EFFECT OF CORPORATE GOVERNANCE ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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DECLARATION

I, the undersigned, declare that this is my original work and has not been presented to any institution or university other than the University of Nairobi for examination.

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D63/80823/2015

This research project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

I dedicate this work to my wife Laura Amanda Okwiya and my daughter Miriam Robai Nyonga. I thank you very much for the love, Patience and sacrifices that you have made for me. I have been forced to be away from you most of the time and at the hour of need but with your understanding, patience and prayers, we have reached this far.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
CBK	Central Bank of Kenya
CG	Corporate Governance
FP	Financial Performance
GDP	Gross Domestic Product
GMM	Generalized Method of Movements
KDIC	Kenya Deposit Insurance Corporation
NIM	Net Interest Margin
NPL	Non-Performing Loans
NSE	Nairobi Securities Exchange
ROA	Return on Assets
VIF	Variance Inflation Factors

ABSTRACT

According to the agency theory, managers have selfish interest and will only work towards maximizing shareholder's returns if there exist efficient corporate governance structures that are likely to monitor and punish wrong doing. Numerous studies have supported that corporate governance is likely to improve business performance. Some scholars have argued that firms that handle corporate governance issues well exhibit cost advantages over those that do not. A lack of corporate governance structure denies the companies robust and harmonized decisions and is reflected in their performance. The study's intent was determining how corporate governance has on performance Kenyan banks. The study selected 42 commercial banks as the population. The independent variable was corporate governance with three measures; board independence, diversity, ownership concentration. The control variables were liquidity and capital adequacy. Financial performance was selected to be the dependent variable which was the variable to be examined. Secondary data from 2015 to 2019 was obtained annually. A descriptive cross-sectional design together with multiple regression model was utilized in the analysis. The SPSS version 23 was the software selected in analyzing the variables. Findings showed an R-square value of 0.664 which could be explained as 66.4 percent changes in financial performance the banks could be attributed to the independent variables while 33.6 percent resulted from factors outside the scope of the study. The findings also showed a strong correlation between independent variables with an efficiency of (R=0.815). ANOVA variable showed an F statistic which was substantial at 5% level with a p=0.000. The model was hence appropriate in exploring the relation between the variables. The findings also showed that board independence, liquidity and capital adequacy had positive substantial values for the study and board diversity and ownership concentration were insignificant to financial performance. The recommendation from the study was that measures should be instituted that will enhance board independence, liquidity and capital adequacy since they are significant to the performance of Kenyan banks.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

How a firm's governance is structured, has a direct effect on its capacity to deliver and this is likely to have a bearing on the performance of the organization. An effective corporate governance structure affects the firm's long-term and short-term organizational goals. Numerous studies have supported that corporate governance is likely to improve business performance and thus shareholder value (Korent, Dundek & Calopa, 2014). Some scholars have argued that firms that handle corporate governance issues well exhibit cost advantages over those that do not. A lack of corporate governance structure denies the companies robust and harmonized decisions and is reflected in their financial performance (Okiro, Aduda & Omoro, 2015).

This study drew support from agency theory, stakeholder theory and stewardship theory that have attempted to elaborate how CG relates to FP. Berle and Means (1934) and Jensen and Meckling (1976) looked into the distinction between ownership and control and the monitoring activities of the board. The board solves the agency problems between executive and owners by replacing and compensating managers that fail to serve the interest of the shareholders which is value creation. Freeman (1999) draws a distinction between agency theory and other stakeholder theorists in that the agency theory only looks at the role of managers in serving stakeholder‘s interests while the foregoing explores a network of relationships with the suppliers, business partners and employees. Directors and executives manage their careers so as to portray their stewardship to their organizations (Fama, 1980). This is based on the assumption that the board activities of the management correspond with the interests of the shareholder meeting (Donaldson & Davis, 1991).

The study will focus on Kenyan commercial banks, and this choice arises from the fact that the commercial banking sector is one of the sectors with diverse CG structures (Kusa & Ongore, 2013). In addition, the economy of the country depends on the success of financial institutions (Waithanji, 2016). It is, therefore, thought that since it is necessary for this industry to remain successful, a study has to be conducted to assist the managers in this industry to manage the sector. Consequently, the study will contribute immensely to the improvement of financial performance of this important sector.

1.1.1 Corporate Governance

OECD (2015) defined corporate governance as the relationship between the management of a company, the shareholders, the board as well as the minority stakeholders. Additionally, a company's corporate governance provides a company with a structure that allows for the proper structuring and attainment of its objectives. Another definition provided by Adams and Mehran (2003) is that corporate governance is the mechanism that gives chance to all company's stakeholders to monitors the operations inside the company both of the management and all other insiders which allows them to protect individual interests. Further, Morin and Jarrel (2001) describe corporate governance as the framework that safeguards as well as monitors concerned actors in the market. The said actors include shareholders, managers, suppliers' staff, the board of administration and clients depending on the type of organization in question.

Good corporate governance practices are the ones where the habitat in which the business is done is candid and reasonable, procedures are straight forward and transparent, and organizations held in charge of their actions. On the other hand,

organizations that have unsteady corporate governance habits lead to wastage, mismanagement and very high levels of corruptions. Corporate governance practices ensure that an organization balances power sharing among its shareholder, the management and the directors which ensure that the shareholder value is enhanced and that other shareholders' interests are protected (Nabil & Ziad, 2014). Effective corporate governance structures ensures reliable and accountable entity and public financial information quality is improved and the efficiency and integrity in the capital market enhanced.

Otieno (2012) posits that corporate governance has been operationalized differently by scholars. Mamatzakis and Bermpei (2015) likewise observed that the current body of knowledge is pointed at different parts of administration and corporate governance that incorporates top managerial staff (directors), remuneration of bank executives, perks and stipends of the senior managers, powers of the CEO structure, how complicated the operations are. According to Olick (2015), the key aspects of administration and corporate governance include board and committee structure, board of directors composition, the guiding processes and the procedures, board independence, aspects of auditing, and the way the corporate entity disseminates and discloses its information to the stakeholder. According to Wasike (2012), corporate governance encompasses; the corporation's board of directors' characteristics, the ownership structure of the corporation, financial transparency and information disclosure.

1.1.2 Financial Performance

Almajali, Alamro and Al-Soub (2012) define FP as a firm's ability to achieve the range of set financial goals such as profitability. FP is a degree of the extent to which a firm's financial benchmarks has been achieved or surpassed. It shows the extent at which

financial objectives are being accomplished. As outlined by Baba and Nasieku (2016) FP show how a company utilizes assets in the generation of revenues and thus it gives direction to the stakeholder in their decision making. Nzuve (2016) asserts that the health of the bank industry largely depends on their FP which is used to indicate the strengths and weaknesses of individual banks. Moreover, the government and regulatory agencies are interested on how banks perform for the regulation purposes.

The focus of FP is majorly on items that directly alter the statements of finance or the firm's reports (Omondi & Muturi, 2013). The firm's performance is the main external parties' tool of appraisal (Bonn, 2000). Hence this explains why firm's performance is used as the gauge. The attainment level of the objectives of the firm describes its performance. The results obtained from achieving objectives of a firm both internal and external, is the FP (Lin, 2008). Several names are given to performance, including growth, competitiveness and survival (Nyamita, 2014).

Measurement of FP can be done using a number of ratios, for instance, Net Interest Margin (NIM) and Return on Assets (ROA). ROA indicates the capability of the bank to make use of the available assets to make profits (Milinović, 2014). ROA is given by dividing operating profit by total asset ratio which is used for calculating earnings from all company's financial resources. On the other hand, NIM measures the spread of the paid out interest to the lenders of banks, for instance, liability accounts, and the interest income that the banks generates in relation to the value of their assets. Dividing the net interest income by total earnings assets expresses the NIM variable (Crook, 2008). Other measures include Return on Equity (ROE) and Return on Sales (ROS) as used by Ngatia (2012) and Tobin Q as used by Wang and Clift (2009).

1.1.3 Corporate Governance and Financial Performance

According to the agency theory, managers have selfish interest and will only work towards maximizing shareholder's returns if there exists efficient corporate governance structures that are likely to monitor and punish wrong doing (Jensen & Meckling, 1976). On the other hand, the stewardship theory suggests that the governance issues that arise in organizations do not necessary emanate from executive but rather from the decisions of other players such as regulators and investors in their pursuit of self-fulfilling motives (Donaldson & Davis, 1991).

Shleifer and Vishny (1997) found out, implementation of a good corporate governance structure helps companies to access more funding and increase returns which results in an improvement in their earnings. Good corporate governance increases the willingness of investors to invest in such companies. In order to compete effectively in a dynamic world, firms must be continually innovative and adapt good corporate governance practices and frameworks; in order to grasp new opportunities and meet new demand (OECD, 2004).

Miring'u and Muoria (2011) concluded that a direct association exists between size, composition and ROE among all state corporations that were sampled. Consequently, for a state agencies' performance to be directly associated with good CG practices, actions must be set to ensure that the executive act to the firm's best interest. However, shareholders and regulators should not make an assumption that the executive continuously serving its self-interest motives, they must on the other hand as well see the board as a resource to the company.

1.1.4 Commercial Banks in Kenya

The CBK (2018) defines a bank as a business which carries out, or intends to conduct banking activities in Kenya. Commercial banking business involves accepting deposits, giving credit, money remittances and any other financial services. The industry performs one of the principal roles in the financial sector with a lot of emphasizes on mobilizing of savings and credit provision in the economy. According to the Bank Supervision yearly Report (2018), the banking industry comprises of the CBK as the legislative authority. The industry also has 1 mortgage finance, 42 commercial banks and 13 microfinance banks. Among the 42 commercial banks in the country 30 have local ownership while 12 have foreign ownership. 11 of the 42 are listed at the NSE.

A report on listed Kenyan commercial banks published by the research team at Cytonn Investments (2018) argue that Kenya is overbanked with a comparatively high proportion of banks to total populace, with 42 commercial banks offering services to a population of 44 million people, compared to 22 banks in Nigeria with a 180 million customer base and 19 South African banks with a 55 million customer base. Over the last few years, there have been cases of banks collapsing such as the case of Chase bank, poor performance such as National bank and increased mergers as banks strive to survive in the industry. Dubai Banks and Imperial Bank have also been subjected to liquidation with the Kenya Deposit Insurance Corporation (KDIC). This is a clear indication for the necessity of investigating on whether CG has an influence on FP and make policy recommendations that would safeguard banks' financial risk and the stakeholders' funds.

The CBK (2018) has given possible reasons for the collapse of a number of Kenyan banking institutions. Some of these are; instances of insider lending and conflicts of several stakeholders 'interests, weak regulations and supervisory systems, poor structures for managing risks, weak internal controls and governance. This forced the CBK to institute stricter and detailed measures aiming to mitigate such negative occurrences thereby making its major roles more firm.

1.2 Research Problem

Agency theory indicates that shareholder objectives and managers' objectives differ and contradict relative to their personal interests giving rise to governance structures meant to reduce the spill over. Lamport et al. (2011) stated that, prior studies argue that good governance structure impacts positively on the performance. It is essential for organizations to grasp good governance practices as these aids in avoiding fraud and enhances the image of the organization. It additionally becomes vital for companies to improve firm performance, enhance the investment environment as well as to encourage development (Braga & Shastri, 2011).

Following the review of CBK regulation on banks in 2013, a number of major banks were placed under liquidation such as Dubai bank, and under receivership such as Chase bank and Imperial bank in 2015 and 2016 resulting from deficiencies in capital, fraudulent and unsafe financial conditions respectively. Over the same period, a Sh.1.2 billion loss was recorded by National Bank at the close of the 2015 fiscal year which almost equaled their profit of Sh.1.3 billion at the close of the 2014 fiscal year (National Bank, 2016). This depicted clearly that, some Kenya's banks continue to experience problem in financial performance notwithstanding the review of the regulations of CBK in the year 2013 meant to address the performance improvement issue and commercial

banks' financial stability (CBK, 2018). However, the other banks like; KCB, Equity and Co-operative Bank have demonstrated improved performance following the regulation review by CBK (CBK, 2018). To understand why some show positive while others negative performance, the purpose is to establish whether CG influence FP of commercial banks listed at the NSE.

There are several studies conducted on CG and firms FP in developed economies but their findings have been inconsistent. many have concluded that good corporate governance results in better financial performance of the firm (Cohen & Ferrell, 2004), yet other studies such as Lamport et al. (2010) have found no statistical difference in the performance of firms with poor corporate governance practice and those with excellent quality of governance practices. Hence, no significant relationship exists between the variables. Piesses (2005) also obtained conflicting results on his empirical research on CG and firm performance. These varied findings therefore imply that the relationship between CG and performance may not be consistent across firm specific context or for all types of corporate governance structures.

Locally, Mang'unyi (2011) in his study investigated how CG affects performance of banks in Kenya. Findings showed an insignificant relationship between CG and FP. Muigai (2014) focused on CG and FP of commercial banks in Kenya and conclude that a solid inverse correlation exists between composition of board and the banks performance and no direct substantial relation exists between gender diversity and the ROA, while an inverse correlation exists between the board size and ROA. Olick (2015) in another study explored the impact that governance has on the ROA of microfinance firms. The study established that size has significant positive effect on ratio ROA while gender diversity had a substantial negative relation to performance. The lack of

consensus among previous researchers was reason enough to conduct further study. This study therefore intended to answer; what is the effect of CG on FP of Kenyan banks?

1.3 Objective of the Study

The objective was determining the effect of corporate governance on financial performance of Kenyan banks.

1.4 Value of the Study

Findings are critical to future researchers, as a reference point. Scholars will also be able to utilize it in finding study gaps on similar topics and in the review of empirical literature to explore additional research areas.

The stakeholders of the banking industry will find this research very useful as this study will generate vital information in management of the industry. These stakeholders include investors, managers in the sector and the legislative authorities in the sector. Bank managment will derive the most out of this since it illuminates ways in which they can utilize CG as a channel to improve FP in their banks.

The study will benefit the government and other policy makers. Inferences made will be useful in policy and guideline formulation that will aid banks and other institutions in the sector to adopt CG thereby enhancing their FP and improve sector performance.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

A review of theories which on which this study is based will be presented in this section. Additionally, prior research on this subject and related areas will be presented. Other discussions in this chapter will cover the determinants of FP, framework showing how the variables under study relate and summary of literature studied.

2.2 Theoretical Framework

This chapter reviews Jensen and Meckling (1976) theorem on agency, the Donaldson and Davis (1989) stewardship theory and Freeman's (1984) stakeholder theorem.

2.2.1 Agency Theory

Jensen and Meckling (1976) point that there exists a relation between the principals who are represented by the shareholders and agents whose task is managing and executing operations of the entity. Jensen and Meckling (1976) assumptions of the agency theory propose that there should be a separation of ownership and management but it may cause agency problems which is the problem being faced by many modern companies.

The principal, who is responsible for transferring some decision-making authority to the agent, incurs costs of agency which arises from the divergent interests of the shareholders' and of company managers. They stated that agency costs is the sum of bonding and monitoring cost, plus residual loss. In addition to the bonding costs incurred, a residual loss is expected since the interests of stakeholders involved are not fully aligned. An alignment of interests takes place when objectives of agents and of the whole entity in an organization are in harmony (Jensen & Meckling, 1976).

Incentives like stock options, bonuses, and profit attached pay can be utilized as the solution for the alignment of interests of the agent and the principal's since they have a direct relation to how useful management decisions are to the shareholder decisions. The theory calls for self-interest by all the staff. It requires the agents to perform duties whilst being mindful of principals' requirements. Agents are directed by policies formulated by principals, which entail the maximization of the shareholders' value.

2.2.2 Stakeholder Theory

Stakeholders' theory, by Freeman (1984) was to be used as a management tool. It has however since found new use as a theory of the firm that has high interpretive potential. The theory emulates a framework covering ethics in business, and organization of management that seeks to illuminate the moral and ethical principles in the management of a business or any other organizations. The theory has a major focus on equilibrium of the interests of the stakeholders as the core consideration of corporate policy. The theory has a large contribution to risk management coming up as an addition to implicit contracts theory as well as other forms of agreements, like financing and sales (Moses, 2019).

Stakeholder theory assumes that managers well regulate the various wants for diverse classifications of stakeholders, and fairly distributing the assets and outcomes (Othman et al., 2014). In this study, the stakeholder theory asserts that the managers of corporations must be aware of the interests in an organization as well as its stakeholders, and invest the maximum activities in a bid to be compliant to the acceptable regulations as well as solutions, and article of association and finally the firm's internal laws.

2.2.3 Stewardship Theory

It emanated from the scholarly works of Donaldson and Davis (1989) and suggests that these agents are working for the benefit of the shareholders as well as that of the organization, which is contrary to the theorem on agency that portrays agents to be self-interested as well as being individualistic (Bouaziz & Triki, 2012). It proposes that; the steward shall always perform their obligations with the interest of the owners in mind and thus eliminates the role of the board (Moses, 2019).

It presumes assumes that; the agent is capable of combining all the interests of the different stakeholders and hence performing his responsibilities diligently to safeguard their assets and his decisions are to bring increased revenue for the owner in the long duration (Siswanto & Fuad, 2017). It goes ahead to acknowledge diverse non-financial benefits which encourage agents while influencing their decision making process. They are inclusive of; the requirement of being recognized and realization of a goal, approval for a good output and its extremely good operations, recognizing the authority as well as the work code of conduct (Amer, 2016). In this study, the stewardship theory suggests that; agents possess the same interests as the owners of the company, and as such, they have their careers being joined to the realization of the company's aims, while their status are incorporated in its output as well as the benefits to the shareholders.

2.3 Determinants of Financial Performance

The determination of an entity's FP can be ascertained by a several elements; these can be within or outside of an organization. Internal factors are different for every bank and can be manipulated by the bank. These consist of CG, capital size, quality of management, efficiency of management, deposit liabilities, credit portfolio, policy of

interest rate, ownership and bank size. External factors affecting the a bank's performance are mainly gross domestic product, Inflation, stability of macroeconomic policy, Political instability and the rate of Interest (Athanasoglou, et al, 2005).

2.3.1 Corporate Governance

Jensen and Meckling (1976) state that managers have selfish interest and will only work towards maximizing shareholder's returns if there exists efficient corporate governance structures that are likely to monitor and punish wrong doing. On the other hand, the stewardship theory suggests that the governance issues that arise in organizations do not necessary emanate from executive but rather from the decisions of other players such as regulators and investors in their pursuit of self-fulfilling motives (Donaldson & Davis, 1991).

Shleifer and Vishny (1997) found out, implementation of a good corporate governance structure helps companies have access to funds and increased returns which improves their earnings. Good corporate governance increases the willingness of investors to invest in such companies. In order to compete effectively in a dynamic world, firms must be continually innovative and adapt good corporate governance practices and frameworks; in order to grasp new opportunities and meet new demand (OECD, 2004).

2.3.2 Bank Size

This variable is important since it determines the degree by which legal and financial factors influence a firm. The variable is also closely connected to capital adequacy since large banks have the ability to raise cheap capital thereby generating massive profits. It also shows a positive correlation with the ROA indicating that it is possible for large banks to achieve economies of scales that will lower costs and improve banks' FP (Amato & Burson, 2007). Magweva and Marime (2016) associate bank size with

capital rations stating that the two have a positive relation which suggests that as size size increases profitability improves.

According to Amato and Burson (2007), the size of an organization is primarily determined by the amount of assets it owns. An argument can be made that the larger the assets a firm owns, the more its ability to undertake more projects with greater returns in comparison with small firms with a smaller amount of assets. Additionally, the bigger the firm, the larger the amount of collateral that can be pledged in a move to access credit facilities in comparison to smaller competitors (Njoroge, 2014). Lee (2009) concluded that the amount of assets in control of a firm has an influence on the level of profitability of the said firm from one year to the next.

2.3.3 Bank Liquidity

This is the capacity of banks to accomplish their monetary obligations when they fall due. Dang (2011) hold a view that adequate of liquidity in banks is positively linked with their success. Liquidity risk control is an obligatory factor of the general risk mitigation charter for all financial institutions (Majid, 2003). An efficient bank ought to adhere to a well-documented framework for alleviation of liquidity risk and shun losses (Guglielmo, 2008). Gatev and Strahan (2003) suggest that customer deposits offer an innate cushion against liquidity risk in commercial banks. The banking sector is interconnected meaning cash flows in one bank harmonize other banks whereby the inflows hedge other banks from outflows emanating from customer withdrawals and loan advancements. This assertion underpins the need for risk management in commercial banks since, banks use deposits to hedge against the liquidity risk.

There are contradictory views on whether liquidity influences financial performance of commercial banks. Shen et al. (2010) note that liquidity risk has a positive correlation to net interest margin which implies that banks with substantial liquidity levels earn higher interest revenue. On the flipside, Molyneux and Thornton (1992) documented that an inverse relation exists amid bank success and liquidity.

2.3.4 Management Efficiency

This is a crucial internal factor measuring the quality of the firm's financial performance. It is the management's ability to utilize resources efficiently in order to maximize the revenue derived by the firm. Lowering of the operational costs is another way in which efficiency is qualitatively measured. These are examples of ways in which the quality of management efficiency is measured (Athanasoglou et al., 2005).

Despite being a measurement of performance, it is also a significant determinant of financial performance ascertained through the quality of the staff, how efficient and effective the internal controls are, overall organizational discipline and the effectiveness management systems. This quality has a direct influence on operating expenses influencing the bottom line of a company therefore it substantially impacts the banks' performance (Kusa & Ongore, 2013).

2.3.5 Capital Adequacy

Athanasoglou et al., (2005), defined capital as a substantial variable that determines bank FP. Capital refers to contribution by the owner that supports activities of the bank whilst being an insurance against negative events. In imperfect capital markets, banks that are sufficiently capitalized should lower their borrowings to support specific types of assets, thereby resulting to low costs of bankruptcy and low costs of funding.

A sufficiently capitalized bank is an indicator to the market that an above average performance is anticipated. Athanasoglou et al., (2005) found that capital increases have a positive impact on bank profitability, which is an indicator of the soundness of the financial conditions of Greek banks. Additionlly, Berger et al., (1987) found a positive causality in both direction between capital increases and company profitability.

2.4 Empirical Review

Local and international studies have been done to support the relationship between CG and FP, with varying results.

2.4.1 Global Studies

Ujunwa (2012) studied how CG impacts the performance Nigerian firms from a sample of 122 listed firms from 1991 to 2008. The results from the study showed that board size, CEO duality and the diversity of was had negative relations had a direct correlation to firm performance. Board duality was also linked to positive board performance. The focus of this study was on the key elements surrounding corporate governance and how they late to firm performance but did not consider non-listed firms and the varying observations made across various industries.

Danoshana and Ravivathani (2013) studied the effect that CG has on performance of quoted firms in Sri Lanka. They utilized the ratio of net income to equity, net income ratio to assets in defining and measuring the firm performance, size and frequency of meetings, and audit committee in measuring corporate governance. The population considered included a total of thirty-three quoted firms; a cluster sampling was used in selecting a sample of twenty-five firms. Secondary data from audited financial reports for the firms selected was obtained for 2008 to 2012. By using correlation, regression,

and descriptive statistics for data analysis, the findings showed that board size and audit committee directly impact performance meetings frquency has an inverse impact.

Marashdeh (2014) also studied how CG impacts performance of industrial and services firms in Jordan from 2000 to 2010 using the agency theory to perform the study. The study population included firms quoted at the Amman Stock Exchange; from which 115 firms were sampled using cluster sampling. Secondary data from annual reports and multiple regression analyzed the data. CEO duality, managerial and foreign ownership were found to directly impact performance, while ownership and non-executive directors had an inverse impact on firm performance.

Susoiu (2014) focused on CG and firms' financial performance. The study sampled 23 firms recorded in Germanian Stock Index DAX30. Data was retrieved from the annual audited reports between the 2009-2013 timeframe. Data analysis was completed using multiple regression analysis, and the study found that size affected performance negatively.

Bermpei & Mamatzakis (2015) in an exploration assessed the effect of the CG on the quoted investment banking enterprise performances in the USA between the 2000 to 2012 time frame, they utilized auxiliary data from the yearly reports and regulatory filings of the 23 investment banks in the sample. Descriptive statistics was used with values being regressed in analysis. The findings showed that size negatively impacted performance; negative relationship between performance and board involvement; executive power had a direct influence on performance while board members ownership stake had an indirect influence on performance.

2.4.2 Local Studies

Nyarige (2012) also tried to examine how the Kenyan commercial bank's corporate governance structure influences their financial performance. The study mainly concentrated on the commercial banks quoted at the NSE. The independent variables were board meetings, executive compensation and size while the explained variable was the performance. The finding indicated that size had an inverse impact on performance while board independence had a direct impact. However, the relationship between CG and Tobin's Q was ambiguous/vague.

Muigai (2014) additionally studied the relation between selected dynamics of corporate board (executive board composition and non-executive members, gender diversity and board size) and firm ROA. The census study followed a descriptive design with a population of 43 licensed Kenyan banks obtaining secondary data from 2009 to 2013. A multiple regression analysis and descriptive statistics analyzed the study. From the findings, a solid inverse relation of composition of board and performance was found and an indirect relation between gender diversity and the ROA, and an inverse relation between the board size and ROA.

Olick (2015) studied how firm governance and administration practices (proportion of non-executive directors, gender diversity and board size) impact the ROA of firms in the microfinance industry in Kenya. A census approach was found to be useful for the study with data being collected from secondary sources of 9 licensed MFI's reports from 2010 to 2014. A multiple regression model was found appropriate for the study and in analyzing variances to determine its significance. The study established that size has a substantial positive impact on ROA, the number of non-executive directors is

positive but insignificant; gender diversity showed a substantial negative impact on performance.

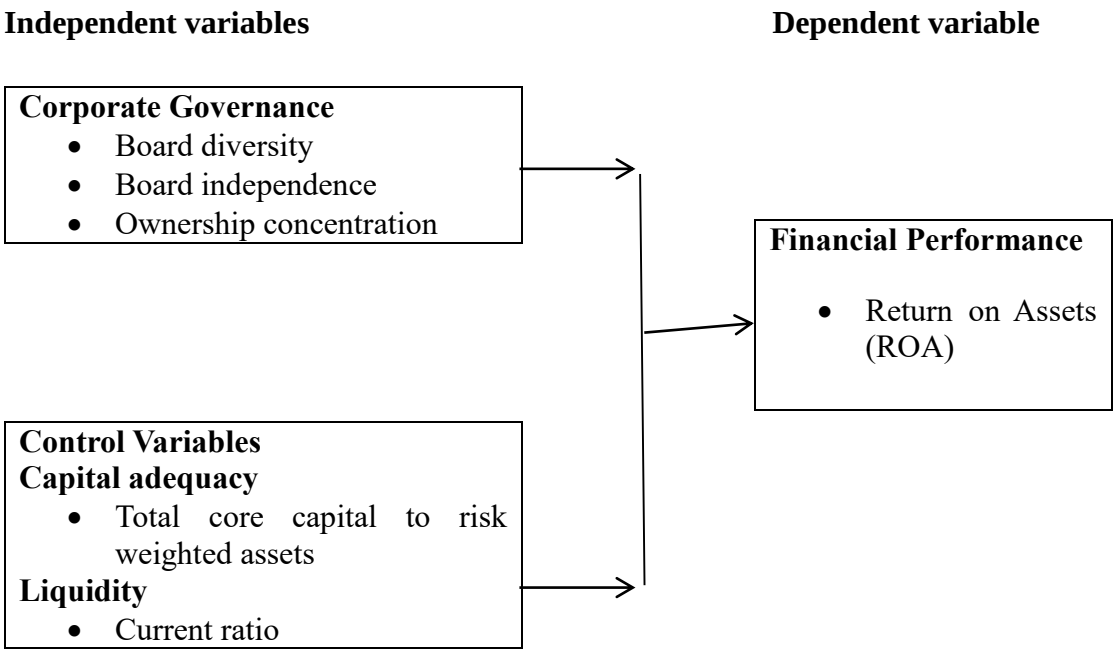
A study by Karanja (2017) who studied how CG impacts NSE listed commercial banks' performance was conducted from 2006 to 2013 using a panel multiple regression in data analysis. The findings showed that a positive relation existed between female board member, CEO duality and performance. However, since the study used a wider scope in terms of variables that included non-financial measures, the selected indicators of financial performance were not employed in the analytical model.

Koech (2018) studied the determinants of effective CG among state corporations found in Kenya. The study targeted managers from the 187 corporations and regression method analysed the data. Findings showed that corporate governance had a positive relation to board characteristics among the corporations. This study is reliable however it needs to be replicated to specific sector contexts such as public university, to take care of unique sectorial dynamics.

2.5 Conceptual Framework

The model below shows the predicted association existing among variables. The predictor variables were CG as given by board diversity, board independence and ownership concentration. The control variables were capital adequacy as given by the ratio of core capital to risk weighted assets and liquidity as measured liquid assets divided by total assets. FP was the response variable that was the core of the study given by return on assets.

Figure 2.1: The Conceptual Model



Source: Author (2020)

2.6 Summary of the Literature Review

Several frameworks have described the anticipated theoretical relation existing between CG and FP of commercial banks. The theories covered are; agency, stakeholder and stewardship theories. Primary determinants of FP have also been discussed in this section. Both local and international studies have been done on CG and FP. The findings related to them have been discussed in this section. The minimal consensus among previous researchers was reason enough to conduct further study. The current study leveraged on this gap.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

To ascertain how the FP of banks in Kenya is affected by CG, a methodology was essential in outlining how the research was carried out. The section is composed of four sections; the design, data collection, diagnostic tests and analysis of the data.

3.2 Research Design

The research utilized a descriptive cross-sectional design in determining how CG and FP of commercial banks relate. It was appropriate because the researcher seeks to describe the nature of affairs as they are (Khan, 2008). It was also selected because the nature of the phenomenon being studied and how they relate was of major interest to the researcher. Additionally, a descriptive research will accurately and reliably represent the variables which aided in providing a response to the research queries (Cooper & Schindler, 2008).

3.3 Population

This is the totality of observations of interest from a collection such as persons or events as specified by a research investigator (Burns & Burns, 2008). It comprised of the 42 Kenyan banks as at 31st December 2019. Since the population was relatively small, a census was done for the study (see appendix I).

3.4 Data Collection

This study relied on secondary data from the published annual financial reports published by banks listed at the NSE from January 2015 and December 2019 and recorded. Reports were from the CBK web page and in annual reports. This resulted in annual information concerning the predictor variables and the response variable.

3.5 Diagnostic Tests

To determine the viability of the study model, the researcher carried out several diagnostic tests, which included normality test, stationarity test, test for multicolinearity, test for homogeneity of variances and the autocorrelation test. Normality tests the presumption that the residual of the response variable have a normal distribution around the mean. The test for normality was done by the Shapiro-wilk test or Kolmogorov-Smirnov test. In the case where one of the variables is not normally distributed it was transformed and standardized using the logarithmic transformation method. Stationarity test was used to assess whether statistical properties like mean, variance and autocorrelation structure changes overtime. Stationarity was given by augmented Dickey Fuller test. In case, the data fails the assumption of stationarity, the study used robust standard errors in the model (Khan, 2008).

Autocorrelation measures how similar a certain time series is in comparison to a lagged value of the same time series in between successive intervals of time. This was measured by the Durbin-Watson statistic and incase the assumption is violated the study employed robust standard errors in the model. Multicollinearity occurs when an exact or near exact relation that is linear is observed between two or several predictor variables. Variance Inflation Factors (VIF) and the levels of tolerance were used. Any multicolinear variable was dropped from the study and a new measure selected and substituted with the variable which exhibits co-linearity. Heteroskedasticity tests if the variance of the errors from a regression is reliant on the independent variables. The study assessed for heteroskedasticity using the Levene test and incase, the data failed the assumption of homogeneity of variances the study used robust standard errors in the model (Burns & Burns, 2008).

3.6 Data Analysis

The study used SPSS version 22 in performing data analysis. Findings were then quantitatively presented by way of graphs and tables. Descriptive statistics summarized and explained the study variables that were observed among the banks. The findings were then presented using percentages, frequencies, measures of central tendencies and dispersion as displayed on tables. Inferential statistics included Pearson correlation, multiple regressions, ANOVA and coefficient of determination.

3.6.1 Analytical Model

The regression model below was used:

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

Where: Y = Financial performance given by return on assets on an annual basis

β_0 =y intercept of equation.

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ =are the slope of the regression

X_1 = Board diversity as measured by percentage of the female directors in proportion to the total number of directors

X_2 = Board independence as measured by the ratio of non-executive directors to total directors

X_3 = Ownership concentration as measured by proportion of block ownership in an year

X_4 = Capital adequacy as measured by the ratio of total core capital to risk weighted assets

X_5 = Liquidity as measured by liquid assets to total assets ratio

ε =error term

3.6.2 Tests of Significance

Parametric tests were carried out by the researcher to establish how significant the overall model and the parameters are. The F-test determined the relevance of the entire model as shown by the ANOVA analysis while a t-test determined how statistical significant the individual variables were.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND FINDINGS

4.1 Introduction

This section presents the analysis, findings and interpretation of the data obtained from CBK and individual banks' reports. The research sought to establish the impact of CG on the financial performance Kenyan banks. The independent variables for the study were the measures of corporate governance while financial performance was the dependent variable given by ratio of net income to total assets. Regression analysis established the effect between the variables of study in relation to the study's objectives. ANOVA tested the goodness of fit of the analytical model. The findings have been represented in tables.

4.2 Response Rate

This study aimed at collecting data from the 42 commercial banks operating in Kenya as at 31st December 2019 for 5 years (2015 to 2019). Data was obtained from 37 out of the 42 banks giving a response rate of 88.1% which was considered adequate. Cooper and Schindler (2008) states that a response of 70% and above is considered good. Therefore, the study had 185 data points.

4.3 Descriptive Analysis

The descriptive statistics gives a representation of the mean, minimum and maximum values of variables presented along with standard deviations. Table 4.1 below shows the statistics of the variables used. An output of all the variables was extracted using SPSS for five years (2015 to 2019) on an annual basis.

Table 4.1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Financial performance	185	.0015	.3650	.112517	.0866131
Board independence	185	.571	1.000	.88660	.079082
Board diversity	185	.17143	.60000	.4866159	.07901386
Board meetings	185	4.000	39.000	7.37674	5.904411
Board size	185	5.000	18.000	9.67907	2.825829
Liquidity	185	.0074	3.2957	1.095325	.5507502
Firm size	185	6.0724	8.7303	7.772521	.5761002
Valid N (listwise)	185				

Source: Research Findings (2020)

4.4 Diagnostic Tests

The data collected was subjected to diagnostic tests. The study presumed a 95% confidence interval or 5% level of significance so as to make variable deductions on the data adopted. Diagnostic tests were useful for ascertaining the falsity or truth of the data. Therefore, the nearer to 100% the confidence interval, the more accurate the data used is presumed to be. In this case, the tests conducted were Multicollinearity test, normality test, and autocorrelation and Heteroskedasticity tests.

4.4.1 Multicollinearity Test

Multicollinearity can be defined as a statistical state where two or more predictors in a multiple regression model have a high correlation. It is an unwanted situation where there is a strong correlation between independent variables. A combination of variables is said to exhibit high Multicollinearity in case there is one or more exact linear correlation among the study variables.

Table 4.2: Multicollinearity Test

	Collinearity Statistics	
Variable	**Tolerance**	**VIF**
Board diversity	0.366	2.732
Board independence	0.398	2.513
Ownership concentration	0.388	2.577
Capital adequacy	0.376	2.659
Liquidity	0.372	2.688

Source: Research Findings (2020)

VIF value and Tolerance of the variable were utilized where the values below 10 for VIF and values more than 0.2 for Tolerance imply no Multicollinearity. From the results, all the variables had a VIF values <10 and tolerance values >0.2 as illustrated in table 4.2 suggesting that no Multicollinearity.

4.4.2 Normality Test

Shapiro-wilk test and Kolmogorov-Smirnov test was utilized in testing normality. The level of significance in the study was 5%. The output of the test is depicted in Table 4.3. The null hypothesis is that the data has normal distribution. In case the Shapiro-wilk test and Kolmogorov-Smirnov tests contradict, the later test is picked over the former because it is more statistically sound. Since the p value in both tests of all the variables is greater than the α (0.05), then the null hypothesis is not rejected. Hence the data series of all the variables is normally distributed.

Table 4.3: Normality Test

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Board diversity	.173	185	.264	.918	185	.822
Board independence	.180	185	.264	.894	185	.790
Ownership concentration	.176	185	.264	.892	185	.784
Capital adequacy	.181	185	.264	.896	185	.792
Liquidity	.188	185	.264	.892	185	.788

a. Lilliefors Significance Correction

Source: Research Findings (2020)

4.4.3 Autocorrelation Test

To test for autocorrelation, Durbin-Watson statistic was applied which gave an output of 2.228 as displayed in Table 4.4. The Durbin-Watson statistic is between 0 and 4. A value of 2 is an indicator of the absence of autocorrelation in the sample. Values from 0 to less than 2 show a positive autocorrelation and with those between 2 to 4 showing negative autocorrelation. The standard criteria is that test statistic values between1.5 to 2.5 are relatively normal. Values beyond this range would raise concerns. Field (2009) however, stated that values lower than 1 or greater than 3 are very serious. Therefore, the data used in this panel is not serially auto correlated since it meets this threshold.

Table 4.4: Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.815[a]	.664	.655	22.5487	2.228

a. Predictors: (Constant), Liquidity, Board diversity, Ownership concentration, Capital adequacy, Board independence

b. Dependent Variable: ROA

Source: Research Findings (2020)

4.4.4 Heteroskedasticity Test

Heteroskedasticity was tested to establish if the error terms are have a correlation across the data observations. The error terms derived from the regression model should portray

constant variance called Homoscedastic. Thus, for ensuring if the residuals met these criteria, the Breusch-Pagan test was employed for Heteroskedasticity whereby the null hypothesis stated that residuals are Homoscedastic. There is constant variance if p-value is >0.05 (Breusch & Pagan, 1979). Hence, the research failed to reject the null hypothesis at a critical p value of 0.05 because value attained was 0.3000. Therefore the data was not affected by heteroskedasticity as revealed in Table 4.5.

Table 4.5: Heteroskedasticity Test

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of ROA
chi2(1) = 48.54
Prob > chi2 = 0.3000

Source: Research Findings (2020)

4.5 Correlation Analysis

Correlation analysis establishes whether there exists an association between two variables which is between a strong negative and perfect positive correlation. Pearson correlation was used in this study for this purpose. The study employed a confidence interval of 95%, being the most common level as used in social sciences. A two tailed test was utilized. Table 4.6 shows the correlation analysis outcome.

The study found an existence of a positive substantial correlation (r = .341, p = .000) between board diversity and financial performance. Further a strong positive substantial correlation between board independence and commercial banks' performance as demonstrated by (r = .773, p = .000) existed. Only ownership concentration had a positive but insignificant link with financial performance given by (r = .095, p = .200).

The two selected control variables (capital adequacy and liquidity) exhibited positive substantial correlations with bank performance as shown by p values less than 0.05. The study further found that although there was an association between the independent variables, the association was not strong enough to cause Multicollinearity. Multicollinearity is a property which shows there exists a perfect relationship between the predictor variables. In the presence of an exact relation between the predictor variables, it is difficult to reliably estimate their individual coefficients. Thus, incorrect conclusions on the relation between outcome variable and predictor variables will be made.

Table 4.6: Correlation Analysis

		ROA	Board diversity	Board independence	Ownership concentration	Capital adequacy	Liquidity
ROA	Pearson Correlation	1					
	Sig. (2-tailed)						
Board diversity	Pearson Correlation	.341**	1				
	Sig. (2-tailed)	.000					
Board independence	Pearson Correlation	.773**	.275**	1			
	Sig. (2-tailed)	.000	.000				
Ownership concentration	Pearson Correlation	.095	.054	.158*	1		
	Sig. (2-tailed)	.200	.462	.000			
Capital adequacy	Pearson Correlation	.292**	.040	.214*	.001	1	
	Sig. (2-tailed)	.000	.588	.000	.991		
Liquidity	Pearson Correlation	.266**	.112	.121*	.164*	.142*	1
	Sig. (2-tailed)	.000	.128	.000	.000	.000	

**. Correlation is significant at the 0.01 level (2-tailed).
b. Listwise N=185

Source: Research Findings (2020)

4.6 Regression Analysis

This was performed between financial performance against the five variables selected for this study. The regression analysis was performed a 5% significance level. The F critical value was compared against the F calculated.

Table 4.7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.815[a]	.664	.655	22.5487	2.228

a. Predictors: (Constant), Liquidity, Board diversity, Ownership concentration, Capital adequacy, Board independence
b. Dependent Variable: ROA

Source: Research Findings (2020)

From the output in table 4.7, the R^2 value was 0.664, implying that 66.4% of the deviations in banks' financial performance results from variations in board diversity, board independence, ownership concentration, liquidity and capital adequacy. Other variables not incorporated in the model explain 33.6% of the variations in commercial banks' financial performance. The correlation coefficient (R) value of 0.815 shows the existence of a strong relation between independent variables included in the study and financial performance.

Table 4.8 provides the outcomes of the ANOVA, F-test was carried out to establish how significant the model was. The formulae for calculating the critical value for the F test is;

$$\mathbf{F} = (SSE_1 - SSE_2 / m) / SSE_2 / n\text{-}k$$

Where;

SSE = Residual sum of squares,

m = Number of restrictions

k = Number of independent variables.

A critical value of 2.37 was obtained from the F-Test tables. The F statistic indicated in the study findings is greater than the critical value, thus the overall model is significant to predict performance.

Table 4.8: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	180034.917	5	36006.983	70.818	.000[b]
	Residual	91011.669	179	508.445		
	Total	271046.585	184			

a. Dependent Variable: ROA

b. Predictors: (Constant), Liquidity, Board diversity, Ownership concentration, Capital adequacy, Board independence

Source: Research findings (2020)

The research used t-test in determining how significant each individual variable employed in this research is in predicting performance of commercial banks in Kenya. The p-value was utilized to indicate significance of the relation between the response and the predictor variables. At 95% confidence, a < 0.05 p value was interpreted as an index of statistical significance of the concepts. Therefore, a p-value > 0.05 depicts a statistically weak association between the response and the predictor variables. The outcomes are demonstrated in table 4.9.

Table 4.9: Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-402.621	23.497		-17.135	.000
	Board diversity	.018	.045	.031	.393	.695
	Board independence	1.453	.219	.517	6.639	.000
	Ownership concentration	.001	.002	.063	.847	.398
	Capital adequacy	3.063	1.109	.173	2.762	.006
	Liquidity	9.596	4.542	.134	2.113	.036

a. Dependent Variable: ROA

Source: Research Findings (2020)

The coefficients are used in indicating the magnitude and direction of the relation between the variables. The T values were used in indicating how significant the association between the independent variable and dependent variable was. The values obtained compared to critical values. A confidence interval of 95% and a two tailed T test critical value of ±1.960 were obtained from the T test tables. A T test value that lies out of this range is significant.

The results showed that board independence is substantial to financial performance. The findings further revealed that liquidity and capital adequacy have a positive substantial influence on financial performance while board diversity and ownership concentration are not significant determiners of financial performance. This implies that increasing board independence, liquidity and capital adequacy by a unit would lead to 1.453, 9.596 and 3.063 increases in financial performance respectively while board diversity and ownership concentration would not have a significant influence. The constant coefficient -402.621 implies that when the five selected independent variable have a zero value, financial performance would be equal to the figure.

The regression equation below was thus estimated:

$$\mathbf{Y_i = -402.621 + 1.453X_1 + 9.596X_2 + 3.063X_3}$$

Where;

Y_i= Financial performance

X_1 = Board independence

X_2 = Liquidity

X_3 = Capital adequacy

4.7 Interpretation and Discussion of Findings

The researcher was seeking to determine the influence of corporate governance on the commercial banks' financial performance. Board independence, board diversity, and ownership concentration were the predictor variables in this study while financial performance of commercial banks given by the ratio of net income to total assets was the dependent variable. The control variables were liquidity and capital adequacy. The adequacy of the overall model in predicting financial performance was examined. The influence of each predictor variable on the dependent variable was also examined with respect to strength and direction.

The Pearson's correlation coefficient between board independence and financial performance of banks revealed a strong positive substantial correlation between the two variables. The Pearson's correlation coefficient between board diversity and performance of revealed a moderate positive substantial correlation between the two. The Pearson's correlation coefficient between ownership concentration and financial performance revealed a weak positive and statistically not significant correlation

between the two variables. Liquidity and capital adequacy showed a positive and statistically substantial association with performance.

The multiple linear regressions exhibited significant relationship between board independence and financial performance of commercial banks. This implies that board independence has a substantial impact on performance. The multiple linear regressions exhibited a weak relation between board diversity and performance of Kenyan banks. This implies that board diversity has no significant impact on financial performance. The multiple linear regressions exhibited a positive but not significant influence of ownership concentration on performance of the banks. This implies that ownership concentration have a weak impact on performance, an increase in ownership concentration leads to increased financial performance but not to a significant extent.

The control variables; liquidity and capital adequacy had a positive substantial association with performance of Kenyan banks. The regression results further confirmed this hypothesis. This implies that an increase in either liquidity or capital adequacy will lead to a substantial increase in performance.

This study agrees with Nyarige (2012) who also tried to examine how the Kenyan commercial bank's corporate governance structure influences their financial performance. The study mainly concentrated on the banks quoted at the NSE. The independent variables were board meetings, executive compensation and size while the explained variable was the performance. The finding indicated that size had an inverse effect on bank market performance while board independence affects the bank market performance directly. However, the relationship between CG and Tobin's Q was ambiguous/vague.

The study agrees with one done by Muigai (2014) who additionally did a research to conclude on the relationship between selected dynamics of corporate board (executive board composition and non-executive members, gender diversity and board size) and firm ROA. This census study followed a descriptive design with a total of 43 licensed Kenyan banks and obtained secondary data from 2009 to 2013. Analysis was made using a regression model and descriptive statistics. From the findings, a sound inverse relation of composition of board and performance was found with a weak relation between gender diversity and ROA, while inverse correlation was established between the board size and ROA.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The study's main objective was determining how corporate governance impacts performance of Kenyan banks. The section presents the summarized findings, conclusions reached, and recommendations for policy and practice. It also highlights limitations faced and suggestions for additional studies.

5.2 Summary of Findings

The study's aim was determining how corporate governance impacts performance of Kenyan banks. To conduct the study, corporate governance was broken down into three independent variables namely board independence, board diversity and ownership concentration. The control variables were liquidity and capital adequacy. The researcher reviewed available theoretical foundations and empirical reviews to get an understanding on the generally accepted relationship among the selected dependent and independent variables. From this review, a conceptual framework was developed that hypothesized the expected association between the study variables.

The research employed a descriptive cross-sectional design. The population was the 42 Kenyan banks as at 31st December 2019. Secondary data was gathered from CBK and individual commercial banks financial reports for a time frame 5 years (January 2015 to December 2019). The researcher carried out descriptive, correlation and regression analysis. To confirm that the data is fit for analysis the researcher transformed the data using natural logarithms and conducted diagnostic tests to ensure that the data has the required characteristics before conducting inferential statistics. Regression analysis was used to test the strength of the association between the study variables and to test both

the significance of the overall model and individual parameters. SPSS version 23 was used to carry out the analysis.

From the correlation, the study found a positive and statistically significant correlation between board independence and financial performance. Further a positive and significant correlation between board diversity and performance existed. Ownership concentration had a positive but not statistically significant link with financial performance. Liquidity and capital adequacy were also found to have a positive substantial correlation with performance while ownership concentration did not exhibit a significant link with financial performance.

The coefficient of determination (R square) shows the variations in the response variable resulting from variations in predictor variable. From findings, R square was 0.664, showing that 66.4% of variations in financial performance stems from variations in board independence, board diversity, ownership concentration, liquidity and capital adequacy. Alternate elements not in the model justify for 33.6% of these changes in financial performance. The findings showed a strong correlation between the chosen variables and the commercial banks' financial performance (R=0.815). Findings from ANOVA test showed that the F statistic was significant at 5% with a p=0.000 rendering the model appropriate in the study.

The results revealed that board independence was positive and substantial to performance. The findings further revealed that liquidity and capital adequacy were positive and substantial to performance while board diversity and ownership concentration showed positive but insignificant influence on financial performance. This implies that a unit increase in board independence, liquidity and capital adequacy would cause1.453, 9.596 and 3.063 increases in financial performance respectively

while board diversity and ownership concentration would not have a significant influence. The constant coefficient -402.621 implies that when the five selected independent variable have a zero value, financial performance would be equal to the figure.

5.3 Conclusion

The findings show that performance is notably affected by board independence. A unit increase in board independence significantly increases the performance of Kenyan banks. The findings of this study also revealed that board diversity and ownership structure does not have statistically significant influence on performance of banks and therefore this study concluded that these two variables do not on average improve financial performance. The findings showed that liquidity and capital adequacy were statistically significant in determining financial performance and hence concluded that the variables were substantial to performance.

The conclusion of this study is that the variables (board independence, board diversity, ownership concentration, liquidity and capital adequacy) to a larger extent have a notable influence on the performance of Kenyan banks. The conclusion is that these variables have a notable impact on the performance of the banks given the p value in ANOVA. The fact that 66.4% of the variations in the response variable are from the factors listed implies that the 33.6% variations are from additional factors not selected.

The study agrees with one done by Koech (2018) studied the determinants of effective corporate governance among Kenyan state corporations. The study targeted managers from 187 state corporations and employed regression in analysing the data. The findings showed that CG was had a positive correlation to board characteristics among the organizations.

This study differs with Olick (2015) who examined how firm governance and administration practices (proportion of non-executive directors, gender diversity and board size) impact the ROA of firms in the microfinance industry in Kenya. A census approach was found to be useful for the study with data being collected from secondary sources of 9 licensed MFI bank reports from 2010 to 2014. A regression model was found appropriate for the study analysis and in ANOVA to determine its significance. The study established that size has a substantial positive impact on ROA, the number of non-executive directors is positive but insignificant; gender diversity showed a substantial negative impact on performance.

5.4 Recommendations for Policy and Practice

The following recommendations have been made based on the study findings. The study established that there exists a positive and significant influence of board independence on performance of banks. It is recommended that policy makers should prioritize having an independent board as it significantly contributes to the goal of commercial banks which is to maximize financial performance.

A positive relationship between financial performance and capital adequacy position was found to exist in this study. The recommendations that will motivate policy change are: a heavy investment by banks in capital adequacy since it will enable an improvement in the performance of the banks. It is the responsibility of the Government through the Central bank to create policies that will create an enabling environment for commercial banks to operate and increase their capital adequacy as this will favor growth of the economy.

Liquidity was also found to be substantial to performance and this implies that the more liquid a firm is, the better the financial performance. This study therefore recommends

that a thorough examination of banks liquidity position should be done in ensuring banks are operating at appropriate liquidity levels thereby improving performance. This is because liquidity is significant to operations.

5.5 Limitations of the Study

The research period was five years 2015-2019. It cannot therefore be ascertained that the findings will hold for an extended study period. Additionally, it is not certain that similar findings will be established beyond 2019. A longer period would be more reliable since it will consider major events excluded from this study.

One of these study limitations is data quality. It cannot be ascertained from the investigation whether findings show accurate facts from the situation. An assumption is made that the data is accurate. The measures used may change from a year to the next based on current conditions. The research used secondary data, which was in the public domain had already been obtained, unlike the first-hand information associated with primary data. The study considered selected determinants and not every factor that determines performance of Kenyan banks primarily due to unavailable data.

For analyzing the data, the multiple linear regression model was used. Because of the limitations of the model like erroneous and misleading results when performance changes, it is impossible for the researcher to generalize the findings with certainty. With the addition of more data in the model, the expected relation between the variables may fail to hold.

5.6 Suggestions for Further Research

A suggestion is given that more research ought to include a qualitative analysis of the relation between CG and performance of Kenyan banks. That study would deal with

interviewing of vital respondents in the banks and this would reveal concealed insights into the fine detailed relation between CG and performance of Kenyan banks.

The study did not exhaust all the independent variables influencing performance and a recommendation is given that more studies be carried out to constitute other variables for instance management financial performance, industry practices, growth opportunities, political stability and ownership structure of the firm. Determining the impact of each variable on performance shall enable the policy makers to understand the tools that can be used to control financial performance.

The research only focused on Kenyan banks. The study's recommendations are that additional studies be carried out on other Kenyan financial companies. Finally, as a result of regression models' limitations, other models including the Vector Error Correction Model (VECM) may be used in explaining the various relationships among variables.

REFERENCES

Adams, M. & Buckle, M. (2003). The determinants of corporate financial performance in the Bermuda insurance market. *Applied Financial Economics*, 13(2), 133-143

Almajali, Y.A., Alamro, S.H., & Al-Soub, Y.Z (2012). Factors affecting financial performance of Jordanian insurance companies listed at Amman stock exchange. *Journal of Management Research*, 4(2), 91-101

Amato, L. & Burson, T. (2007). The effects of firm size on profit rates in the financial service, *Journal of Economic and Economic Research*, 8(1), 61- 81

Athanasoglou, P., Brissimis, S., & Delis, M. (2005). Bank-specific, industry-specific and macroeconomics determents of bank profitability, *Bank of Greece*, No. 25

Athanasoglou, P., Sophocles, B., & Matthaois, D. (2009). Bank-specific, industry-specific and macroeconomic determinants of bank profitability. *Journal of International Financial Markets, Institutions and Money*. 5(11), 121-136.

Atieno, Y. A. (2009). *Corporate governance problems facing Kenyan Parastatals: A case study of the sugar industry*. An unpublished MBA project, University of Nairobi

Bebchuk, L., Cohen, A. & Ferrell, A., (2004). What matters in corporate governance? *Working paper*, Harvard Law School, Cambridge, MA

Berle, A. A. Jr. & Means, G. C. (1932). *The modern corporation and private property*. New York: MacMillan.

Bermpei, T & Mamatzakis, E. (2015). The effect of corporate governance on the performance of us investment banks. *New York Salomon Center*, 24(2-3), 191- 239

Burca, A., & Batrinca, C. (2014). The determinants of financial performance in the Romanian insurance market. *International Journal of Academic Research in Accounting, Finance and Management Sciences*. 4(1), 299-308

Burns, N. & Burns, S. (2008). *The practice of nursing research: conduct, critique and utilization*: 5th Edition: St Louis, Elsevier Saunders

Central Bank of Kenya (2016). *Annual Reports*, Central Bank of Kenya, Nairobi.

Central Bank of Kenya (2016). *Bank supervision annual reports*. CBK. Nairobi. .

Charkham, J.P. (1995). *Keeping good company: A study of corporate governance in five Countries*. Oxford University press. Oxford, UK

Clarkson, M.B.E. (1994). *A risk based model of stakeholder theory, the Centre for corporate social performance & ethics*, University of Toronto. Commonwealth

Cooper, R., & Schindler, S. (2008). *Business research methods.* New York: Mc Grawhill

Daily, C.M. & Dalton, D.R. (1992). The relationship between governance structure and corporate performance in entrepreneurial firms. *Journal of Business Venturing*, 7: 375-386.

Danoshana, S & Ravivathani, T. (2013). the impact of the corporate governance on firm performance: A study on financial institutions in Sri Lanka. *Journal of Accounting, Auditing, Economics and Finance,* 1(6), 118- 121.

Donaldson, L., & Davis, J. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Academy of Management Review, 20(1),* 65-73.

Fama, E.F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, 88, 288-307

Fernando, A. (2009). *Corporate governance principles, policies and practices*. Dorling Kindersley (India) Pvt. Ltd.

Flannery, M. &Protopadakis, W. (2002). Macroeconomic factors that influence aggregate stock returns. *The Review of Financial Studies*, 7(4)751-782.

Freeman, R.E. (1999). Response: Divergent stakeholder theory. *Academy of Management Review*, 24(2), 233-236

Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *Quarterly Journal of Economics, 118(1),* 107-155.

Humera, K. (2011). A literature review of corporate governance. *International Conference on E-business, Management and Economics*, 25, 1-5

Jensen, M. C. (1993). The modern industrial revolution, exit and the failure of internal control systems. *The journal of Finance*, 48(3), 831-880

Jensen, M.C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial economics,* 3, 305–360.

Jovanovic, B. (1982). Selection and the evolution of industry. *Econometrics*, 50,649-670

Khan, J. A. (2008). *Research methodology*. New Delhi. APH Publishing Corporation

Kihara, M.N. (2006). *Relationship between ownership structure, governance structure and performance of firms listed with NSE*, Unpublished MBA Project, university of Nairobi, Kenya.

Korent, D., Đunđek, I., & Čalopa, M. (2014). Corporate governance practices and firm performance measured by Croatian Corporate Governance Index (CCGI®), *Economic Research-Ekonomska Istraživanja*, 27:1, 221-231,

Kusa, G., & Ongore, O. (2013). Determinants of the financial performance of commercial Banks in Kenya. *International Journal of Economics and Financial Issues, 3*(1) 237-252

Kwon, A. & Song, I. (2011). Capital structure and firm performance: Evidence from Iranian Companies. *International Research Journal of Finance and Economics*, 70, 20-29

Lamport, M J, Latona M N, Seetanah B & Sannassee R V (2011). Relationship between corporate governance and firm performance: Evidence from a sample of top 100 Mauritian companies. *Faculty of Law and Management, University of Mauritius*

Lee, J. (2009). Does the size matter in firm performance? Evidence from us public firms, *Internal Journal of the Economic of Business*, 16(2), 199- 203

Liargovas, P. & Skandalis K. (2008). *Factors affecting firm's financial performance*. The case of Greece, Athens. University of Peloponnese Press.

Machuki, V.N., & Aosa, E. (2011). The influence of the external environment on performance of publicly quoted companies in Kenya. *Prime Journal of Business Administration and Management*, 1(7), 205-218.

Mamatzakis, E. & Bermpei, T. (2015). The effect of corporate governance on the performance of US investment banks. *Financial Planning Review*, *24*(2), 191-239.

Marashdeh, Z. (2014). *The effect of corporate governance on firm performance in Jordan.* A Doctoral Thesis, University of Central Lancashire.

Miring'u, A. N., & Muoria, E. T. (2011). An analysis of the effect of corporate governance on performance of Commercial State Corporations in Kenya. *International Journal of business and Public Management, 1*(1), 115-118.

Muigai, J. (2014). *Relationship between Selected corporate board dynamics and financial performance of commercial banks in Kenya*. An Unpublished MBA Research Project, University of Nairobi.

Murerwa, J. (2015). *Relationship between corporate board dynamics and financial performance of commercial banks in Kenya*: An Unpublished MBA Project, University of Nairobi.

Nabil, A., Osama S. & Ziad A. (2014). The effect of effective corporate governance structure in improving investors' confidence in the public financial information. *International Journal of Academic Research in Business and Social Sciences.* 4(1), 556-560

Nambiro, C. A. (2007). *Relationship between level of implementation of CMA guidelines on corporate governance and profitability of companies listed at the Nairobi Stock Exchange*. Unpublished MBA project. School of Business, University of Nairobi

Nyarige, E.M. (2012*). The effects of corporate governance structure on the financial performance of commercial bank in Kenya*, unpublished Master's Project, Nairobi: University of Nairobi.

Okiro, K, Aduda, J & Omoro, N. (2015). The effect of corporate governance and capital structure on performance of firms listed at the East African Community Securities Exchange. *European Scientific Journal*, 11(7), 504-533.

Olick, L. (2015). *The effect of corporate governance on financial performance of 50 microfinance banks in Kenya*. An Unpublished MBA Research Project, University of Nairobi.

Otieno, W. L (2011). *The relationship between corporate governance practices and financial performance of local airlines in Kenya*. Unpublished MBA project, University of Nairobi.

Pfeffer, J. (1973). Size, composition and function of corporate boards of directors: the organization environment linkage. *Administrative Science Quarterly*, 18,349-364

Pfeffer, J., & Salancik, G.R. (1978). *The external control of organizations: A resource dependence perspective.* New York: Harner and Row.

Piesses, C. (2005). Corporate governance and firm performance in an international perspective conflicting empirical evidence. *Journal of Finance*, 12(2), 16-24

Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *Journal of Finance, 52*(2), 737–783.

Stanwick, P.A. & Stanwick, S. (2002). The relationship between corporate governance and financial performance: an empirical study. *Journal of Financial Management*, 19(16), 297-305

Sundaram, A.K. & Inkpen, A.C. (2004). The corporate objective revisited. *Organisation Science*, 15(3), 350-363

Susoiu, A. (2014). The effects of corporate governance on firm performance. Academy Journal of Finance, 22(2),314-341

Ujunwa, A. (2012). Board characteristics and the financial performance of Nigerian quoted firms. *Corporate Governance*, 12(5), 656-674.

Wamalwa, E., (2003). *Factors Influencing investment decisions in parastatals in Kenya*, Unpublished MBA Project, Kenyatta University, Kenya.

Wanyama, D.W. & Olweny T. (2013). Effects of corporate governance on financial performance of listed insurance firms in Kenya. *Public Policy and Administration Research*, 3(4), 96-116

Yahaya, O. A. & Lamidi, Y. (2015). Empirical examination of the financial performance of Islamic banking in Nigeria: A case study approach. *International Journal of Accounting Research*, 2(7), 1-13

APPENDICES

Appendix I: Commercial Banks in Kenya

1. Africa Banking Corporation Ltd
2. Bank of Africa Kenya
3. Bank of Baroda(K) Ltd
4. Bank of India
5. Barclays Bank of Kenya Ltd
6. Citibank N.A. Kenya
7. Commercial Bank of Africa Ltd
8. Consolidated Bank of Kenya Ltd
9. Co-operative Bank of Kenya
10. Credit Bank Ltd
11. Development Bank of Kenya Ltd
12. Diamond Trust Bank Kenya Ltd
13. DIB Bank Kenya Ltd
14. Ecobank Kenya Ltd
15. Equity Bank Ltd
16. Family Bank Ltd
17. First Community Bank Limited
18. Guaranty Trust Bank Limited
19. Guardian Bank Limited
20. Gulf African Bank Limited
21. Habib Bank A.G Zurich
22. Housing Finance Company Ltd
23. I& M Bank Limited
24. Jamii Bora Bank
25. Kenya Commercial Bank Ltd
26. Middle East Bank (K) Ltd
27. Mayfair Bank Ltd
28. M- Oriental Bank Limited
29. National Bank of Kenya Ltd
30. NIC Bank PLC
31. Paramount Bank Ltd
32. Prime Bank Limited
33. SBM Bank
34. Sidian Bank Ltd
35. Stanbic Bank Kenya Ltd
36. Standard Chartered Bank (K) Ltd
37. Spire Bank Ltd
38. Transnational Bank Ltd
39. UBA Bank Kenya Ltd
40. Victoria Commercial Bank Ltd
41. Chase Bank Kenya Ltd **
42. Charterhouse Bank Ltd **
43. Imperial Bank Ltd **

Source: CBK (2019)

Appendix II: Research Data

Bank	Year	ROA	Board diversity	Board independence	Ownership concentration	Capital adequacy	Liquidity
ABC Bank	2015	0.0081	0.327	0.727	0.662	0.1645	0.0544
	2016	0.0029	0.489	0.889	0.655	0.1528	0.0659
	2017	0.0065	0.500	0.900	0.644	0.1560	0.0992
	2018	0.0004	0.500	0.900	0.591	0.1844	0.0633
	2019	0.0023	0.500	0.900	0.519	0.1538	0.0750
Bank of Africa	2015	(0.0148)	0.544	0.944	0.492	0.1639	0.0859
	2016	0.0002	0.544	0.944	0.504	0.1616	0.1142
	2017	0.0012	0.544	0.944	0.538	0.1578	0.0951
	2018	0.0035	0.544	0.944	0.525	0.1602	0.2023
	2019	(0.0464)	0.489	0.889	0.505	0.1083	0.2103
Bank of Baroda	2015	0.0297	0.475	0.875	0.552	1.9617	0.0475
	2016	0.0355	0.475	0.875	0.492	0.3053	0.0489
	2017	0.0408	0.475	0.875	0.490	0.3229	0.0455
	2018	0.0319	0.475	0.875	0.442	0.3466	0.0519
	2019	0.0286	0.475	0.875	0.416	0.3274	0.0547
Barclays Bank	2015	0.0349	0.489	0.889	0.607	0.1840	0.0755
	2016	0.0285	0.314	0.714	0.575	0.1786	0.0515
	2017	0.0255	0.314	0.714	0.539	0.1803	0.0602
	2018	0.0228	0.314	0.714	0.470	0.1638	0.0723
	2019	0.0199	0.314	0.714	0.482	0.1667	0.0770
Bank of India	2015	0.0263	0.314	0.714	0.587	0.4230	0.0362
	2016	0.0343	0.418	0.818	0.636	0.4574	0.0335
	2017	0.0369	0.418	0.818	0.614	0.5397	0.0391
	2018	0.0309	0.418	0.818	0.645	0.4392	0.0340

Bank	Year	ROA	Board diversity	Board independence	Ownership concentration	Capital adequacy	Liquidity
	2019	0.0374	0.433	0.833	0.647	0.4842	0.0427
Citibank	2015	0.0386	0.433	0.833	0.740	0.2832	0.1110
	2016	0.0332	0.433	0.833	0.740	0.2637	0.0672
	2017	0.0398	0.433	0.833	0.743	0.2555	0.0835
	2018	0.0369	0.433	0.833	0.721	0.2764	0.0860
	2019	0.0304	0.433	0.833	0.748	0.2715	0.1219
Commercial Bank of Africa	2015	0.0167	0.433	0.833	0.826	0.1792	0.0810
	2016	0.0287	0.457	0.857	0.830	0.1845	0.1344
	2017	0.0231	0.457	0.857	0.833	0.1732	0.0947
	2018	0.0226	0.457	0.857	0.833	0.1573	0.0754
Consolidated bank	2015	0.0031	0.457	0.857	0.843	0.0939	0.0537
	2016	(0.0152)	0.467	0.867	0.722	0.0790	0.0469
	2017	(0.0249)	0.467	0.867	0.730	0.0509	0.0637
	2018	(0.0419)	0.467	0.867	0.729	0.0280	0.0713
	2019	(0.0448)	0.475	0.875	0.741	0.1352	0.0764
Credit bank	2015	(0.0058)	0.475	0.875	0.759	0.1551	0.0247
	2016	0.0090	0.475	0.875	0.817	0.2285	0.0248
	2017	0.0092	0.475	0.875	0.817	0.1477	0.0201
	2018	0.0139	0.475	0.875	0.817	0.1451	0.0228
	2019	0.0098	0.475	0.875	0.817	0.1496	0.0182
Co-operative bank of Kenya	2015	0.0342	0.489	0.889	0.817	2.1258	0.0860
	2016	0.0360	0.489	0.889	0.652	0.2277	0.0730

Bank	Year	ROA	Board diversity	Board independence	Ownership concentration	Capital adequacy	Liquidity
	2017	0.0295	0.489	0.889	0.713	0.2268	0.0627
	2018	0.0308	0.489	0.889	0.780	0.1618	0.0785
	2019	0.0313	0.489	0.889	0.775	0.1505	0.0635
Development Bank of Kenya	2016	0.0038	0.489	0.889	0.755	0.2508	0.0050
	2017	0.0017	0.489	0.889	0.724	0.2355	0.0040
	2018	0.0075	0.489	0.889	0.721	0.2323	0.0078
	2019	0.0703	0.489	0.889	0.710	0.3147	0.0235
Diamond Trust Bank	2015	0.0243	0.489	0.889	0.651	0.1463	0.0159
	2016	0.0236	0.489	0.889	0.710	0.1850	0.0180
	2017	0.0191	0.489	0.889	0.822	0.1901	0.0210
	2018	0.0187	0.489	0.889	0.819	0.2111	0.0210
	2019	0.0188	0.489	0.889	0.820	0.2091	0.0212
Dubai Bank	2017	(0.2298)	0.489	0.889	0.812	0.7005	0.0420
	2018	(0.1192)	0.499	0.899	0.805	0.2990	0.0990
	2019	(0.0636)	0.499	0.899	0.950	0.1486	0.1263
Ecobank	2015	0.0017	0.499	0.899	0.950	0.2496	0.0684
	2016	(0.0429)	0.499	0.899	0.950	0.1944	0.0477
	2017	(0.0209)	0.499	0.899	0.950	0.1599	0.0851
	2018	0.0036	0.499	0.899	0.950	0.1659	0.0743
	2019	0.0021	0.500	0.900	0.791	0.1622	0.0301
Equity Bank	2015	0.0405	0.500	0.900	0.793	0.2017	0.0814
	2016	0.0350	0.500	0.900	0.790	0.1966	0.0494
	2017	0.0361	0.500	0.900	0.789	0.2041	0.0509

Bank	Year	ROA	Board diversity	Board independence	Ownership concentration	Capital adequacy	Liquidity
	2018	0.0346	0.500	0.900	0.787	0.1593	0.0425
	2019	0.0362	0.509	0.909	0.782	0.1979	0.0710
Family bank	2015	0.0244	0.509	0.909	0.884	0.1441	0.0759
	2016	0.0051	0.509	0.909	0.784	0.2078	0.0790
	2017	(0.0145)	0.509	0.909	0.785	0.1986	0.0816
	2018	0.0036	0.509	0.909	0.791	0.1952	0.0937
	2019	0.0120	0.509	0.909	0.392	0.1869	0.0883
First Community Bank	2015	(0.0008)	0.509	0.909	0.391	0.1145	0.1685
	2016	(0.0037)	0.509	0.909	0.392	0.1399	0.1486
	2017	0.0087	0.509	0.909	0.394	0.1534	0.1340
	2018	(0.0119)	0.509	0.909	0.393	0.0911	0.1271
	2019	0.0102	0.509	0.909	0.394	0.0810	0.1678
Guaranty Trust Bank	2015	0.0095	0.509	0.909	0.620	0.2649	0.0786
	2016	0.0130	0.509	0.909	0.648	0.2547	0.2266
	2017	0.0067	0.509	0.909	0.654	0.2387	0.1958
	2018	0.0024	0.509	0.909	0.638	0.2597	0.0477
	2019	0.0197	0.509	0.909	0.645	0.2428	0.0526
Guardian Bank	2015	0.0157	0.517	0.917	0.668	0.1763	0.0904
	2016	0.0156	0.517	0.917	0.691	0.1904	0.1042
	2017	0.0101	0.517	0.917	0.541	0.2022	0.0782
	2018	0.0139	0.517	0.917	0.478	0.2275	0.0863
	2019	0.0112	0.517	0.917	0.492	0.2220	0.0961
Gulf African Bank	2015	0.0295	0.523	0.923	0.492	0.1577	0.0890

Bank	Year	ROA	Board diversity	Board independence	Ownership concentration	Capital adequacy	Liquidity
	2016	0.0184	0.523	0.923	0.492	0.1872	0.1278
	2017	0.0049	0.523	0.923	0.492	0.1620	0.1095
	2018	0.0039	0.523	0.923	0.492	0.1866	0.0866
	2019	0.0048	0.535	0.935	0.645	0.1711	0.0642
Habib Bank Ltd	2015	0.0292	0.600	0.944	0.668	0.3213	0.0526
	2016	0.0245	0.600	0.944	0.669	0.3911	0.0670
	2018	0.0105	0.600	0.944	0.688	0.2463	0.0322
	2019	0.0097	0.600	0.944	0.713	0.2729	0.0305
Housing finance Company ltd	2015	0.0167	0.600	0.889	0.533	0.1813	0.0004
	2016	0.0126	0.600	0.875	0.541	0.1769	0.0699
	2017	0.0019	0.600	0.875	0.491	0.1700	0.0604
	2018	(0.0099)	0.600	0.875	0.477	0.1534	0.0459
	2019	(0.0020)	0.600	0.875	0.416	0.1456	0.0504
I&M Bank	2015	0.0373	0.600	0.875	0.690	0.2020	0.0519
	2016	0.0369	0.600	0.889	0.692	0.1815	0.0526
	2017	0.0303	0.600	0.714	0.675	0.1858	0.0495
	2018	0.0264	0.600	0.714	0.581	0.1792	0.0483
	2019	0.0326	0.600	0.714	0.561	0.2156	0.0440
Jamii Bora Bank Ltd	2015	0.0011	0.314	0.714	0.428	0.1625	0.0647
	2016	(0.0106)	0.418	0.818	0.558	0.2008	0.0438
	2017	(0.0367)	0.418	0.818	0.615	0.1933	0.0133
KCB Bank	2015	0.0352	0.418	0.818	0.619	0.1536	0.1737
	2016	0.0331	0.418	0.818	0.571	0.1801	0.0494

Bank	Year	ROA	Board diversity	Board independence	Ownership concentration	Capital adequacy	Liquidity
	2017	0.0305	0.600	0.917	0.628	0.1663	0.0450
	2018	0.0336	0.600	0.917	0.631	0.1955	0.0589
	2019	0.0280	0.600	0.917	0.602	0.1903	0.0676
Middle East Bank (K) Ltd	2016	(0.0127)	0.517	0.917	0.500	0.3933	0.0575
	2017	(0.0049)	0.517	0.917	0.367	0.5708	0.1582
	2018	0.0005	0.517	0.917	0.645	0.4494	0.0660
	2019	0.0004	0.517	0.917	0.668	0.3119	0.0615
M-Oriental bank ltd	2016	0.0034	0.517	0.917	0.503	0.3869	0.0801
	2017	0.0091	0.517	0.917	0.382	0.3316	0.0921
	2018	0.0078	0.517	0.917	0.173	0.3093	0.1104
	2019	(0.0018)	0.457	0.857	0.667	0.3442	0.0855
National Bank of Kenya	2015	(0.0092)	0.475	0.875	0.700	0.1399	0.1310
	2016	0.0006	0.475	0.875	0.700	0.0715	0.0764
	2017	0.0071	0.475	0.875	0.700	0.0542	0.0683
	2018	(0.0007)	0.457	0.857	0.700	0.0370	0.0533
	2019	(0.0080)	0.475	0.875	0.700	0.1150	0.1132
NIC Plc bank	2015	0.0271	0.538	0.938	0.727	0.2059	0.0539
	2016	0.0256	0.538	0.938	0.727	0.2304	0.0429
	2017	0.0201	0.523	0.923	0.727	0.2227	0.0462
	2018	0.0203	0.538	0.938	0.750	0.1869	0.0574
Paramount Bank Ltd	2015	0.0150	0.457	0.857	0.750	0.2412	0.0958
	2016	0.0113	0.529	0.929	0.620	0.2741	0.0812

Bank	Year	ROA	Board diversity	Board independence	Ownership concentration	Capital adequacy	Liquidity
	2017	0.0123	0.529	0.929	0.676	0.2946	0.1153
	2018	0.0239	0.489	0.889	0.640	0.2853	0.1249
	2019	0.0088	0.489	0.889	0.622	0.2450	0.0866
Prime Bank	2015	0.0311	0.600	0.909	0.637	0.1729	0.0575
	2016	0.0291	0.600	0.909	0.602	0.2216	0.0413
	2017	0.0288	0.600	0.909	0.546	0.2248	0.0611
	2018	0.0227	0.600	0.909	0.563	0.3729	0.0876
	2019	0.0241	0.600	0.909	0.505	0.4136	0.0531
SBM Bank	2015	(0.0054)	0.500	0.900	0.432	0.1509	0.0798
	2016	(0.1918)	0.500	0.900	0.347	(0.1281)	0.0307
	2017	(0.0286)	0.500	0.900	0.416	0.1644	0.0877
	2018	0.0187	0.500	0.900	0.439	0.2425	0.1112
	2019	0.0125	0.500	0.900	0.439	0.2312	0.0586
Sidian Bank	2015	0.0195	0.400	0.800	0.302	0.2468	0.1559
	2016	0.0013	0.400	0.800	0.555	0.2325	0.1486
	2017	(0.0219)	0.400	0.800	0.605	0.1646	0.1991
	2018	(0.0149)	0.400	0.800	0.649	0.1440	0.0846
	2019	0.0041	0.400	0.800	0.620	0.1793	0.1250
Stanbic Bank Kenya Ltd	2015	0.0235	0.509	0.909	0.545	0.1870	0.0544
	2016	0.0206	0.509	0.909	0.360	0.1812	0.0402
	2017	0.0173	0.509	0.909	0.424	0.1684	0.0323
	2018	0.0222	0.509	0.909	0.403	0.1740	0.0785
	2019	0.0211	0.509	0.909	0.364	0.1834	0.0914

Bank	Year	ROA	Board diversity	Board independence	Ownership concentration	Capital adequacy	Liquidity
Standard Chartered Bank	2015	0.0271	0.600	0.909	0.029	0.2116	0.0609
	2016	0.0361	0.600	0.909	0.302	0.2091	0.0619
	2017	0.0242	0.600	0.909	0.302	0.1852	0.0467
	2018	0.0284	0.600	0.909	0.266	0.1947	0.0711
	2019	0.0273	0.600	0.909	0.379	0.1773	0.0683
Spire Bank Ltd	2015	(0.0336)	0.350	0.750	0.309	0.1745	0.0544
	2016	(0.0545)	0.350	0.750	0.453	0.1627	0.0712
	2017	(0.1010)	0.350	0.750	0.480	0.1265	0.0305
	2018	(0.2445)	0.350	0.750	0.487	(0.2201)	0.0445
	2019	(0.0688)	0.433	0.833	0.462	(0.2060)	0.0205
Transnational Bank	2015	0.0161	0.314	0.714	0.496	0.2164	0.0974
	2016	0.0105	0.314	0.714	0.611	0.2230	0.1242
	2017	0.0036	0.418	0.818	0.652	0.2908	0.1391
	2018	(0.0070)	0.418	0.818	0.658	0.2111	0.1290
	2019	(0.0090)	0.418	0.818	0.626	0.2015	0.0869
UBA Kenya Bank Ltd	2015	(0.0338)	0.418	0.818	0.654	0.2379	0.0312
	2016	0.0043	0.400	0.800	0.624	0.3868	0.0366
	2017	0.0029	0.475	0.875	0.689	0.3878	0.0733
	2018	0.0035	0.475	0.875	0.645	0.3316	0.0860
	2019	0.0042	0.475	0.875	0.668	0.2537	0.0256
Victoria Commercial Bank	2015	0.0357	0.475	0.875	0.728	0.1930	0.0659
	2016	0.0264	0.475	0.875	0.629	0.2545	0.0598

Bank	Year	ROA	Board diversity	Board independence	Ownership concentration	Capital adequacy	Liquidity
	2017	0.0238	0.171	0.571	0.609	0.2274	0.0673
	2018	0.0135	0.171	0.571	0.739	0.2109	0.0816
	2019	0.0146	0.171	0.571	0.743	0.2015	0.0780