

**RELATIONSHIP BETWEEN BOARD CHARACTERISTICS AND
PROFITABILITY OF COMMERCIAL BANKS IN KENYA**

BY

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DECLARATION

I hereby declare that this research project is my original work; it has not been presented to any other institution of higher learning for academic purposes.

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TABLE OF CONTENTS

DECLARATION.....	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	v
LIST OF FIGURES	vi
LIST OF ABBREVIATIONS	vii
ABSTRACT.....	viii
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background to the Study.....	1
1.1.1 Board Characteristics	3
1.1.2 Profitability	5
1.1.3 Board Characteristics and Profitability.....	6
1.1.4 Commercial Banks of Kenya.....	8
1.2 Research Problem	11
1.3 Research Objective	12
1.4 Value of the Study	12
CHAPTER TWO: LITERATURE REVIEW	14
2.1 Introduction.....	14
2.2 Theoretical Review	14
2.2.1 Stewardship Theory	14
2.2.2 Agency theory	15
2.2.3 Resource Dependency Theory	16
2.3 Determinant of Profitability of Banks.....	18
2.4.1 Bank’s Size.....	18
2.4.2 Capital Adequacy,.....	19
2.4.3 Liquidity	19
2.4.4 Credit Risk.....	20
2.4.5 Efficiency in the Bank’s Operations	20
2.4 Empirical Review.....	21
2.5 Conceptual Framework.....	23
2.6 Summary of the Literature Review	25
CHAPTER: RESEARCH METHODOLOGY	26
3.1 Introduction.....	26

3.2 Research Design.....	26
3.3 Population	26
3.4 Data Collection	26
3.5 Data Analysis.....	27
3.5.1 Diagnostic tests.....	27
3.5.2 Analytical Model.....	30
3.5.3 Test of Significance	31
CHAPTER FOUR.....	32
DATA ANALYSIS, FINDINGS AND DISCUSSION	32
4.1 Introduction.....	32
4.2 Descriptive Statistics.....	32
4.2.1 Profitability of commercial banks	33
4.3 Test for Multicollinearity	34
4.4 Regression Analysis.....	36
4.5 Linearity, Non-Stationarity, Heteroscedacity and Autocorrelation	39
4.6 Discussion of the Findings.....	40
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS ..	44
5.1 Introduction.....	44
5.2 Summary of the findings.....	44
5.3 Conclusions.....	47
5.4 Recommendations.....	48
5.5 Suggestions for Further.....	49
5.6 Limitations of study	50
REFERENCES.....	51
APPENDIX I: LIST OF COMMERCIAL BANKS IN KENYA AS PER CBK 2016 REPORT	55

LIST OF TABLES

Table 4.1: Descriptive Value From Regression Analysis (Dependent And Independent Variables).....	33
Table 4.2: Commercial Bank Profitability.....	34
Table 4.3: Correlations table.....	35
Table 4.14: Regression Model Summary.....	36
Table 4.15: Analysis of Variance.....	37
Table 4.16: Regression Model Coefficients.....	38

LIST OF FIGURES

Figure 2.1: Conceptual model	24
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LIST OF ABBREVIATIONS

ANOVA: Analysis of Variance

CAMELS: Capital Adequacy Assets Management Capability Earnings Liquidity Sensitivity

CAR: Capital Adequacy Requirement

CBK: Central Bank of Kenya

CCCG: Combined Code on Corporate Governance

CEOs: Chief Executive Officer

CMA: Capital Markets Authority

NIM: Net Interest Margin

NSE: Nairobi Securities Exchange

ROA: Return on Asset

ROE: Return on Equity

ABSTRACT

In today's globalized, ever-changing, and competitive business landscape, corporate boards have become critical for the smooth operation of organizations. More than ever, boards are expected to perform not just the monitoring of management but provide strategic directions especially in times of crisis. Research Objective was to ascertain the relationship between board characteristics and profitability of commercial banks in Kenya. This study was based on three theories: Stewardship theory, agency theory, and resource dependency theory. The research used analytical and cross-sectional research design in studying the characteristics of board and the impact it has on profitability among the commercial banks operating in the Kenyan market. The population used in this study was all commercial banks regulated by CBK. The study was a census survey covering all the 43 commercial banks in existence in Kenya. The banks were classified into local private commercial banks, local public commercial banks, and foreign commercial banks. The researcher collected data from 2012 – 2016 for 43 commercial banks operating in the Kenyan market. The study used secondary data on the study variables include board expertise, board size, board independence, gender diversity and Firm Profitability (ROA) which was obtained from audited financial statements which are available at the CBK website (www.central.go.ke). The study covered descriptive and inferential statistics. Descriptive statistic was conducted through multiple comparisons of the means from the variables and trend analysis. On the other hand, inferential statistics used Pearson product moment correlation analysis design and analysis through regression method. Correlation coefficient was used by the researcher to describe the relationship between the study independent and dependent variables. The study used coefficient of determination to evaluate the model fit. The model had an average adjusted coefficient of determination (R^2) of 0.578 and which implied that 57.8% of the variations in commercial bank profitability are explained by the board characteristics investigated. The study findings indicate that there is a significant positive relationship between the factors under study and financial performance of commercial banks: board expertise, board size, director independence, board diversity and it indicated that they influenced profitability of commercial banks. Based on the findings of this study, there is a need to improve board characteristics, in terms of board expertise, board size, director independence and board diversity so as to improve the profitability of commercial banks in Kenya. Thus, there are some practical recommendations for possible reform on board characteristics in order to better improve the profitability of commercial banks in Kenya.

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

Corporate governance can be defined as the structure and process used by business in managing and directing their affairs towards ensuring business prosperity through the achievement of the ultimate goals hence realizing shareholders long-term goals (Busta, 2007)). According to Michael (2011), some of the business principles essential for effectiveness in corporate governance include the board, duties of a chief executive officer and chairperson, participation of shareholders, accountability, and audit. However, the different ideologies of corporate governance including the directors have not gotten adequate attention in most organization, Kihumba, (2000) hence attracting global attention due to its significance in the strategic health of the businesses operating in the modern business world and the society in general. Ensuring problems arising from corporate governance is addressed significantly will have a huge impact where it will improve the living standards of the people in a given economy and completely strengthen an economy. The impact will result from the fact that huge numbers of businesses are suffering from bad governance hence reduction in their performance and reduced growth.

According to Hassan (2011), businesses with good governance generally record high profits, experience growth in sales and have higher valuation and in some cases, they have reduced capital expenditure. In a broad perspective, studies have indicated that effective governance tends to increase stakeholders' confidence and promote goodwill in the organization (Hassan 2011; Klapper and Love, 2004). Also, Gideon (2014) agency theory is built under effective corporate governance; while Love and Rachinsky (2007)

state that effectiveness in corporate governance lower control right that the creditors and shareholders have on the organization management hence raising the chances of investing in projects that will bring about positive net present value or projects which will have impact on firm value.

Therefore, corporate governance can be described as a method for ensuring there is transparency, fairness, and accountability in the reports of an organization. Mayer (2014) indicated that the corporate governance duties are not only to enhance corporate efficiency but it also comprises of two important subjects namely, the organizations strategy and the life cycle development. As pointed out by Love and Rachinsky (2007) it is therefore clear that corporate governance ensures the individuals operating an organization pursue the strategies which will guard the shareholders' interests. Therefore, good governance mechanisms are high-level corporate responsibility which is demonstrated by an organization in relation to transparency, accountability, and ethical values. Hence, Misangyi (2008) and Mulbert (2010) concluded that in every organization, effectiveness in the operations of banks corporate governance have a vital role to play.

In the modern business world, BOD is essential in ensuring the organization is practicing good corporate governance (Misangyi, 2008). In developing countries such as Kenya, corporate governance is essential for various reasons. Firstly, banks play critical roles in the development of the financial system which is important in the economic growth Bank corporate governance in developing countries, such as Kenya, is important for several reasons (King & Levine, 1993a, b; Levine, 1997). Secondly, the underdeveloped nature of these economies makes banks the most import sources of finance for other businesses (Htay, 2012). Finally, in the developed economies, banks are important where they act as

the primary mechanism of payments and the main saving depository (Nyamongo & Kebede, 2013). Both academics and practitioners alike recognize the critical importance of mechanisms of corporate governance. However, currently, the debate has shifted the focus and currently they are dealing with board characteristics and the relationship they have with the firm's profitability.

1.1.1 Board Characteristics

According to Htay (2012) board characteristics is referred to the dimensions of the board's organization, including the type and the size of the committees, committee membership, and how the information flow from one board member to another and board leadership. Some of the main goals of the board of directors in an organization include controlling and monitoring the organization's management, offering counsel and information to the managers, and ensuring the organization comply with all laws and regulations and ensure the organization is effectively linked to the external environment (Michael (2011). A study conducted by Hermalin and Weisbach (1998) showed that the essential principle of every board member is to ensure they attain success in performing their duties and to have effective Board characteristics in place. Also, Htay (2012) indicated that the board monitoring roles are impacted by issues like the board culture, board composition, board diversity, CEO duality, board size, and information asymmetries. Various exogenous factors determine the success of the board of directors in performing their roles. They include board expertise, board size, director independence, and board gender diversity. Profitability of a given organization is dependence on the board expertise. As posted by Michael (2011) Information to the board is important in ensuring board effectiveness. There is evidence that Enron

managers provided misleading information in off-balance sheet debt facilities and early revenue recognition. The managers were able to defraud investors and non-executive directors leading to the collapse of the organization. The lemons problem states that sellers have incentives to provide misleading information to buyers hence, buyers need to beware. To curb this problem corporate governance and regulations have been put in place to enhance market infrastructure.

In every organization, the size of the board is the total headcounts of company's board of directors. Htay (2012) stated that organizational boards which are large are not as effective as the smaller boards because of the various issues associated with control, coordination, and elasticity in decision-making and they offer overindulgence control to the CEOs. Similar observations were made by Bhagat and Black (2002) who showed that there were more profits from businesses with a small board. However, results from various studies have indicated that large board size has the ability to improve performance where it is capable of facilitating manager's supervision and offer more advice to the manager. Additionally, Kihumba (2010) indicated that large boards impact organizations performance positively in any organization especially organizations that want more advises such as those which operate in multiple segments.

The independence of directors in an organization is calculated by the proportion of the sovereign nonexecutive directors to the sum of directors in the organization. The issue of board independence is pinned on agency theory (Htay 2012). From the banking sector perspective, the board composition is essential in determining in synchronizing managers interests with those of the various shareholders in the organization. Scholars argue that the presence of a director in a bank who is not an employee play important role in

ensuring effectiveness in the process of monitoring the manager, resulting in increased bank performance and value. This is because directors from outside have higher chances of defending the interests of external shareholders more compared to internal directors. Kihumba (2010) finds that: directors outside of the board play an important part in monitoring the Chief Executive Officer and are more likely than the inside-dominated board of directors to replace a nonperforming Chief Executive Officer. The banks' corporate governance system is based on three principles: to receive non-confidential information on how the bank is functioning, to effectively control the bank and its managers through deliberations in general meetings and to foster banks' long-term interests in tandem with those of the shareholders; more specifically shareholders wealth maximization. These three principles can well be achieved when a great proportion of the bank's board of directors are independent (Kihumba, 2010).

Lastly, gender diversity has become an important theme in the process of reforming governance globally. The business argument on gender diversity claim that when there is board diversity, there is an increase in the effectiveness of board actions which result in improved performance and productivity of the bank (Hassan, 2011).

1.1.2 Profitability

Profitability in banking can be defined as it is ability to generate profit. A profit can also be defined as what is left from revenue generated by a business after paying all the expenses including producing a product and other expenses incurred when running a business (Gedion, 2014). Narver and Slater, (2010) indicated that there exist varying ways of analyzing a business. However, the primary focus of the research is profitability

ratios, which is the process of measuring the organizations potential in generating revenue which is higher than expenses incurred.

In a market where there is competition, business owners need to come with means of achieving a satisfactory level of profit. Increased profitability in a business is determined by the managers' ability to choose financial strategies which are working and those which need improvement. Therefore, understanding the primary features in a business which will influence profitability help managers to come up with strategies for their organizations (Narver & Slater, 2010). The primary objective of every business is to maximize profits or as a way of reducing exposure to risks. Some of the ratios used in measuring profits include Return on Asset and Return on Equity (ROE) (Hassan, 2011). ROE is the ratio of net profit and the total equity generated from shareholders investments. The ratio depends on the financial leverage, profit margin, and speed assets (Bătrâncea, 2010). Also, the returns on assets help in determining the profitability of the investment assets. Kihumba (2010) indicated that ROA is essential in understanding the efficiency of the company management when it comes to generation of resources in the organization

1.1.3 Board Characteristics and Profitability

According to the Combined Code on Corporate Governance (CCCG) (2003), every organization needs an effective BOD who is important for the success of the organization. The BOD should be given responsibility for the company's value and entrepreneurial objectives and to also control and assess risks and ensure there is an improvement in performance of the organization (Birhanu, 2012). However, there is still

no consensus on the effect of BOD characteristics when it comes to profitability because of the differences in researchers views.

Chepkosgei (2013) established a contrary relation between the market worth of a given organization and the board of director's size. A study conducted by Eisenberg et al. (1998) indicated that businesses having small sized board are most likely inclined to have a higher Return on Assets (ROA). Additionally, Hassan (2011) indicated that organizations with the large sized board have poor performance due to subsequent performance improvement because larger boards tend to slow down subsequent performance improvement. Having independent directors result in diversity and enhances the monitoring role and hence improve the quality of the BOD. Excess stock returns over the market as being significantly higher for companies with high-quality BODs than for those with low-quality BODs. Companies with good BODs also reported higher ROE and had a higher price to book ratios (Htay, 2012).

There have been issues in determining the relations between board pay and the performance of an organization. According to Htay (2012), directors' compensation is highly influenced by the board size and frequency of meetings and not the performance of the firm. Chepkosgei (2013) indicated that profitability predicts the compensation of the board. Results from a study conducted by Cordiero, Veliyath, and Erasmus (2000) found out that there are affirmative correlation between the performance of a business and the compensation of directors. The study did indicate that increased growth rate in a company results to increased stock compensation. Mishra and Nielsen (2000) concluded that pay-for-performance would be a more effective predictor of profitability whenever there are short-tenured independent directors from outside.

Changing political, cultural, and societal views of the BOD and the global desire for better CG practices are some of the factors credited with an increased interest in the demographic diversity in BODs. A significant number of studies on BOD diversity are pinned on resource dependency theory or they are theory neutral. Using resource dependency theory, Carter, Simkins, and Simpson (2003) came to the conclusion that diversity is positively related to the organizations performance, a finding supported by Roberson and Park (2007).

The development of corporate governance codes of best practice in Kenya is done by Private Sector Corporate Governance Trust. The Capital Markets Authority (CMA) is mandated with role of formulating and implementing rules and regulations for players in the capital market. The Company Act is silent on board size but sets a minimum of two directors. The Global Competitiveness Report 2012-2013 indicated that Kenya's competitive ranking plummeted due to lack of effectiveness in areas such as organizations ethical behavior, the integrity of auditing, the strength of investor protection, and the standards of reporting and guarding the minority shareholders (Chepkosgei 2013).

1.1.4 Commercial Banks of Kenya

Presently, there are 44 licensed commercial banks in Kenya, and only one institution offering mortgage financing. Among the 44 institutions are 31 which are locally owned, while 13 are owned by foreigners. Currently, the Kenya Government has a huge stake in three locally owned commercial banks (Okumu, 2007). However, the rest are family owned businesses. The Kenyan banking industry went through a tumultuous period after the country gained its independence; the banking industry was Africanized, in the 1980s

through to 2005 with twelve banks collapsing between 1984 and 1989. A huge number of locally owned banks found the environment unsuitable numbers of the new locally owned banks were finding it difficult to keep afloat due to expensive deposits, low capitalization, political interference, and poor liquidity ratios. Due to inadequate capacity and political interference, the Central Bank, at the time was not able to regulate the banking industry effectively (Kenya Bankers Association, 2013).

The Banking Act of 1989 was enacted to license banks and financial institutions after the first wave collapse of banks. Some of the changes made in the Act included an increase in minimum capital, making deposit insurance compulsory, and prohibition of over-lending and earning interest on loans which are not performing. Additionally, Deposit Protection Fund Board was established to offer protection to depositors and oversee bank liquidation (Kenya Bankers Association, 2013). However, even with the new regulation, the banking industry experienced a second wave which occurred between 1993 and 1995 hence affecting about 19 banks. The problem results in loss of billions of shillings with several banks being linked with the Goldenberg scandal.

In 1998, Reliance Bank, Fortune Finance, Trust Bank, Bullion Bank, City Finance Bank, and Prudential Bank also collapsed while between 2000 and 2005 five more banks also collapsed (Kenya Bankers Association, 2013). Impact of technology on the Kenyan banking industry has been huge with the introduction of the automated teller machines, swift system, mobile banking which has been largely influenced by the M-Pesa innovation, internet banking leading to financial inclusion in Kenya (Kenya Bankers Association, 2013). According to Central Bank of Kenya (2013), financial inclusion in Kenya stands at 74% as at June 2013.

Financial inclusion has contributed heavily to the economic growth of Kenya due to the ease and convenience of funds transfer through mobile money. At Central Bank of Kenya, the process of system rating is done using the Asset Quality, Management Quality, Earnings, Capital Adequacy, and Liquidity (CAMEL). The process helps understand how sound the commercial banks are. In 2012, a commercial bank of Kenya was rated strong. Based on the rating, the banking institution was rated strong (18), satisfactory (21) and fair (4) in December. However, in November 2012, the Central Bank issued revised Risk Management and Prudential Guidelines which was supposed to be applied by all mortgage finance companies, commercial banks, and non-bank financial institutions that are licensed under the Banking Act. The purpose of the update was driven by the need to have updated regulations in the banking sector due to the changes in a local, international, and regional banking environment. The revised prudential guideline had several changes including enhancement of Capital Adequacy Requirement (CAR), the introduction of 2.5% buffer which was supposed to start 24 months and others. The revised guidelines played a significant role in the enhancement of Corporate Governance Requirements via introducing ethical leadership as directed by the new constitution in efforts of ensuring there is transparency, ethics, and diversity, strengthening board independence which wanted a third of members of a board to require at least a third of the directors to be clear differentiation and autonomous (Central Bank of Kenya, 2012). The move was based on the belief that effectiveness in corporate governance plays an important role in creating investors' confidence and goodwill. Again, firms lacking effectiveness in governance are not profitable.

1.2 Research Problem

In today's globalized, ever-changing, and competitive business landscape, corporate boards have become critical for the smooth operation of organizations. More than ever, boards are expected to perform not just the monitoring of management but provide strategic directions especially in times of crisis (Okumu, 2007). In addition, the board is also charged with the responsibility of facilitating changes that support the mission of the organization. For the board to execute its functions effectively, scholars concur on the importance of a competent board that contribute to the sustainability of the firm (Mulbert 2010; Michael 2011). Therefore, due to the board of director's role, it is important to identify their various characteristics and the impact they have on the performance of an organization.

The characteristics of BOD as the main mechanism for corporate governance have been highly discussed in the last few years from various regulators, participants of the markets and academics. The reason this topic has received significant attention is theories offer views that are conflicting on the board's characteristics influence on the performance and control of the organization and on the other hand, the empirical evidence provided is inconclusive. Mulbert (2010) indicated that even today, the company performance, and board structure are the most studied elements in all investigation on boards. Naturally, research on impacts of board and effects it has on performance conducted up to date are not conclusive. A study conducted by Bhagat and Black (2012) concluded that there is limited proof to be used in suggesting that characteristics of a board have impact on the performance of an organization. However, in other studies, enough evidence to support the argument certain characters of board impact on firm performance (Bhagat & Black,

2012; Gedion , 2014; Love & Rachinsky 2007). Understanding board composition in the banks is critical in understanding the ability of these boards to deliver on various parameters that can foster performance. It is also a basis upon which proposed reforms in board selection can be evaluated too. All the main theories of governance, whether shareholder or stakeholder-focused, point to the fact that boards of directors of a company are the cornerstones of good governance. Nevertheless, even with a huge number of researchers on the relationship between organizational performance and corporate boards, results from empirical studies indicate lack of consensus. (Mulbert 2010). This paper has explored this issue, paying particular attention to the relationship between board characteristics and profitability of commercial banks in Kenya. The study tries to answer the following questions: what extent the directors' expertise affects the profitability of commercial banks in Kenya? What extent board size affect the profitability of commercial banks in Kenya? What extent director independence affects the profitability of commercial banks in Kenya? And what extent board gender diversity affect the profitability of commercial banks in Kenya?

1.3 Research Objective

To ascertain the relationship between board characteristics and profitability of commercial banks in Kenya

1.4 Value of the Study

The study benefits the following stakeholders:

Banks benefit from the study because they relate board effectiveness to profitability. Questions have lingered in the banking industry regarding the usefulness of corporate

governance regulation and this study seeks to address these questions. Creditors and investors are keen on the profitability of the banks; because creditors are concerned with the liquidity of the bank while investors are interested with the ROE. The study assists creditors and investors in recognizing banks to invest in from assessing the corporate governance structures in place.

Bank customers have trusted financial intermediaries with their deposits and as such protection of customer's funds becomes paramount. The study seeks to provide assurance to the customers that corporate governance practices in banks insulate against malpractices during the global financial crisis regulators were blamed for being lenient with banks and financial institutions by not keeping abreast the changes in the industry by introducing 8 new regulations. This study assists regulator in identifying gains made by corporate governance regulation in place and ways to improve corporate governance in the industry.

The study is beneficial to employees providing assurance that embedding corporate governance practices lead to stable banks. This study assists academicians in building the body of knowledge regarding the influence of board effectiveness to the profitability of banks. Corporate governance is an integral topic in strategic management and business management.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The aim of this chapter is offer an analysis of previous studies on board characteristics and firm profitability relationship. The chapter is divided into several sections. The first section reviews the theories of corporate governance. The second section reviews the Empirical literature on the effect of the selected board characteristics on firm profitability. The third reviews the various determinants of profitability in the context of board characteristics. A conceptual framework is also provided and the chapter concludes by having a summary of some of the reviewed literature.

2.2 Theoretical Review

This study was based on three theories: Stewardship theory, agency theory, and resource dependency theory.

2.2.1 Stewardship Theory

According to Donaldson and Davis (1991), stewardship theory states that the only way stewards can be motivated and satisfied is when they attain the success of the organization. Some of the countries where the Stewardship model can be applied effectively include Japan, where the workers tend to assume the role of stewards and get engaged in the role of owner. Additionally, the theory suggests that there is a need to unify the various roles CEO and the chairman in order to minimize agency costs and also ensure the stewards have greater roles in the organization. Proponents of the theory claim that this will improve the process of safeguarding the shareholder's interests.

According to Stewardship theorists (Muth & Donaldson, 1998; Yermack, 1996), smaller board sized play is essential in enhancing the participant of social cohesion, while large board sizes prevent the ability of the board to reach an agreement on some of the most important decisions in the organization. Stewardship theorists also suggest that there is a need to have organizations which are dominated by boards because of the depth of the knowledge, technical know-how, and obligation to the organization, which have a significant effect on performance of an organization. Donaldson and Davis (1991) state that improving commitment and technical expertise are the two main ways a business can enhance profitability.

2.2.2 Agency theory

Agency theory was proposed by Jensen and Meckling, (1976) and examines agency relationships in which one party (the principal) delegates work to another party (the agent) who performs work on behalf of the principal. Agency theory indicates that division of control and ownership is among the hallmarks of the businesses operating in the modern world wherein various instances, firm managers tend to use their firm's knowledge and managerial expertise to create an advantage over the owner of the firm who tends to be absent for day to day activities in the organization. Because the managers are in control of the organization, they tend to pursue actions which will favor them personally, and not those benefiting the business owners.

According to the agency theory, there are specific roles of main actors in the governance of an organization, which stipulate that it's the role of the top management to make decisions and that the organization's shareholders have the right to hold the management accountable for the results obtained from the decisions. The agency theory has been the

main theory of corporate governance since the 1980s, and it describes corporate governance in terms of balancing the interests of the shareholders, organization's principles based on the expertise and responsibilities of the top managers.

The theory is of huge significance to corporate governance because it creates the backbone of the organizations doing well in terms of regulations and policies especially in the 21st century where the world has experienced the collapse of some of the major corporations. Additionally, the theory is important due to talks regarding strengthening corporate governance in businesses to ensure effectiveness and efficiency in protecting shareholders and stakeholder interests.

Because of the problems associated with the process of mitigating agency issues using contracts, various researchers have offered various governance mechanisms to help addresses the issues. Therefore, the agency theory offers the basis for the organization to use both internal and external mechanisms (Weir et al., 2002; Roberts et al., 2005). The theory claim that governance mechanisms are developed by the organization to protect the interests of shareholders, minimize the cost of agents and ensure agent-principal interest arrangement (Davis et al., 2007,).

2.2.3 Resource Dependency Theory

Resource Dependency Theory was originally developed by Pfeffer and Salancik (1978). And it has since been used as a basis to study and explain the influences of environments on organizational relations. Resource dependency theory emphasis more on board's role in providing the right to use the resources needed by the organization. The theory indicated that the main purpose of the BOD is to offer resources to the organization. Therefore, organization directors are treated as an essential resource to an organization.

Therefore, if the directors are considered as resource providers, diversities such as experience, gender, qualification and the like becomes essential. Some of the resources provided by Directors to an organization include skills, business proficiency, information, and access to key constituents such as public policy makers, suppliers, social groups, buyers, and legitimacy (Abdullah & Valentine 2009).

Ayuso and Argandona (2007) indicated that BOD offers expertise, skills, information and an effective linkage to the organization. According to the resource-based approach, the board of directors may offer support to the organization where in-firm knowledge to conduct some activities may be lacking or inadequate. According to Wang (2009), the resource dependence model indicates that BOD can be utilized to create a link with the external environment as a way of supporting the management achieves various objectives.

According to Ferreira (2010), Resource dependency theory focus on controlling and monitoring functions of the directors while the resource dependency theory concentrates on counseling and advisory of roles of the board members to the managers. However, the two theorists have changed and currently, they are assigning the board two roles of advising and monitoring the management. However, according to Marinova et al. (2010) there still exists a controversial issue on whether the board manages to perform both functions. If the board has the capability of performing such roles well remain a huge controversy. Using a corporate governance framework, board composition plays an important role in ensuring alignment of the shareholders and management interests with the primary purpose being to offer information on counsel, monitor, and to ensure decision-making effectiveness.

Habbash (2010) indicated that the two primary roles of boards are recognized. However, the characteristics of the board have dependent highly on Resource dependency theory, where they highly focus on the controlling the board functions. Resource dependency theory is among the theories that have received significant consideration from researchers and practitioners. Mallin (2007) offered a broad argument on the theories of corporate governance and indicated that one of the most appropriate approaches for this field is agency approach because it explains the corporate governance roles (Habash, 2010).

2.3 Determinant of Profitability of Banks

Other than board characteristics, factors that influence profitability in commercial institutions are both in-house and outside factors. According to Staikouras and Wood (2011), internal factors are those factors which bank's managers can control while the factors due to outside factors are those outside or beyond bank's management control. External factors that influence the profitability of commercial banks are related to legal and economic environment and comprises of factors like interest rates, inflation, recession, boom, regulations, market growth and market structure. Onuonga (2014) argues that the internal factors reflect the management policies of the banks and decisions made about the sources of funds, expenses, and liquidity administration. Information on bank-specific factors that controlling profitability in commercial banks can be obtained from the financial statements hence study will emphasis on bank's size, capital adequacy, liquidity, credit risk and efficiency in the bank's operations.

2.4.1 Bank's Size

According to Sehrish, Irshad and Khalid (2010) bank's size specifies that the size of a bank influence performance such that larger banks perform well compared to small-sized

banks through harnessing the economies of scale in their transactions such that big banks will enjoy high profits. Alkhazaleh and Almsafir, (2014) assert that large banks are assumed to have more advantages as compared to their smaller rivals and have a stronger bargaining capability and make it less complex to gain the benefits through economies of scale and specialization scope. In addition, Tariq et al. (2014) empirical evidence indicate that size of a bank directly affects profitability by reducing the cost of raising capital for big banks. A study was done by Cull et al. (2007) also indicate that size captures the economies or diseconomies of scale of an institution and normally the natural logarithm of bank's assets are normally used as a proxy for size.

2.4.2 Capital Adequacy,

According to Birhanu (2012), capital sufficiency is the measurement of commercial bank's ability or strength in financial terms. It shows the willingness of the bank and ability to tolerate with unusual and set losses. It indicates the firm's ability to undertake an additional business. It also measures the commercial banks' ability to effectively absorb risk and solvency. Therefore, the ratio is utilized in protecting the bank's fund depositors as well as promoting efficiency and stability of financial systems.

2.4.3 Liquidity

As defined by Ongore and Kusa (2014) Liquidity is the banks potential to meet its mandate, mostly from depositors of funds to the bank. The availability of liquidity is influences profitability since it improves the bank's capability to acquire cash, in order to fulfill present and essential needs. For the commercial banks to gain public assurance, Chinoda (2014) says that they should have sufficient liquidity to meet the demands loan

holders and depositors needs. Small liquidity level serves as the ground reality of the failure of a bank. Liquidity problems also lead to issues in generating funds and failure to fulfill current and unanticipated variations in the sources of financing (Tariq et al., 2014). Loan to assets ratio is normally used to calculate the liquidity position of a bank and the ratio indicates the percentage of total assets used to provide loans.

2.4.4 Credit Risk

According to Muzahem (2011), there is a different measure which can be used to determine the risks associated with credit loans loss condition to total loan ration and be able to understand the deposits of banks. Higher provisions for loan losses could signal a possibility of future loss on loans and could be a sign of a timely recognition of bad loan by cautious banks. A higher ratio of NPLs to total loans and an absolute deterioration of credit portfolio quality negatively affect commercial bank's profitability (Roman & Tomuleasa, 2013). In addition, raise in credit risk increases the marginal cost of loans, obligations, and equity leading to the enlargement of the cost of finance for the bank (Tariq et al., 2014).

2.4.5 Efficiency in the Bank's Operations

In 2014, Chinoda indicated that operating costs refer to the expenses incurred in the normal functioning of the bank beside the cost of obtaining funds. Empirical evidence indicates that low operating costs lead to the greater profitability of commercial banks. Other costs like the provisions made towards bad debts and doubtful debts influence performance and are likely to lead to a probable annual loss on assets. Expenses are normally the operational cost of banks and they specify a fraction of banks earnings and

have an inverse relationship with bank profit, and indicate the proficiency of the bank administration and its dealings during operations (Tariq et al., 2014). Operational efficiency indicator also referred to as expenses by management is a ration of income and cost. There is always a reduced efficiency whenever there is increased ratio and the bank could be adversely affected in return on assets, depending on the extent of competition in the industry (Chinoda, 2014).

2.4 Empirical Review

Shrader, Blackburn, and Iles (1997) conducted a research on percentage of female board members and organizations profitability relationship using ROA and ROE and a sample of 200 Fortune 500 firms. The study results showed that the value of the firms under study and percentage of women on the boards have a negative relationship.

A study conducted by Carter et al. (2003) that indicated that the connection between directors' diversity and organizations value is positive. The study sample was 638 Fortune 1000 firms. The study results indicated that higher percentage of women has an impact on increased firm value. The study outcomes indicated that increasing the women percentages and minorities on the board can add to the firm value. The study also suggested that the women portion on board is a major determinant of a fraction of the minority on the board.

Mandu (2012) examined the relationship between measures of board independence and the profitability of commercial banks in Kenya. The study used data for the period 2004 through 2008 and used a sample of 36 banks where their annual financial reports of the commercial banks in Kenya was used. The study indicated that composition of a board has a negative correlation on the performance of small organizations and for larger firms.

Another study was conducted by Mbugua (2012) to understand the relationship that exists between the board diversity and profitability commercial banks registered and domiciled in Kenya. Some of the data used in the study included Boards' gender, educational qualifications, and board specialization. Also, the companies' profitability was obtained from CBK's supervisory department where a total of 33 banks reports were sampled. The outcomes indicated that there is a small association between financial performance of the commercial banks and board diversity.

A number of empirical studies on the effect of board size have been conducted in Kenya and globally with mixed results. Chepkosgei in 2013 studied the influence of board composition on the profitability of 43 commercial banks in Kenya. Findings of the study revealed that board size, average tenure, the ratio of female directors, the occupational experience of the directors, and the ratio of non-executive could significantly predict only ROE and ROA. The literature on corporate governance provides conclusive information on independent directors.

Nyamongo and Kebede (2013) conducted a study in the Kenyan context to understand the impact corporate governance has on performance; the study used ROA & ROE of 37 commercial banks in Kenya over the period 2005-2009. A panel econometrics technique was used to understand governance variables and bank performance relationship. The study results indicated that whenever the board of directors had independence, it positively impacts the performance of banks, while large board sizes have negative impact on the organizational performance.

A study done by Opanga (2013) sought to establish how the number of directors, number of resolutions passed in general meetings, number of committees and the frequency of

holding meetings affect the insurance firms' profitability in Kenya. An 80% sample of the 45 insurance firms in Kenya during the period of 2010 – 2012 was used in the study. The study established that the number of board committees, board meeting frequency, number of resolutions passed in an AGM and number of board of directors all are positively correlated with financial performance.

2.5 Conceptual Framework

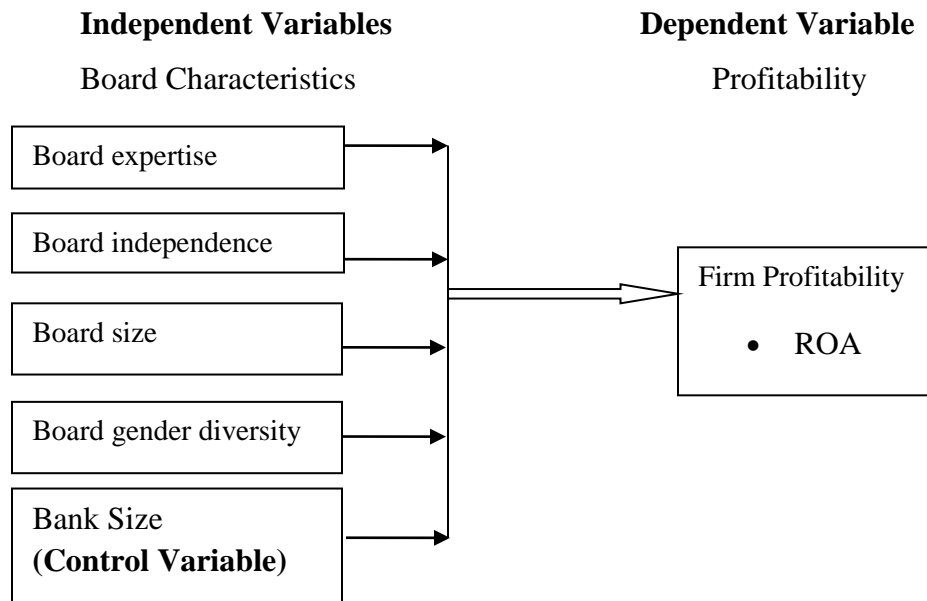
A conceptual framework is a set of general ideas and principals taken from related field of enquiry and used to construct a subsequent presentation (Reichel and Ramey – 1987). According to Stewardship theorists (Muth & Donaldson, 1998; Yermack, 1996), smaller board sized play is essential in enhancing the participant of social cohesion, while large board sizes prevent the ability of the board to reach an agreement on some of the most important decisions in the organization. Stewardship theorists also suggest that there is a need to have organizations which are dominated by boards because of the depth of the knowledge, technical know-how, and obligation to the organization, which have a significant effect on performance of an organization.

According to the Combined Code on Corporate Governance (CCCG) (2003), every organization needs an effective BOD who is important for the success of the organization. The BOD should be given responsibility for the company's value and entrepreneurial objectives and to also control and assess risks and ensure there is an improvement in performance of the organization (Birhanu, 2012). Eisenberg et al. (1998) indicated that businesses having small sized board are most likely inclined to have a higher Return on Assets (ROA). Additionally, Hassan (2011) indicated that organizations with the large sized board have poor performance due to subsequent performance

improvement because larger boards tend to slow down subsequent performance improvement.

In the study, conceptual Framework is used to describe the association between variables (Mugenda & Mugenda, 2003). In this discourse, the accompanying conceptual framework is used to analyze the effects of board characteristics on firm performance. Board characteristics form the independent variables while firm performance forms the dependent variable. Board characteristics under study include; board expertise, board size, board independence, and gender diversity. The proxy for profitability is accounting based measure that is the Return on Assets (ROA). The framework is displayed diagrammatically in Figure 2.1 below.

Figure 2.2: Conceptual Model



Source: Researcher 2017

2.6 Summary of the Literature Review

The chapter conducted a review of literature related to board characteristics and the impact it has on profitability based on different theoretical perspectives. The theory of agency is created is based on the idea that control potentials and separation of ownership result into self-interested actions in firm's managers. Additionally, the theory is rooted on small-sized board. The theory indicated that the main contribution from the board in ensuring they are independent is to ensure they are independent whenever they are monitoring various activities in the organization. Also, the theory of stewardship claims that primary role of any board of directors is to offer support and advice to the management and not to monitor and discipline the managers as described by the agency theory.

Practical studies conducted on the effects of Board characteristics on profitability have provoked different outcomes. Some researchers indicate that directors' number has an influence on the effectiveness in board functioning and thus impacting organizational performance. However, there is another set of studies which indicate that large board is less effective and they also have a negative impact on organizations profitability. One strand of the literature argues whenever independent directors are present in an organization, there is less conflict of interest, and it is more effective to reduce problems related to agency. Information on the influence on board diversity (racial, gender and ethnic composition of the board) has also turned out mixed results.

CHAPTER: RESEARCH METHODOLOGY

3.1 Introduction

The primary purpose of the study was to describe the research design, the data collection techniques and procedures and the target population.

3.2 Research Design

The research used analytical and cross-sectional research design in studying the characteristics of board and the impact it has on profitability among the commercial banks operating in the Kenyan market. Cooper and Schindler (2003) indicated that research design is used to gather snapshot of data and analyze the data based on the relationship between study variables. The selected designs was appropriate because it enables respondents to provide relevant information on some of the issues of interest in the study.

3.3 Population

For the survey, the target population was the whole set of units which were used to make inferences. The population used in this study was all commercial banks regulated by CBK. The study was a census survey covering all the 43 commercial banks in existence in Kenya. The banks were classified into local private commercial banks, local public commercial banks, and foreign commercial banks. See appendix I attached.

3.4 Data Collection

The researcher collected data from 2012 – 2016 for 43 commercial banks operating in the Kenyan market. The study used secondary data on the study variables include board

expertise, board size, board independence, gender diversity and Firm Profitability (ROA) which will be obtained from audited financial statements which are available at the CBK website (www.central.go.ke)

3.5 Data Analysis

The study covered descriptive and inferential statistics. Descriptive statistic was conducted through multiple comparisons of the means from the variables and trend analysis. On the other hand, inferential statistics used Pearson product moment correlation analysis design and analysis through regression method. Correlation coefficient was used by the researcher to describe the relationship between the study independent and dependent variables.

3.5.1 Diagnostic tests

The analytical model to be adopted in the study is the multiple linear regression analysis which sought to develop an adequate predictive model that shows the relationship between the dependent and independent variables. To validate this relationship, regression diagnostics test play a pertinent role by assessing whether the assumption of regression have been violated. A violation of any assumption affected the adequacy of the model. A regression model is usually fitted under the assumption that the observations are independent and identically distributed, residuals should be normally distributed and the observations have the equal variance. Diagnostics was therefore conducted to ensure that the assumptions of regression have been met and the sampled data appear to have come from a population that meets the regression assumptions.

3.5.1.1 Tests of Normality

Normality of residuals is a necessary assumption for building a regression model. This test helps to assess whether the random error in the association between the dependent and independent variable in a regression model follows a normal distribution. Violation of normality of residuals does not significantly influence the efficiency or bias of the model but it affects the computation of significant values that are used to test model adequacy when the sample size is very small. There are a number of statistics available to test for the violation of the normality assumption including skewness and kurtosis. The assumption can also be tested by assessing graphical depictions of the error terms in normal probability plots. In this study we shall use the Shapiro-Wilk and Kolmogorov Smirnov test to assess the violation of the normality assumptions. To make a conclusion using this test we compare the computed significant value with the study's level of significance (0.05). If the computed significant value is greater than the study's level of significance we conclude that the residuals are normally distributed. If the computed significant value is greater than the study's level of significance we can infer that the data considerably departs from a normal distribution.

3.5.1.2 Test for Multicollinearity

Whenever two or more of the independent variables in a multiple regression model are highly or moderately correlated, we can infer that multicollinearity exists. The effect of multicollinearity is that it skews the results in a multiple regression model. Another crucial impact of severe multicollinearity is that it can raise the variance of the coefficients estimates and make them very sensitive to minute changes in the model. It

arises from poor design of experiments with inadequate data collection techniques. It can also arise from using insufficient sample sizes or the inclusion of a variable in the model that is a blend of two other variables of interest in the study. To determine the severity of multicollinearity, the study used the Variance Inflation Factor (VIF). Variance Inflation Factor (VIF) measures the extent to which the variance of the coefficients estimates increased if the independent variables are correlated. If there is no multicollinearity, then the Variance Inflation Factor (VIF) will be 1. A VIF above was an indication that the independent variables are moderately correlated while a VIF between 5 and 10 indicates severe multicollinearity which is problematic.

3.5.1.3 Heteroscedasticity

Heteroscedasticity implies the case where the variation of the error term is not similar for all observations. The basic assumption of multiple regression analysis is the variation of the error term is similar for all observations. If the residuals violate the assumption that requires equality of variance, the model coefficients from the model will neither be ones of minimum variance nor will they be unbiased. The test for equality of variance was tested using graphical representation by plotting the model residuals (which the difference between the observed value and the model-estimated value) against the predictor variables. A well-fitted model shows no conceivable patterns of the fitted values. Scatter plots are a valuable method assessing the variance of a data and are the first step in gauging Heteroscedasticity. The study also used the Breusch-Pagan test which tests the null hypothesis that the residuals have a constant variation for all observations. A p-value that is less than the study's level of significance (0.05) would

lead the researcher to make an inference the assumption of equality of variance is violated.

3.5.2 Analytical Model

Further, the multiple linear regression analysis was used by the researcher to understand whether there is variations in the dependent variables which is essential in understanding changes experienced in the independent variables and even as a predictor variable but the analysis might be done without other variables using the T-statistic. T-statistic is the measure of ratios of the model mean square which is divided by the mean square error. This study sought to establish how the various board characteristics variables affect the profitability of banks. The study conceptually utilized the model shown below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where:

Y: The Dependent Variables - Profitability (ROA)

X₁: Board Expertise-, measured by education levels

X₂ Board Size - measured by the number of directors in a board

X₃: Director Independence - measured by the number of executive or non-executive director

X₄: Board diversity - measured by the proportion of the female directors in the board.

X₅: Bank Size – measured by the log of Total assets (control variable)

β₁ –β₅ are the regression co-efficient representing change introduced in **Y** by change in each independent variable

ϵ is the error term assumed to be from the constant variance and they are normally zero mean.

3.5.3 Test of Significance

In the study, the p-values which were obtained from the ANOVA results were used to test the relationship between variables and their significance. The ANOVA results were obtained using regression analysis technique. In testing the significance, the researcher used the 0.05 (5%) conventional probability where if the p-values are not more than 0.05 are the study indicated significant relationship between variables.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Introduction

The objective of this study was to determine the relationship between board characteristics and profitability of commercial banks in Kenya. To achieve this objective the study applied descriptive statistics and inferential statistics, namely: correlation and regression analysis, to analyze the various board variables on the one hand, and the dependent variable (ROA) on the other hand. This chapter presents data analysis and interpretation of the results. The areas covered in this chapter are: Descriptive Statistics, Correlation Analysis, Regression Analysis and Chapter Summary.

4.2 Descriptive Statistics

Data was collected from the 43 commercial banks, which were operational in Kenya for the five years (2012, 2013, 2014, 2015 and 2016). Data collected in relation to board characteristics included: board expertise, board size, director independence and board diversity. Additionally, data was collected in relation to the bank size. This section provides a summary of descriptive analysis of board characteristics and profitability of commercial banks operating in Kenya from 2012 to 2016. The study used tables and figures to describe the variables of interest to this study.

Table 4.1: Descriptive Value from Regression Analysis (Dependent and Independent Variables)

Variable	Mean	St. dev	Minimum	Maximum
ROA	0.097	0.15	-0.79	0.62
Board Expertise	4.29	1.28	2	8
Board Size	9	2.54	3	15
Director Independence	5.98	2.81	0	14
Board diversity	1.27	1.2	0	5
Bank Size	23022.28	35671.45	92.25	222302.3

The study considered descriptive statistics (mean, standard deviation, minimum and maximum) for the panels. Table 4.1 depicts ROA of an average of 0.0966 with a minimum of -0.79 and a maximum of 0.62. Board Expertise on average was 4.29 with standard deviation of 1.28. The experts ranged from 2 minimum to a maximum of 8 individuals. Board size on average was 9 with standard deviation of 2.54. The board with the least members had 3 individuals while the board with maximum number of individual had 15 directors. Board independence was on average 5.98 respectively with a standard deviation of 2.8. The composition of audit committee depicted by the proportion of non-executive independent directors on the audit committee on average was 3 members. Also on assessing the different gender diversity on average there were 1.27 number of women as compared to me with a standard deviation of 1.2. Women ranged from 0 to 5 individuals.

4.2.1 Profitability of commercial banks

The findings on the trend in banks profitability is presented on the table below

Table 4.2: Commercial Bank Profitability

Year	ROA*
2012	2.86%
2013	3.01%
2014	3.24%
2015	3.51%
2016	3.56%

***ROA calculated on a simple average basis**

Source: Research Findings 2017

For the periods under study (2012, 2013, 2014, 2015 & 2016), simple average ROA for the four years ranged between 2.86% and 3.56%. The year 2016 registered the highest ROA of 3.56% with 2012 recording the lowest percentage 2.86%. This implied that ROA in the commercial bank was increasing.

4.3 Test for Multicollinearity

Multicollinearity is considered to exist when there is perfect linear relationship between the variables under the study. The correlation matrix was used to determine if any pair of independent variables was highly collinear through the magnitude of the correlation coefficient of the pairs of variables established. This bias arises when one or more pairs of independent variables are perfectly correlated to each other.

Table 4.3: Correlations table

	ROA		Board Expertise	Board Size	Director Independence	Board diversity	Bank size
ROA	Pearson Correlation	1					
	Sig.(2-tailed)						
Board Expertise	Pearson Correlation	0.0652	1				
	Sig.(2-tailed)	.002					
Board Size	Pearson Correlation	0.0922	0.7805	1			
	Sig.(2-tailed)	.012	.003				
Director Independence	Pearson Correlation	0.0007	0.572	0.782	1		
	Sig.(2-tailed)	.003	.028	.007			
Board diversity	Pearson Correlation	0.1159	0.4907	0.6386	0.4907	1	
	Sig.(2-tailed)	.004	.032	.024	.006		
Bank size	Pearson Correlation	0.1053	0.1518	0.1621	0.0532	0.1977	1
	Sig.(2-tailed)	.003	.028	.007	.222	.021	

Source : Research Findings (2016)

Multicollinearity was considered present if the correlation coefficient was above 0.8 as it may lead to spurious regression. As indicated in Table 4.3, the study found that all pairs had a correlation of less than 0.80, which is the threshold to permit retaining of all the variables under study. Retaining variables implies that the coefficient of determination improves as described in Woodridge (2004).

4.4 Regression Analysis

In this study, a multiple regression analysis was conducted to test the influence among the variables. The study used statistical package for social sciences (SPSS V 20) to code, enter and compute the measurements of the multiple regressions.

Model Summary

The results on the model summary were presented on the table below.

Table 4.2: Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.768	.584	.578	.08823

Source : Research Findings 2016

The study used coefficient of determination to evaluate the model fit. The adjusted R^2 , also called the coefficient of multiple determinations, is the percentage of the variance in the dependent explained jointly or uniquely by the independent variables. The model had an average adjusted coefficient of determination (R^2) of 0.578 and which implied that 57.8% of the variations in commercial bank profitability are explained by the board characteristics investigated.

Analysis of Variance

The study further tested the significance of the model by use of ANOVA technique. The findings are tabulated in table below.

Table 4.3: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	138.1668	4	34.5417	2.8178771	.0038b
	Residual	453.55	37	12.2581		
	Total	591.7168	41			

Source : Research Findings 2017

Critical value = 2.19

From the ANOVA statics, the study established the regression model had a significance level of 0.3%, which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance (p-value) was less than 5%. The calculated value was greater than the critical value ($2.8178 > 2.19$) an indication that Board Expertise, board size, director independence, board diversity and bank size all have a significant effects on commercial bank profitability. The significance value was less than 0.05 indicating that the model was significant.

Table 4.4: Regression Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	Constant	0.366	0.495		0.739	0.006
	Board Expertise,	0.257	0.16	0.1855	1.6	0.010
	Board Size,	0.239	0.152	0.008	1.572	0.024
	Director Independence,	0.233	0.114	0.031	2.044	0.002
	Board diversity	0.222	0.129	0.161	1.682	0.33
	Bank Size	0.247	0.16	0.1855	0.15438	0.010

Source : Research Findings

As per the SPSS generated output as presented in table above, the equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5$) becomes:

$$Y = 0.366 + 0.257X_1 + 0.239X_2 + 0.233X_3 + 0.222 + 0.247X_4$$

From the regression model obtained above, a unit change in Board Expertise while holding the other factors constant would lead to an increase in Commercial bank profitability by a factor of 0.257, a unit change board size while holding the other factors constant would lead to an increase in commercial bank profitability by a factor of 0.239, a unit increase in , director independence while holding the other factors constant would lead to an increase in Commercial bank profitability by a factor of 0.233 and a unit change in board diversity while holding the other factors constant would lead to an increase in Commercial bank profitability of the by a factor of 0.222. While holding the other factors constant a unit change in bank size would lead to a increase in Commercial bank profitability by a factor of 0.247.

The analysis was undertaken at 5% significance level. The criteria for comparing whether the predictor variables were significant in the model was through comparing the obtained probability value and $\alpha = 0.05$. If the probability value was less than α , then the predictor variable was significant otherwise it wasn't. All the predictor variables were significant in the model as their probability values were less than $\alpha = 0.05$

4.5 Linearity, Non-Stationarity, Heteroscedacity and Autocorrelation

Due to time series component, the fixed effects model makes assumptions on normal distribution of the stochastic random error term, linearity, constant variance of error terms across observations and no serial autocorrelation of the error terms. However, regarding heteroscedasticity and autocorrelation, Waldinger (2011) suggests that standard regression packages (such as STATA) will do the adjustment of standard errors automatically if one specifies a fixed effects model. This implies that panel data approach takes care of the presence of varying variance of the error terms across all the observations in the panels and any suspected or proved correlation between random error terms of the subsequent periods. Therefore, the following diagnostic tests were undertaken to validate the yielded estimates.

To proceed with estimation, this study applied the Shapiro Wilk test for normal data or distribution of the stochastic random error terms. The study found out that at 10% significance level, overall residuals of the variables were normally distributed. The pvalue of the residuals was 6.53% which slightly exceeds 5% level but less than 10% level implying that the null hypothesis of normality of residuals is not rejected therefore the data was normally distributed.

4.6 Discussion of the Findings

The study considered descriptive statistics (mean, standard deviation, minimum and maximum) for the panels. Table 4.1 depicts ROA of an average of 0.0966 with a minimum of -0.79 and a maximum of 0.62. Board Expertise on average was 4.29 with standard deviation of 1.28. The experts ranged from 2 minimum to a maximum of 8 individuals. Board size on average was 9 with standard deviation of 2.54. The board with the least members had 3 individuals while the board with maximum number of individual had 15 directors. Board independence was on average 5.98 respectively with a standard deviation of 2.8. The composition of audit committee depicted by the proportion of non-executive independent directors on the audit committee on average was 3 members. Also on assessing the different gender diversity on average there were 1.27 number of women as compared to men with a standard deviation of 1.2. Women ranged from 0 to 5 individuals. For the periods under study (2013, 2014, 2015 & 2016), simple average ROA for the four years ranged between 3.01% and 3.56%. The year 2016 registered the highest ROA of 3.56% with 2013 recording the lowest percentage 3.01%. This implied that ROA in the commercial bank was increasing.

As indicated in Table 4.3, the study found that all pairs had a correlation of less than 0.80, which is the threshold to permit retaining of all the variables under study. Retaining variables implies that the coefficient of determination improves as described in Woodridge (2004). The study used coefficient of determination to evaluate the model fit. The adjusted R^2 , also called the coefficient of multiple determinations, is the percentage of the variance in the dependent explained jointly or uniquely by the independent variables. The model had an average adjusted coefficient of determination (R^2) of 0.578

and which implied that 57.8% of the variations in commercial bank profitability are explained by the board characteristics investigated.

From the ANOVA statics, the study established the regression model had a significance level of 0.3% which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance (p-value) was less than 5%. The calculated value was greater than the critical value ($2.8178 > 2.19$) an indication that Board Expertise, board size, director independence, board diversity and bank size all have a significant effects on commercial bank profitability. The significance value was less than 0.05 indicating that the model was significant.

From the regression model obtained above, a unit change in Board Expertise while holding the other factors constant would lead to an increase in Commercial bank profitability by a factor of 0.257, a unit change board size while holding the other factors constant would lead to an increase in commercial bank profitability by a factor of 0.239, a unit increase in , director independence while holding the other factors constant would lead to an increase in Commercial bank profitability by a factor of 0.233 and a unit change in board diversity while holding the other factors constant would lead to an increase in Commercial bank profitability of the by a factor of 0.222. While holding the other factors constant a unit change in bank size would lead to a decrease in Commercial bank profitability by a factor of 0.247.

The analysis was undertaken at 5% significance level. The criteria for comparing whether the predictor variables were significant in the model was through comparing the obtained probability value and $\alpha = 0.05$. If the probability value was less than α , then the predictor

variable was significant otherwise it wasn't. All the predictor variables were significant in the model as their probability values were less than $\alpha = 0.05$

To proceed with estimation, this study applied the Shapiro Wilk test for normal data or distribution of the stochastic random error terms. The study found out that at 10% significance level, overall residuals of the variables were normally distributed. The p-value of the residuals was 6.53% which slightly exceeds 5% level but less than 10% level implying that the null hypothesis of normality of residuals is not rejected therefore the data was normally distributed. A number of studies have found a positive correlation between board expertise and firm performance (Hunt, 2000; Ljungquist, 2007). Experienced and qualified members of the board would be able to stimulate the boards to consider more alternatives when reviewing different positions (Cox & Blake, 1991). Agrawal and Chadha (2005) found out in their study that boards with higher levels of expertise exhibited reduced incidences of restated earnings.

Board size and firm performance relationship has received a lot of empirical considerations the earliest work being that of Lipton and Lorch (1992). Their study put forth a recommendation that a board should constitute between 7 to 8 members. They concluded that larger boards can result in time consuming effort in decision making. Their study is corroborated by Jensen (2001) who concluded that companies with oversized boards tend to become less effective. Lorsch however recommends a board size of 12 members which would lead to effective deliberations while allowing for staffing of board committees.

The independence of the board is often denoted by the number of non-executive directors viz a vis that of executive (Lawal, 2012). Despite the argument, the non-executive and executive directors have pros and cons, majority of researchers favour independent directors (Andres et al, 2005). This is because of the perceived benefit that independent directors provide management due to their independence (Baysinger and Butler, 1985). Independent directors contribute to impartiality in board's strategic decision making including providing independent oversight on the management (Fama and Jansen, 1983).

Some empirical studies have found no influence on performance of gender diversity (Smith et al., 2007; Rose, 2007; Eklund et al., 2009). Other studies found that a higher proportion of women have had a statistically significantly positive effect (Erhardt et al., 2003; Campbell and Minquez-Vera, 2008). Still others found a negative effect (Bøhren and Strøm, 2007; Adams and Ferreira, 2009; and Ahren and Dittmar, 2012).

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of findings, conclusions and recommendations from the study. The chapter also highlights various limitations of this study and makes suggestions for further research. The chapter is organized into: Summary of Findings, Conclusion and Recommendations, Limitations of the Study and Suggestions for Further Research.

5.2 Summary of the findings

The objective of the study was to investigate the relationship between board characteristics and financial performance of commercial banks in Kenya. The study makes a number of findings. Commercial banks in Kenya operate within the corporate governance guidelines and have met the minimum CBK requirements as far as Board Expertise, board size, director independence, board diversity and bank size among others.

The study considered descriptive statistics (mean, standard deviation, minimum and maximum) for the panels. Table 4.1 depicts ROA of an average of 0.0966 with a minimum of -0.79 and a maximum of 0.62. Board Expertise on average was 4.29 with standard deviation of 1.28. The experts ranged from 2 minimum to a maximum of 8 individuals. Board size on average was 9 with standard deviation of 2.54. The board with the least members had 3 individuals while the board with maximum number of individual had 15 directors. Board independence was on average 5.98 respectively with a standard deviation of 2.8. The composition of audit committee depicted by the proportion of non-executive independent directors on the audit committee on average was 3 members. Also on assessing the different gender diversity on average there were 1.27 number of women

as compared to me with a standard deviation of 1.2. Women ranged from 0 to 5 individuals. For the periods under study (2013, 2014, 2015 & 2016), simple average ROA for the four years ranged between 3.01% and 3.56%. The year 2016 registered the highest ROA of 3.56% with 2013 recording the lowest percentage 3.01%. This implied that ROA in the commercial bank was increasing. As indicated in Table 4.2, the study found that all pairs had a correlation of less than 0.80 which is the threshold to permit retaining of all the variables under study. Retaining variables implies that the coefficient of determination improves as described in Woodridge (2004).

The study used coefficient of determination to evaluate the model fit. The adjusted R^2 , also called the coefficient of multiple determinations, is the percentage of the variance in the dependent explained jointly or uniquely by the independent variables. The model had an average adjusted coefficient of determination (R^2) of 0.578 and which implied that 57.8% of the variations in commercial bank profitability are explained by the board characteristics investigated. From the ANOVA statics, the study established the regression model had a significance level of 0.3%, which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance (p-value) was less than 5%. The calculated value was greater than the critical value ($2.8178 > 2.19$) an indication that Board Expertise, board size, director independence, board diversity and bank size all have a significant effects on commercial bank profitability. The significance value was less than 0.05 indicating that the model was significant.

From the regression model Board Expertise was the leading influential factor in Commercial bank profitability with the highest factor of 0.257 compared to board size,

director independence, board diversity and bank size. The analysis was undertaken at 5% significance level. The criteria for comparing whether the predictor variables were significant in the model was through comparing the obtained probability value and $\alpha = 0.05$. If the probability value was less than α , then the predictor variable was significant otherwise it wasn't. All the predictor variables were significant in the model as their probability values were less than $\alpha = 0.05$

To proceed with estimation, this study applied the Shapiro Wilk test for normal data or distribution of the stochastic random error terms. The study found out that at 10% significance level, overall residuals of the variables were normally distributed. The p value of the residuals was 6.53% which slightly exceeds 5% level but less than 10% level implying that the null hypothesis of normality of residuals is not rejected therefore the data was normally distributed

These finding have found support from different studies. A number of studies have found a positive correlation between board expertise and firm performance (Hunt, 2000; Ljungquist, 2007). Experienced and qualified members of the board would be able to stimulate the boards to consider more alternatives when reviewing different positions (Cox & Blake, 1991). Agrawal and Chadha (2005), found out in their study that boards with higher levels of expertise exhibited reduced incidences of restated earnings.

Board size and firm performance relationship has received a lot of empirical considerations the earliest work being that of Lipton and Lorch (1992). Their study put forth a recommendation that a board should constitute between 7 to 8 members. They concluded that larger boards can result in time consuming effort in decision making.

Their study is corroborated by Jensen (2001) who concluded that companies with oversized boards tend to become less effective. Lorsch however recommends a board size of 12 members which would lead to effective deliberations while allowing for staffing of board committees.

5.3 Conclusions

The objective of this study was to evaluate the board characteristics factors affecting financial performance of commercial banks. Based on previous studies, the aspects were expected to have a positive effect on financial performance. The study findings indicate that there is a significant positive relationship between the factors under study and financial performance of commercial banks: board expertise, board size, director independence, board diversity and it indicated that they influenced profitability of commercial banks.

The importance of board characteristics cannot be overemphasized since it enhances the organizational climate for the internal structures and performance of a company. Indeed, board characteristics bring to bear through external independent directors, new dimension for effective running of a corporate entity thereby enhancing a firm's corporate entrepreneurship and competitiveness.

The independence of the board is often denoted by the number of non-executive directors viz-a-vis that of executive. Despite the argument the non-executive and executive directors have pros and cons, majority of researchers favour independent directors. This is because of the perceived benefit that independent directors provide management due to their independence. Independent directors contribute to impartiality

in board's strategic decision making including providing independent oversight on the management.

5.4 Recommendations

Based on the findings of this study, there is a need to improve board characteristics, in terms of board expertise, board size, director independence and board diversity so as to improve the profitability of commercial banks in Kenya. Thus, there are some practical recommendations for possible reform on board characteristics in order to better improve the profitability of commercial banks in Kenya.

Based on the findings boards of directors have a big mandate in day to day affairs of their respective firms/organization. Based on the estimation result, there is a need for the government to consider re-evaluating the boards by emphasizing independence to generate better outcomes. This should be in tandem with the structures of their day to day running of the operations. If this is done, it may lead to improved performance across the listed firms in the same industry/sector and market environment and even under the same regulatory arrangements.

The empirical findings also support stewardship theory as advanced by Davis and Donaldson (1991) who argued that from the theoretical perspective, superior performance of the firm had higher likelihood of having a large proportion of independent directors (managers) in board since these managers have a better appreciation of the business and can therefore make better decisions.

Another determinant of financial performance of banks, other than board structure, is bank size - measured by bank's peer grouping. Large banks, most of which are old banks,

perform better than small banks financially. This means that it takes quite some time for banks to acquire assets, be well capitalized and before they can register high levels of ROA. The results of this study are consistent with past researches by Short (1979), Bikker and Hu (2002) and Goddard et al. (2004) which conclude that large size banks are more profitable than small banks.

5.5 Suggestions for Further

As the research objectives stated, this study sought to find out whether board characteristics has a relationship with profitability of commercial banks. However, the research did not exhaust everything and therefore suggests that independent variables like the age of the directors should also be tested to find out if it has significance to performance. A related study also could be carried out to find out board compositions aspects in all financial institutions. Since the study covered only commercial banks in Kenya, further comparative studies could be appropriate between Kenya and other developing countries and even developed countries that act as a benchmarking analyzing the domestic companies' achievement in areas of board composition.

Similar studies as current are required covering firms across East Africa and even showing comparisons with respect to these characteristics. There is also a need for more studies of the same nature utilizing other indicators like political instability and corruption, factors which are more pronounced in Africa continent given weak judicial and social structures.

5.6 Limitations of study

A study of this nature has certain inherent limitations as it is designed to investigate into, and understand, specific elements. The findings of this study cannot be generalized to all sectors and industries since the sample was limited to banks operating in Kenya and excluded all other banks operating elsewhere.

The study was also limited to the aforementioned specific elements and variables; therefore, it cannot be generalized to all other elements and variables of the banking industry. The study only studied a period of 5 years. This period is not sufficient to study how various board characteristics will evolve over time, and what significance such changes will have on financial performance.

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APPENDIX I: LIST OF COMMERCIAL BANKS IN KENYA AS PER CBK 2016 REPORT

Bank Name
1 African Banking Corporation Ltd
2 Bank of Africa (K) Ltd
3 Bank of Baroda (K) Ltd
4 Bank of India
5 Barclays Bank of Kenya Ltd
6 CFC Stanbic Bank (K) Ltd
7 Charterhouse Bank Ltd
8 Chase Bank Ltd
9 Citibank N.A. Kenya
10 Commercial Bank of Africa Ltd
11 Consolidated Bank of Kenya Ltd
12 Co-operative Bank of Kenya Ltd
13 Credit Bank Ltd
14 Development Bank of Kenya Ltd
15 Diamond Trust Bank (K) Ltd
16 Dubai Bank Ltd
17 Ecobank Kenya Ltd
18 Equatorial Commercial Bank Ltd
19 Equity Bank Ltd
20 Family Bank Ltd
21 Fidelity Commercial Bank Ltd
22 First Community Bank Ltd
23 Giro Commercial Bank Ltd
24 Guaranty Trust Bank Ltd
25 Guardian Bank Ltd

26 Gulf African Bank Ltd
27 Habib Bank A.G. Zurich
28 Habib Bank Ltd
29 I&M Bank Ltd
30 Imperial Bank Ltd
31 Jamii Bora Bank Ltd
32 K - Rep Bank Ltd
33 Kenya Commercial Bank Ltd
34 Middle East Bank (K) Ltd
35 National Bank of Kenya Ltd
36 NIC Bank Ltd
37 Oriental Commercial Bank Ltd
38 Paramount Universal Bank Ltd
39 Prime Bank Ltd
40 Standard Chartered Bank (K) Ltd
41 Trans - National Bank Ltd
42 UBA Kenya Ltd
43 Victoria Commercial Bank Ltd
Source: Central Bank of Kenya (December, 2016)