of NSE listed companies in Kenya, NSE considered some information sensitive and confidential and thus the researcher had to convince them that the purpose of information is for academic research only and may not be used for any other intentions.

Board composition keep on changing from period to period depending on prevailing economic situations and demand on the capital market. The findings therefore may not reflect the true effect of board composition across the companies listed for a period of 5 years since some companies are delisted and listed again depending on their performance on NSE.

5.6 Suggestions for Further Research

The study suggests more studies to be carried out taking into account the prevailing macroeconomic variables as the control variables since they play major roles in decision making among the board of directors. More studies should also be carried out taking into account other performance variables such as size, leverage and Return on equity as opposed to the current study which only considered Return on Assets as a measure of Financial Performance. A similar study should also be carried out on relationship between firms' financial performance and board composition in Kenya incorporating more corporate governance variables as opposed to the current study which took into consideration only four Board Composition variables.

REFERENCES

Aduda, J; Chogii,R .and Magutu,P.O. (2013),An Empirical Test of competing corporate Governance Theories on the performance of Firms Listed at The Nairobi Securities. Exchange, *European Scientific Journal Vol.9,No.13 ISSN:1857-7881*

Ayogo, M (2005): "Corporate Governance in Kenya: The Record and Policies for good Governance". *African Development Bank, Economic Research Paper*, No.66.

Baums, T (1994): *Corporate Governance in Harmony-system & Recent Developments, in* Aspects of corporate Governance, Stockholm: Jurist

Bhagat, S., & Black, B. (1997). *Do independent directors matter?* Unpublished working paper. New York: Columbia University.

Bhagat, S. and Black, B.(2000). "Board independence and long-term firm performance". *Stanford Law School Working Paper* No. 188.

Bhagat, S and Black, B (2002): "The Non-Correlation between Board Independence and Long-Term Firm Performance", *Journal of Corporation Law*, 27(2), 231-273.

Brennan, N. (2006). Boards of Directors and Firm Performance: is there an expectations gap? *Corporate Governance: An International Review*, 14, 6, 577-593

Byrd, J. W. and Hickman,K.A. (1992), Do Outside Directors Monitor Managers? Evidence from Tender Offer Bids, *Journal of Financial Economics*, 32 (2): 195-222.

Capital Markets Act. (2002). *Gazette Notice 3362. Guidlines on Corporate governance practices by public listed companies in Kenya.*

Cadbury, M. (1992). Succession as a socio-political process: Internal impediments to outsider selection. *Academy of Management Journal*,

Carter, C.B., Lorsch, J.W. (2004), Back to the Drawing Board: Designing Corporate Boards for a Complex World, Harvard Business School Press, Boston, MA,.

Carpenter, M.A. & Westpal, J.D. (2001). The strategic context of external network ties: Examining the impact of director appointments on board involvement in strategic decision making, *Academy of Management Journal*, 44 (4),639-990. doi:10.2307/3069408, http://dx.doi.org/10.2307/3069408

Capital Markets Authority, CEO. (2009). *CMA Kenya. Retrieved from Restriction of trading of bob Mathews stock brokers* Limited : www.cma.or.k

CMA report (2009): Stock Markets in Developing Countries: Key Issues and a Research Agenda, *World Bank Working Papers*, WPS 515, October.

Cotter, J, Shivdasani, A and Zenner, M (1997): "Do Independent Directors Enhance Target Shareholder Wealth during Tender Offers?", *Journal of Financial Economics*, 43,

Davidson III, W. N. and Rowe,W. (2004), Intertemporal Endogeneity in Board Composition and Financial Performance, *Corporate Ownership and Control*, 1 (4): 49-60.

Dagsson S.W. J. (2011). Shareholder wealth effects of CEO departures: *Evidence from the UK. Journal of Corporate Finance*, 8, 1, 81-104.

Dalton, V. and Daily, H. (1999). Corporate Performance and Board Structure in Belgian Companies. *Long Range Planning*, 34, 3, 383-398

Davidson III, W. N. and Rowe,W. (2004), Intertemporal Endogeneity in Board Composition and Financial Performance, *Corporate Ownership and Control*, 1 (4): 49-60. Dezso, J. & Ross, P. , (2008), "Did J. P. Morgan's Men Add Value?: An Economist's Perspective on Financial Capitalism," in Peter Temin, ed., *Inside the Busines Enterprise: Historical Perspectives on the Use of Information (Chicago, IL: University of Chicago Press)*

Dwyer, J., Richard, F., & Chadwick, L. (2003). Toward a stewardship theory of management. *Academy of Management Review*, 22, 1, 20-47.

Eklund, J. E, Palmberg, J. & Wiberg, D. (2009). Ownership Structure, Board Composition and Investment Performance. CESIS Electronic Working Paper Series, Paper no. 172.

Fama, E.F. 2000. "Agency problems and the theory of the firm". *Journal of Political Economy*, 88(2, April): 288–307

Farrar, J. (2005), *Corporate Governance: Theories, Principles and Practice*, 2nd Edition, South Melbourne, VIC: Oxford University Press

Fields, M. A. and Keys, P.Y (2003), The Emergence of Corporate Governance from Wall St. to Main St.: Outside Directors, Board Diversity and Earnings Management, and Managerial Incentive to Bear Risk, *The Financial Review*, 38 (1): 1-24.

Finkelstein, S. and Hambrick, D.C. (1996), *Strategic Leadership: Top Executives and Their Effects on Organization*, West Publishing Company, Minneapolis/St. Paul.

Forbes, M.C., & Milliken, W. (1999). Theory of the Firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.

Geneen, S. (2008) Corporate Performance and Board Structure in Belgian Companies. *Long Range Planning*, 34, 3, 383-398

Gitobu M. N (2000), " Relationship between Corporate Governance and Firms performance", Unpublished MBA Project Report, Strathmore university.

Golden, K., & Zajac, W. (2001). The effect of Board size and Diversity on Strategic Change. *Strategic Management Journal*, 15, 3, 241-250.

Grand, W. (2010, June 19). Mars Group Kenya. Retrieved September 20, 2009, from Government Eyes NSE Ownership Stake: www.multimedia.marsgroupkenya.org

Hambrick, R., & Mason, M. (1984). Corporate Governance Structure and Performance of Malaysian Listed Companies. *Journal of Business Finance & Accounting*,

Hambrick, D, Jackson, E (2000), "Outside directors with a stake: the linchpin in improving governance", California Management Review, Vol. 42 No.4, pp.108-27.

Hansen, J., Holthausen, J., & Mowen, D. (2005). Corporate governance, chief executive officer compensation and firm performance. *Journal of Financial Economics*, 51, 371–406.

Harrington, G., & Wilson, R. (1989). Governance and banks' valuations. *Journal of Financial Intermediation*, 16, 584-617.

Hermalin, B. E. and Weisbach,M.S. (2003), Board of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature, *Economic Policy Review*, 9 (1): 7-26.

Hermalin, B.E., & weisbach, M.S. (2006). The market for corporate Control. *Journal of Financial Economics,* 11(1-4), 5-50.

Hutchinson, M (2002): "An Analysis of the Association between Firms' Investment Opportunities, Board Composition, and Firm Performance", *Asia Pacific Journal of Accounting and Economics*, 9, 17-39

Jelic, E., & Briston, M. (2001). The separation of ownership and control. *Journal of Law and Economics,* 26, 301 – 325.

Jensen, Michael C. 2001. "Value maximization, stakeholder theory, and the corporate objective function". Working Paper No. 01-01, *Harvard Business School.*

Jensen, M. C. and W. J. Meckling (1976), Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, *Journal of Financial Economics,* 3 (4): 305-360.

Jesover, F. and Krikpatrick,G. (2005), The Revised OECD Principles of Corporate Governance and their Relevance to the Non-OECD Countries, *Corporate Governance: An International Review*, 13 (2): 127-136.

John, K and Senbet, L.W. (1998): "Corporate Governance and Board Effectiveness" *Journal of Banking and Finance*.

Johnson, S. (1996). Bankruptcy, boards, banks and blocks holders: Evidence on changes on corporate ownership and control when firms default. *Journal of Financial Economics*, 27: 355–387.

Kesner, I. F.,Victor,B. and Lamont,B.T. (1986), Board Composition and Commission of IllegalActs: An Investigation of Fortune 500 Companies, *Academy of Management Journal*, 29(4): 789-799.Leblanc, R. W. (2004), What's Wrong with Corporate Governance: A Note, *Corporate Governance: An International Review*, 12 (4): 436-441.

Klein, F. (1998). A limited rationality model of interlocking directorates, Academy of Management Review. 8: 206–217.

Lazaridis, D. (2006). Factors affecting the number of outside directorships held by CEOs. *Journal of Financial Economics*. 40: 81-104.

Letting.N,Aosa.E & Machuki.V(2012). Board Diversity and Performance of Companies Listed in Nairobi Stock Exchange *International Journal of Humanities and Social Science Vol. 2 No. 11; June 2012*

Marinova, A, Adjasi, K D C and Abor J (2006): Corporate Governance and Firm Performance: Evidence from Ghanaian Listed Firms", *Journal of Corporate Ownership and Control, 4*(1): 123-132

Mbaru, J (2008): The Role of Regulatory Bodies in Capital Market Development: The Kenyan Experience presented at an International Conference on *"Promoting of Capital Markets "*, Beijing, China, 16-19 December.

Munene M. P (2007), "The Relationship between Board composition and firms performance – A Case Study of the NSE", Unpublished MBA Project Report, Kenyatta University.

Munga K. S (2012). The impact of Board diversity on Nairobi stock exchange and Kenya's manufacturing firms. Unpublished MBA dissertation, School of Business, Moi University.

Musila, G (2007): "Leadership Structure: Separating the CEO and Chairman of the Board", *Journal of Corporate Finance*, 3(3), 189-220.

Mugenda, A. & Mugenda,O. (1999). *Research Methods: Qualitative and Quantitative Approaches.* Nairobi: Acts Press.

Mugenda, A. & Mugenda,O (2003). *Research Methods: Qualitative and Quantitative Approaches.* Nairobi: Acts Press.

Murage, H.N. (2010), Relationship between Corporate Governance and Financial performance of Parastatals in Kenya, unpublished MBA project.

Mwangi, B.M. (1977) Corporate governance practices in developing countries, a case of Kenya. *International journal of Business Administration*, 2(1), 14-40.

Naser, K. & Mokhtar, S. (2004). Emerging Economies, Institutional Voids, and the Role of Busy Boards in Firm Performance. Purdue University (Unpublished)

Ongore.V.O, A. & K'Obonyo P.O. (2011). Effects of Selected Corporate Governance Characteristics on Firm Performance: Empirical Evidence from Kenya. *International Journal of Economics and Financial Issues Vol. 1, No. 3, 2011, pp.99-122*

Ozawa A. , (2006), Contests for Corporate Control. Corporate Governance and Economic Perfromance in the United States and Germany, (New York: Oxford University Press)

Padachi, C.B. (2006). Elite Directors and Firm Performance. *Unpublished Master's Thesis*, Stockholm School of Economics

Park, Y W and Shin, H H (2003): "Board Composition and Earning Management in Canada", *Journal of Corporate Finance*, 185, 1-27.

Pearce, J. A. & Zahra, S.A (1992). Board Composition from a Strategic Management. Perspective. *Journal of Management Studies,* 29 (4), 411 – 438

Private Sector Initiative for Corporate Governance. (2009). Principles for Corporate Governance in Kenya and a Sample Code for best Practice for Corporate Governance. Nairobi: Private Sector Corporate Governance Trust.

Rashid, A. (2011). Board Composition Board Leadership Structure and Firm Performance: Evidence from Kenya. A Paper for Inclusion in the Accounting and Finance Association Australia and New Zealand Annual Conference Adelaide, July 5-7th.

Rashid, A; De Zoysa,A; Lodh, S; and Rudkin,K; (2010),Board composition and Firm performance: Evidence from Kenya, *Australian Accounting Business and Finance Journal 4(1),2010,76-95*.

Robson, G. (2000). *Business Ethics and Coporate Governance in Africa*. Johannesburg.

Rose, D. (2007). Outside Directorships and corporate performance. *Journal of Financial Economics*, 27, 389–410.

Sahin, K., Basfirinci, C. S. and Ozsalih, A. (2011). The impact of board composition on coporate financial and social responsibility performance :Evidence from public-listed companies

in Turkey. *African Journal of Business Management*, **5***(7)*: pp 2959-2978.

Senbet, T (2005): "Corporate Governance Mechanisms and Firm Financial Performance in Nigeria", *AERC Research Paper*, No. 149

Smith, A. (2006), CEO involvement in the selection of new board members: An empirical analysis, *Journal of Finance 54, 1829-1853*

Tangen, M.S. (2003). An empirical analysis of the relation between the board of director's composition and financial statement fraud. *The Accounting Review*, 71, 443-465.

Thomas, A., and Ely,D. (1996), CEO involvement in the selection of new board members: An empirical analysis, *Journal of Finance 54, 1829-1853*.United Nations Economic Commission for Africa (UNECA) (2008): The African Economie in Perspective presented at an International Conference on *"Promoting CapitaL Markets in Africa"*, Abuja, Nigeria, 11-13 November.

Wegge, M. (2008). "Outside directors and CEO turnover". *Journal of Financial Economics*, 20: 431–60.

Weidenbaum, M. L. (1986), Updating the Corporate Board, *Journal of Business Strategy*, 7 (1): 77-83.

Weisbach, M. 2008. "Outside directors and CEO turnover". *Journal of Financial Economics*, 20: 431–60.

Zahra, L. & Pearce (1989). *Corporate governance*", in Peter Newman (ed.), The New Palgrave Dictionary of Economics and the Law, London: Macmillan, 497-502.

APPENDIX 1 COMPANIES LISTED ON THE NSE AS AT 31ST DECEMBER 2012

AGRICULTURAL
Eaagads Ltd
Kapchorua Tea Co. Ltd
Kakuzi
Limuru Tea Co. Ltd
Rea Vipingo Plantations Ltd
Sasini Ltd
Williamson Tea Kenya Ltd

COMMERCIAL AND SERVICES
Express Ltd
Kenya Airways Ltd
Nation Media Group
Standard Group Ltd
TPS Eastern Africa (Serena) Ltd
Scangroup Ltd
Uchumi Supermarket Ltd
Hutchings Biemer Ltd

TELECOMMUNICATION AND TECHNOLOGY
AccessKenya Group Ltd
Safaricom Ltd

AUTOMOBILES AND ACCESSORIES
Car and General (K) Ltd
CMC Holdings Ltd
Sameer Africa Ltd
Marshalls (E.A.) Ltd

BANKING
Barclays Bank Ltd
CFC Stanbic Holdings Ltd
Diamond Trust Bank Kenya Ltd
Housing Finance Co Ltd
Kenya Commercial Bank Ltd
National Bank of Kenya Ltd
NIC Bank Ltd
Standard Chartered Bank Ltd
Equity Bank Ltd
Co-operative Bank of Kenya Ltd.

INSURANCE
Jubilee Holdings Ltd

Pan Africa Insurance Holdings Ltd
Kenya Re-Insurance Corporation Ltd

INVESTMENT
City Trust Ltd
Olympia Capital Holdings ltd
Centum Investment Co Ltd

MANUFACTURING AND ALLIED
B.O.C Kenya Ltd
British American Tobacco Kenya Ltd
Carbacid Investments Ltd
East African Breweries Ltd
Mumias Sugar Co. Ltd
Unga Group Ltd
Eveready East Africa Ltd
Kenya Orchards Ltd
A.Baumann CO Ltd

CONSTRUCTION AND ALLIED
Athi River Mining
Bamburi Cement Ltd
Crown Berger Ltd
E.A.Cables Ltd
E.A.Portland Cement Ltd

ENERGY AND PETROLEUM
KenolKobil Ltd
Total Kenya Ltd
KenGen Ltd
Kenya Power & Lighting Co Ltd

Source, NSE report, 2012

APPENDIX 1I: RAW DATA

DATA COLLECTION SHEET FOR THE EFECT OF BOARD COMPOSITION ON FINANCIAL PERFORMANCE OF COMPANIES LISTED ON NAIROBI SECURITES EXCHANGE

Companies	Age distribution (Average)	Gender distribution (Percentage of women directors on the board)	Board independence distribution	Standard deviation of ethnicity	Return on Assets (ROA)
Eaagads Ltd	3	34.05	35.95	1.3013	1.371
Kapchorua Tea Co. Ltd	6	34.05	35.95	0.926	1.286
Kakuzi	5	39.85	30.15	1.313	1.808
Limuru Tea Co. Ltd	3	34.94	35.06	1.235	1.624
Rea Vipingo Plantations Ltd	3	32.23	37.67	0.464	1.902
Sasini Ltd	4	44.25	35.65	1.578	0.017
Williamson Tea Kenya Ltd	5	49.10	40.90	1.587	1,597
Express Ltd	6	30.94	40.06	1.726	1.716
Kenya Airways Ltd	2	37.90	22.06	0.171	1.655
Nation Media Group	5	31.99	48.11	1.4067	0.118
Standard Group Ltd	3	32.025	47.98	0.285	0.948
TPS Eastern Africa (Serena) Ltd	5	38.69	31.31	0.458	0.981
Scangroup Ltd	3	34.05	35.95	1.3013	1.371
Uchumi Supermarket Ltd	6	34.05	35.95	0.926	1.286
Hutchings Biemer Ltd	5	39.85	30.15	1.313	1.808
AccessKenya Group Ltd	3	34.94	35.06	1.235	1.624

Safaricom Ltd	3	32.23	37.67	0.464	1.902
Car and General(K) Ltd	2	38.01	21.19	1.034	0.706
CMC Holdings Ltd	2	43.32	36.68	0.844	1.354
Sameer Africa Ltd	5	39.04	20.96	0.300	1.543
Marshalls (E.A.) Ltd	5	32.29	21.71	1.159	1.104
Barclays Bank Ltd	5	31.97	48.03	0.586	0.865
CFC Stanbic Holdings Ltd	4	32.77	28.23	1.511	0.818
Diamond Trust Bank Kenya Ltd	2	36.35	33.65	0.076	1.392
Housing Finance Co Ltd	5	34.40	25.60	1.064	1.796
Kenya Commercial Bank Ltd	2	40.74	29.26	1.267	0.753
National Bank of Kenya Ltd	4	43.60	26.40	0.813	1.400
NIC Bank Ltd	5	39.02	40.98	1.038	0.932
Standard Chartered Bank Ltd	3	35.46	34.54	1.057	1.404
Equity Bank Ltd	3	37.54	32.46	0.307	1.097
Co-operative Bank of Kenya Ltd.	4	38.65	41.35	0.661	1.323
Athi River Mining	4	32.58	47.42	0.595	0.532
Pan Africa Life Assurance Company	6	36.67	33.33	0.625	1.431
B.O.C Kenya Ltd	5	41.10	54	1.740	1.471
British American Tobacco Kenya Ltd	2	43.82	46.18	0.701	0.533

Carbacid Investments Ltd	5	41.77	38.23	0.485	1.371
East African Breweries Ltd	4	38.83	41.17	0.560	1.332
Mumias Sugar Co. Ltd	5	38.51	21.49	1.460	1.195
Unga Group Ltd	4	37.02	32.92	0.491	0.994
Eveready East Africa Ltd	3	34.25	35.75	1.393	1.095
A.Baumann CO Ltd	6	30.64	49.36	0.234	1.079
Bamburi Cement Ltd	6	31.72	48.28	1.205	0.963
Crown Berger Ltd	2,	43.02	36.98	1.112	1.107
Fidelity Shield Insurance Company Limited	4	44.25	35.65	1.578	0.017
E.A.Portland Cement Ltd	5	49.10	40.90	1.587	1,597

Source, NSE report, 2012

APPENDIX III PROPOSED RESEARCH BUDGET

Item	Description	Unit Cost	Units needed	Subtotal cost
1	Printing & typing of proposal	KSh 50 per page	40 Pages	2,000
2	Final copies of proposal (Spiral Binding)	Kshs. 300 per copy	6 copies	1,800
3	Typing and printing draft report. Editing report Photocopying final report	Ksh. 50 per page Ksh.20 per page Ksh 200 per copy	100 pages 100 pages 6 copies	5,000 2,000 1,200
4	Spiral and hard copy binding of final copy	Ksh 360 per copy	7 copies	2,520
5	Contingency Amount			5,000
				19,520

APPENDIX IV WORK PLAN

Phase	Description	Weeks													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Proposal writing presentation and adjustments (5 Weeks)														
2	Data collection (3 Weeks)														
3	Data Analysis And writing final project report (3 weeks)														
4	Defence And correction (3 Weeks)														
5	Submission of final project (1 Week)														