

**BOARD AUDIT COMMITTEE EFFECTIVENESS VARIABLES
AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS
IN KENYA**

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DECLARATION

This management project is my original work and has not been presented for a degree in any other university.

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The project has been submitted for examination with my approval as university supervisor.

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DEDICATION

To the current and future leaders of the commercial banks in Kenya as they play an important role to fuel the country's economic growth.

ABSTRACT

Over the past three decades, the world has experienced high profile cases of corporate failures. Consequently, there has been increasing attention being paid to corporate governance and to the effectiveness of boards, internal controls, audit committees, disclosures, and the independence of directors and auditors. Indeed, the Basel Committee on Banking Supervision has called attention to the need to study, understand, and improve the corporate governance of financial entities. In Kenya, the Central Bank of Kenya has established corporate governance mechanisms within the CBK Prudential Guidelines. The Board of Directors is the main custodian of prudent corporate governance in organizations including the commercial banks. This is executed either directly or through its various sub committees. The Board Audit Committee (BAC) is key in ensuring adherence to set guidelines and standards. The findings contained in the CBK supervisory reports of 2010 and 2011 on incidences of non compliance to set guidelines may be an indicator of ineffective corporate governance and audit committees. The study seeks to establish the relationship between board audit committee effectiveness variables and financial performance of commercial banks in Kenya over the period 2007 to 2011. It examines specific structural and operational characteristics of Audit Committees (ACs) for the banks; these banks have strived to adhere to the Central Bank of Kenya's regulations and prudential guidelines. The research design for this study was a cross sectional survey employing multiple regression analysis. The design was formalized and structured with clearly stated investigative questions. The target population of interest was all registered commercial banks operating in Kenya. There are 43 commercial banks in Kenya. All the banks were considered for this study, of which data for five year financial periods between 2007 and 2011 was obtained for 25 banks. Both primary and secondary data was used for this study. The main findings are as follows: there is a significant positive correlation between percentage of BAC members with financial expertise and ROE; the percentage of Independent Non Executive Directors in the BAC has a significant positive correlation with ROE; changes in the BAC membership do not affect ROE; the attendance rate for BAC meetings has a significant positive correlation with ROE; there exists a significant positive correlation between size of the BAC and ROE; and the number of BAC meetings in a financial year has a significant effect on ROE. The key limitation of this study is the use of a quantitative approach, not supplemented by in-depth case studies, that leads to generalization without investigating specific factors typical of a qualitative study. A key implication of this study to the commercial banks and regulators is that they should pay attention to board audit committee effectiveness particularly emphasizing on competence, commitment and independence as this is highly correlated to financial performance. This is an empirical study about the practices and compliance of ACs among the commercial banks in Kenya.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Over the past three decades, the world has experienced high profile cases of corporate failures. Consequently, there has been increasing attention being paid to corporate governance and to the effectiveness of boards, internal controls, audit committees, disclosures, and the independence of directors and auditors.

Indeed, the Basel Committee on Banking Supervision has called attention to the need to study, understand, and improve the corporate governance of financial entities. The Committee advocated a governance structure composed of a board of directors and senior management (Basel Committee, 1999; and 2006). The core of the Committee's message is the conviction that good corporate governance increases monitoring efficiency and that corporate governance is necessary to guarantee a sound financial system and consequently, a country's economic development (Pablo de Andres and Vallelado, 2008). Corporate governance is expected to mitigate conflicts of interest in institutional stewardship to safeguard stakeholders' interests.

Two schools of thought exist on institutional stewardship represented by agency and stewardship theorists. The theories offer contradictory perspectives on the potential conflict of interest by management in exercising institutional stewardship on behalf of shareholders and other stakeholders. Agency theory alludes that problems and conflicts are bound to arise in the process of management exercising the stewardship role. On the other hand, the stewardship theory supposes that managers are inclined to

act responsibly as stewards of assets entrusted to them. Corporate governance is aligned to the agency theory acknowledging the essential role of checks and balances in organizational stewardship.

In Kenya, the Central Bank of Kenya has established corporate governance mechanisms within the CBK Prudential Guidelines (CBK/PG/02). The Board of Directors is the main custodian of prudent corporate governance in organizations including the commercial banks. This is executed either directly or through its various sub committees. The Board Audit Committee (BAC) is key in ensuring adherence to set guidelines and standards. The findings contained in the CBK supervisory reports of 2010 and 2011 on incidences of non compliance to set guidelines may be an indicator of ineffective corporate governance and audit committees. This study sought to determine the relationship between board audit committee effectiveness variables and financial performance of Commercial Banks in Kenya.

1.1.1 Corporate governance

Corporate governance is about building credibility, ensuring transparency and accountability as well as maintaining an effective channel of information disclosure that would foster good corporate performance. It is also about how to build trust and sustain confidence among the various interest groups that make up an organisation. Indeed the outcome of a survey by Mckinsey in collaboration with the World Bank in June 2000 attested to the strong link between corporate governance and stakeholder confidence (Mark, 2000). The board of directors is expected to play the oversight role within organizations including commercial banks to ensure that corporate governance principles are observed.

Corporate governance of banks in developing countries is important for several reasons. First, banks have an overwhelmingly dominant position in developing-economy financial systems, and are extremely important engines of growth (King and Levine, 1993a, b; Levine, 1997). Second, as financial markets are usually underdeveloped, banks in developing economies are typically the most important source of finance for the majority of firms. Third, banks in developing countries play a major role in the payment system and are the main depository for the economy's savings. Finally, liberalization has reduced the role of economic regulation. Consequently, managers of banks have greater freedom on how they run their banks.

1.1.2 Board audit committee

The Audit Committee (AC) plays a central 'watch dog' role to ensure adherence to set procedures. The AC is a sub-committee of the board of directors, and its establishment can be traced back over 50 years ago to the recommendations by the Securities and Exchange Commission (SEC) in the US in the 1940s (Goddard and Masters, 2000).

Since the 1990s, many listed companies have voluntarily established ACs with the objective to demonstrate good governance (Razae, Olibe and Minmier, 2003). With time the establishment of an AC as a sub-committee of the board of directors has become a compulsory requirement, and the AC would perform a crucial role as "the ultimate monitoring mechanism" in the corporate financial reporting assurance process (Tsui and Gul, 2003).

1.1.3 Organisational performance

Organisational performance comprises the actual output or results of an organisation as measured against its intended outputs (or goals and objectives). According to Richard et al. (2009) organisational performance encompasses three specific areas of firm outcomes i.e. financial performance, product market performance and shareholder return. In recent years, many organizations have attempted to manage organizational performance using the balanced scorecard methodology where performance is tracked and measured in multiple dimensions such as financial performance, customer service, social responsibility, and employee stewardship.

According to Mitchell (2002) organisational performance can be measured through relevance, effectiveness, efficiency and financial viability. Relevance being the degree to which the organisation's stakeholders think the company is relevant to their needs. Effectiveness is the degree to which the organisation is successful in achieving its strategy, mission and vision. Efficiency being how well the organisation uses its resources including financial, human, physical and information. Financial viability being how viable the organisation is not only in the short but also in the long term.

1.1.4 The banking industry in Kenya

The banking industry in Kenya comprises of Commercial Banks and Mortgage Finance Institutions which are licensed and regulated pursuant to the provisions of the Banking Act and the Regulations and Prudential Guidelines issued there under. Currently there are there are 43 licensed commercial banks and one mortgage finance

company. Out of the 44 institutions, 31 are locally owned and 13 are foreign owned. The locally owned financial institutions comprise three banks with significant shareholding by the Government and State Corporations, 27 commercial banks and one mortgage finance institution.

The banking industry in Kenya is governed by the Banking Act (Cap 488), the Companies Act (Cap 486), the Central Bank Act (Cap 491) and the Central Bank of Kenya (CBK) Prudential Guidelines. The Central Bank of Kenya and the Capital Markets Authority (CMA) are the main regulators of commercial banks in Kenya. The CBK is the regulating and supervising agency and the manager of monetary policy operations in Kenya. The CBK works closely with the Institute of Certified Public Accountants of Kenya (ICPAK) to ensure that the banking sector leads the other sectors in implementation of International Financial Reporting Standards (IFRS).

1.1.5 Commercial banks in Kenya

Although the banking sector in Kenya has been experiencing problems over the last 25 years with 37 banking institutions collapsing between 1986 and 1998 (Kithinji and Waweru, 2007; Ngugi, 2001), there has been a continued growth in performance over the last eight years with the banking sector collectively registering impressive performance. The sector's total profit before tax, which stood at KSh. 6.0 billion in 2002, grew to KSh. 48.9 billion in 2009 (Central Bank of Kenya, 2005 to 2009).

Despite the increase in banking sector profit over the years, the distribution of profits being accounted for by the 'large' banks remained skewed in particular with four banks, whose assets market share stood at 46 percent, having contributed 54.3 percent

of the sector's total pre-tax profits (Central Bank of Kenya, 2006). The recent initiatives undertaken by the Government of Kenya to increase the capital base of banking institutions coupled with a robust regulatory framework and effective supervisory regime has the potential to reduce future bank failures, forestall systemic risk and improve the financial performance of medium and small-size banking institutions.

1.2 Research problem

Corporate governance is the arrangement by which organizations are led and controlled to ensure achievement of organisational mandate. Management is expected to act as responsible stewards in safeguarding organizational assets and delivering acceptable return on the assets for the shareholders. Conflicts of interest in executing its role may however hinder management from executing its role effectively leading to reduction of asset value contrary to shareholder expectations. The effectiveness of corporate governance mechanisms to forestall conflicts of interest and resultant losses can therefore be determined by financial performance particularly focusing on returns on shareholder equity. Corporate governance mechanisms specifies the distribution of rights and responsibilities among different participants in the corporation, such as, the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs. The Board discharges its mandate through various committees including the Board Audit Committee which plays a critical role in ensuring effective internal controls design and compliance.

The Central Bank of Kenya issued Prudential Guidelines whose purpose is to maintain a stable and efficient banking and financial system in Kenya. One of the

mandatory committees as stipulated in the guidelines is the Audit Committee (AC) which is required to review the financial condition of the banking institution, its internal controls, performance and findings of the internal auditors, and to recommend appropriate remedial action regularly, preferably at least once in three months (Central Bank of Kenya, 2006). The Central Bank of Kenya supervisory reports of 2010 and 2011 contain incidences of non compliance with the Banking Act and CBK Prudential Guidelines which serve to enhance prudent corporate governance safeguarding stakeholder's interest. The incidences included failure to meet the minimum statutory capital requirement of Kshs. 500 million; some banks advancing credit facilities to single borrowers in excess of 25 percent of their core capital; advancing unsecured credit facility to insiders; investing in land and buildings in excess of 20 percent of core capital; and lack of qualified internal auditor i.e. with ICPAK membership (Central Bank of Kenya, 2010; Central Bank of Kenya, 2011).

There are a number of studies that have been conducted on corporate governance in the banking industry. Otieno (2011) studied the effect of corporate governance on financial performance of Commercial Banks in Kenya. The study aimed at establishing the effects of corporate governance practices and policies on financial Performance of commercial banks. He found out that corporate governance play an important role on bank stability, performance and bank's ability to provide liquidity in difficult market conditions. Ombayo (2008) examined how corporate governance practices of companies listed at the Nairobi Stock Exchange impact on financial performance. The study established a relationship between corporate governance practices and financial performance among the surveyed firms. Firms that had instituted strong corporate governance practices and particularly presence of Independent Non Executive Directors in the Board and Board Audit Committee

exhibited strong financial performance. Ochieng (2011) studied the relationship between corporate governance practices and commercial bank performance in Kenya. From the study he concludes that the Board should be involved in the selection and appointment of senior executives, and that the board should also put systems in place for identifying, monitoring and managing the organization's risk profile. The study concluded that amongst the factors determining the overall bank performance, 20.7% are attributable to corporate governance practices. Kibugi (2012) examined the effect of corporate governance practices on the financial performance of commercial banks in Kenya. The conclusion from her study was that corporate governance practices affects the financial performance of the banks. Ogbechie (2011) studied the level of understanding of the Central Bank of Nigeria (CBN) corporate governance guidelines amongst Nigerian banks. He also evaluated the level of compliance amongst the banks and problems encountered. Matama (2008) studied the relationship between corporate governance and financial performance of selected commercial banks in Uganda. This study found that corporate governance predicts 34.5% of the variance in the general financial performance of commercial banks in Uganda. The study used financial transparency, trust and disclosure as the corporate governance variables, and capital adequacy, asset quality, earnings and liquidity as the financial performance variables. Matama (2008) in his study, linked corporate governance to financial performance. Although several studies have been carried out on corporate governance in commercial banks, there is no research carried out to establish the link between the Board Audit Committee effectiveness variables and financial performance of Kenyan commercial banks.

The Board Audit Committee serves as the key Board watchdog, blowing the whistle in the event of non compliance with set rules and procedures. This study sought to establish the relationship between board audit committee effectiveness variables with financial performance of the commercial banks in Kenya. The audit committees are expected to serve as a proactive deterrent factor to improper management practices which may not be happening entirely pursuant to the findings of the CBK supervisory committee on non compliance to the Prudential Guidelines. Is there a relationship between board audit committee effectiveness variables and financial performance of the commercial banks in Kenya?

1.3 Research objective

The study objective was to establish the relationship between Board Audit Committee effectiveness variables and financial performance of commercial banks in Kenya.

1.4 Value of the study

This study sought to establish the relationship between Board Audit Committee effectiveness variables and financial performance of commercial banks in Kenya. The commercial banks in Kenya and other countries especially developing countries stand to benefit from the results of this study as they grapple with increasing stakeholder expectations in a turbulent, exceedingly competitive environment. The findings of the study serve as a guide on strengthening board audit committee by focusing on variables found to have a strong correlation with financial performance. Likewise the regulators ought to lay emphasis on board audit committee effectiveness variables particularly on competence, commitment and independence as they strengthen the regulatory framework.

The study has established a correlation between board audit committee effectiveness variables and financial performance of commercial banks in Kenya. It has therefore validated the supposition of the agency theorists on the need of checks and balances for management through good corporate governance particularly effectiveness of the board audit committee. The study has contributed to the existing literature availing corporate governance insights based on commercial banks in Kenya particularly focusing on Board Audit Committee effectiveness variables and financial performance. It has provided a guide for further research to researchers and academics, by recommending an in-depth study to identify the bank audit committee specific characteristics that negatively affect ROE.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter contains some of the available literature that has been reviewed for the study. The literature is on corporate governance and mainly addressing the Board Audit Committee. The specific areas covered include problems with corporate governance, instruments of governance, effectiveness of audit committees, structure and operations of the audit committees, ownership structure and CEO/Board Chairman duality.

2.2 Theoretical foundation

The agency and stewardship theories represent opposing views on conflict of interest in exercising stewardship entrusted to management by shareholders. Corporate governance leans more towards the agency theory recognizing the importance of checks and balances to ensure that organizational assets are safeguarded by management on behalf of the shareholders.

2.2.1 Agency theory

Agency theory is a supposition that explains the relationship between principals and agents in business. It is concerned with resolving problems that can exist in agency relationships; that is between principals (such as shareholders) and agents of the principals (e.g. company executives).

Agency theorists argue that corporate governance should lead to higher stock prices or better long-term performance, because managers are better supervised and agency cost are lower. Yet, according to (Gompers, Ishii and Metrick, 2003), the evidence of a positive association between corporate governance and firm performance may have little to do with the agency explanation. Whilst some studies (Weisback, 1988; Rosenstein and Wyatt, 1997; Mehran, 1995 and John and Senbet, 1998) find better performance for firms with boards of directors dominated by outsiders, other studies (Weir and Liang, 2001 and Pinteris, 2002) find no such relationship in terms of accounting profit or firm value. Besides, (Forsberg, 1989) found no relationship between the proportion of outside directors and various performance measures.

2.2.2 Stewardship theory

Stewardship theory is a theory that managers, left on their own, will indeed act as responsible stewards of the assets they control. This theory is an alternative view of agency theory, in which managers are assumed to act on their own self interests at the expense of the shareholders.

Proponents of stewardship theory contend that superior corporate performance will be linked to a majority of inside directors as they work to maximize profit for shareholders (Donaldson, 1990; Donaldson and Davis, 1991). There is also evidence in the literature that lend support to the stewardship theory (Donaldson and Davis, 1991), along with a body of research (Daily and Dalton, 1993; Rechner and Dalton, 1989) that find no impact of leadership structure on firm performance.

2.3 Corporate governance

Despite expectations about corporate governance in safeguarding the interests of the shareholders, the effectiveness of the board of directors in monitoring an organization has been questioned: Without proper monitoring mechanisms in place, the board of directors tends to act for their self-interest and rarely looks after the needs of the stakeholders (Brennan, 2003). To an extreme, (Monks and Minow, 2004) observed that boards of directors in the US have failed to protect shareholders' interests.

Coffee (2005) suggested that ownership structures had a common problem in the absence of an effective checks-and-balances system. In these cases, managers who were in control of the board tended to influence the companies for their own interest, regardless of dispersed or concentrated ownership structures.

2.4 Instruments of governance

Several instruments are used to ensure effective corporate governance among organizations. They include the board of directors and different board committees, ownership concentration, managerial ownership, managerial compensation, dividend payment, market for corporate control, and managerial labor market.

2.4.1 The board of directors and board committees

The size and composition of the board of directors act as a corporate governance mechanism. Limiting board size is believed to improve firm performance because the benefits of larger boards (increased monitoring) are outweighed by the poorer communication and decision making of larger groups (Lipton and Lorsch, 1992;

Jensen, 1993). The composition of a board is also important. There are two components that characterize the independence of a board, the proportion of non-executive directors and the separated (or not) roles of chief executive officer (CEO) and chairman of the board (COB). Non-executive or outside directors, through their expertise and independence, can play an important role at firm level through transferring knowledge as well as at country level through building constituencies for corporate governance reform (Berglöf and Claessens, 2006).

Besides the size and composition of the board of directors, various board committees representing the internal control system of an organization, particularly the audit committee and the remuneration committee, also prove to be important control mechanisms. For example, the audit committee assists the board of directors in overseeing and ensuring adequate functioning of internal control mechanisms, monitoring and focusing on reviewing financial risk and risk management (Bhuiyan, Hossain and Biswas, 2007). Hence, audit committee helps determine indicators of problems and address these problems, mitigate possible damage and enhance shareholder value (Haron, Jantan and Pheng, 2005).

2.4.2 Ownership Concentration

Theoretically, shareholders could take themselves an active role in monitoring management. However, given that the monitoring benefits for shareholders are proportionate to their equity stakes, an average shareholder has little or no incentives to exert monitoring behavior. In contrast, shareholders with substantial stakes have more incentives to supervise management and can do so more effectively.

As a result, institutional or large block holders, find incentives to engage in monitoring activities through different shareholder activisms like voting at the Annual General Meeting on issues like membership of the board of directors, remuneration policy, engagement of the external auditor, budget and operating restrictions, shareholder resolutions, incentive schemes and contracts like share ownership and stock options, threat of dismissal in case of low income, sale of shares etc. (Bromwich, 1992; Shleifer and Vishny, 1997; Patel, Balic and Bwakira, 2002; CorreiaDa Silva et al., 2004).

2.4.3 Managerial Ownership

Jensen and Meckling (1976) suggest that managerial ownership can align the interest between the two divergent groups of claimants and, therefore, reduce the agency costs within the firm. According to their model, the relationship between managerial ownership and agency costs is linear.

Subsequent studies, however, mostly report non-monotonic relationship between managerial ownership and agency costs (for example, Morck, Shleifer and Vishny, 1988; McConnell and Servaes, 1990). Managerial ownership is therefore a key enhancer or restrainer of effective corporate governance.

2.4.4 Managerial Compensation

Periodic performance reviews and incentive compensation in the form of accounting-based bonuses, stock option grants, stock appreciation rights, or restricted stock can reduce a variety of agency problems (Habib, 2004). This is because satisfied managers will be less likely to expropriate organizational resources for self-benefit.

Empirically, Hall and Liebman (1998) and Main, Bruce and Buck (1996) find that when stock options are included, a stronger pay-performance link can be identified. Aggarwal and Samwick (1999) report that executive's pay-performance sensitivity for executives at firms with the least volatile stock prices is greater than that at firms with most volatile stock prices.

2.4.5 Dividend Payment

Dividend policy, another important corporate governance mechanism, often serves as substitute and/or mechanism to other corporate governance instruments (Correia Da Silva et al., 2004). Substitute in the sense that a high dividend payout policy often directs managers to generate sufficient amount of cash flows and thereby, enable them to distribute to the shareholders.

On the other hand, 'complementary' in the sense that presence of large shareholders or a strong board of directors can impose such a high dividend payout policy and such a dividend policy is often used as a defence against hostile takeover (Correia Da Silva et al., 2004). Therefore, dividend payment is often applied strategically including as an instrument of corporate governance.

2.4.6 Market for corporate control and managerial labor market

Market for corporate control is an important external corporate governance mechanism. The role of this mechanism may be direct or indirect (Correia Da Silva et al., 2004). For example, the role is direct in case of hostile takeover.

However, whether poorly performing firms are more likely to be the target of hostile takeover is not overwhelmingly supported in the literature. As indirect role, a mere

threat of a takeover may increase the efficiency of management ex ante, or setting-up of anti-takeover devices may coincide with reduction in share price (Correia Da Silva et al.,2004). Career opportunities and potential for higher compensation provides incentive for effective managers, as opposed to ineffective managers, to increase stockholder value and limit self-serving behaviour (Habib, 2004).

2.5 Effectiveness of Audit Committees

The former chair of the Securities Exchange Commission (SEC), Arthur Levitt, pointed out the importance of an AC in a financial reporting process: Qualified, committed, independent, and tough-minded ACs represent the most reliable guardians of the public interest; nevertheless, there were stories abound of ACs' members who lacked the expertise in the basic principles of financial reporting as well as the mandate to ask probing questions (Levitt, 1998).

The stability of capital markets depends on “reliable, transparent, and objective financial information to support an efficient and effective capital allocation process” (Bromilow and Berlin, 2005). In recent years, accounting scandals in terms of their significance and frequency have been associated with crises in capital markets and have led to significant concerns over the effectiveness of ACs (Song and Windram, 2004). The accounting profession and regulators are beginning to challenge the effectiveness of ACs in ensuring the reliability of financial reporting statements. We summarize that the effectiveness of an AC is driven by its independence, competence, size, duty, and resources.

2.5.1 Independence from the management

If an AC is independent from the management, then it is expected to be able to deter the management from manipulating the earnings of its firm (Choi, Jeong and Park, 2004). In two previous studies, (Beasley, 1996; Dechow, Sloan and Sweeney, 1996) found evidence that the independence of an AC was negatively related to the occurrence of financial statement fraud.

Other studies have provided evidence that the existence of an independent AC was crucial to the maintenance of the integrity and quality of a firm's financial reporting (Defond and Jiambalvo, 1991; Klein, 2002). The findings argued that ACs in its current form could not resolve the conflicts of interest and loyalty to board colleagues who were to evaluate the AC's performance and suggested the use of a two-tier board structure in the private and public sectors to better manage these conflicts (Guthrie and Turnbull, 1995). Terrell (2001) advocated that the most critical element for an effective AC was the independence of its members.

2.5.2 Competence and size

The members of an AC should be of appropriate competency (Xie, Davidson and DaDalt, 2003; Choi et al., 2004). Financial reporting and its related internal control processes is complex, and only those members that have the relevant competency or expertise in accounting, finance, or business are capable of understanding them.

AC members with financial or accounting expertise are thought to be able to unveil any opportunistic earnings management activities more effectively (Choi et al., 2004). Researchers classify expertise into five categories: accounting-related; finance-related; academic-related; other firm-related; Law-related expertise (Choi et al., 2004; Xie et al., 2003).

It is argued that an effective AC should be of optimal size for effective performance. Tsui and Gul (2003) suggest that the appropriate size should be in the range of three to five members. The size of the AC is critical to timely decision making and to mitigate against collusion or dominance.

2.5.3 Duty and resources

To clarify the duties of an AC, companies are required as part of compliance to disclose the terms of references for their AC. These terms include those responsibilities set out by regulators, such as the functioning of an AC and its communication with the external auditors and the board of directors of the firm (Blue Ribbon Committee, 1999; Hong Kong Code of Best Practice, 2005; Myers and Ziegenfuss, 2006).

Lastly, AC members require proper resources to perform their expected duties. AC members need to meet regularly to discuss the financial reporting issues of the firm, and it is generally recommended that it should meet at least four times a year (Tsui and Gul, 2003). If an AC is not active or is dormant, its effectiveness is not guaranteed even if it is composed entirely of INEDs that are equipped with the necessary expertise (Choi et al., 2004).

How active an AC is operating can be measured by the number of AC meetings in a year (Collier and Gregory, 1999; Choi et al., 2004). DeZoort and Salterio (2001) provided a definition of the effectiveness of AC: an effective audit committee has qualified members with the authority and resources to protect stakeholder interests by ensuring reliable financial reporting, internal controls, and risk management through its diligent oversight efforts.

2.6 Structure of the Audit Committee

One of the elements of the structure of the audit committee is the percentage of audit committee members with financial expertise. This element indicates the quality of the AC members in conducting their responsibilities. Previous research suggests that financial competency is one of the most important qualities that an AC should possess because all of the major duties of AC members are concerned with accounting, finances and auditing issues (Xie et al., 2003; Tsui and Gul, 2003; Choi et al., 2004).

The percentage of Independent Non Executive Directors (INEDs) in an audit committee is another important element of the structure of the AC. The existence of INEDs in an AC enhances the independence of the committee (Tsui and Gul, 2003; Blue Ribbon Committee, 1999; Razaee et al., 2003; Zhang, Zhou and Zhou, 2007). Because an Non Executive Director (NED) may have business or family relationships with the company's controlling shareholders, an AC composed of more INEDs is perceived to be more independent from management and the largest shareholder and is likely to be more effective.

The percentage of AC members retired during the year is a key variable of the structure of the AC. While AC members with a short tenure are considered a better arrangement to enhance the independence of the AC, the extensive replacements of AC members during a year, regardless of whether it is forced or of a voluntary nature, may have an adverse effect on the continuity (Tsui and Gul, 2003) and the operations of an AC.

The average number of AC members' outside directorship impacts on the structure of the AC. The literature contains growing concerns about the costs and benefits of multiple boards served by board members in general. Core, Holthausen and Larcker (1999) found that busy directors set excessively high levels of CEO compensation, which in turn led to poor firm performance. Fich and Shivdasani (2006) reported that firms with busy boards were associated with weak corporate governance, lower market-to-book ratios, weak profitability and lower sensitivity of CEO turnover to firm performance. In contrast, (Ferris, Jagannathan and Pritchard, 2003) found no relation between the average number of directorships held by outside directors and a firm's market-to-book ratio.

2.7 Operations of the Audit Committee

The coverage of the terms of reference for an AC is an essential element for effective AC operations (Blue Ribbon Committee, 1999; Razaee et al., 2003; Myers and Ziegenfuss, 2006). The terms of reference of an AC should cover at least four major topics: reviews of finances and other reporting, oversight of internal control and risk management, audit, and other duties and responsibilities (e.g. whistle-blowing and compliance of regulations).

The number of AC meetings points to the operations of the AC and it indicates how many regular issues require discussion and decisions by the AC members. A certain number of meetings are necessary because one of the major duties of an AC is to approve interim and annual reports before their publications. Every AC is recommended to hold at least four meetings each year (Collier and Gregory, 1999; Tsui and Gul, 2003; Choi et al., 2004).

2.8 Ownership structure and CEO/Board chairman duality

The largest shareholder could have a controlling or significant influence on firm. The largest shareholder can be an individual, a family, or a company. The extent of influence of the largest shareholder can affect the structure and operation of an AC as well as its effectiveness. Previous research on US companies indicated that a lower level of single major ownership tends to have higher audit activities, which provides an environment for a more effective AC (Pincus, Rusbarsky and Wong, 1989).

Splitting the posts of CEO and board chairman is considered to be an effective checks-and-balances arrangement to avoid CEO dominance on the board. This splitting is designed to provide a better environment for nurturing an effective AC (Collier and Gregory, 1999; Chau and Leung, 2006) and the development of better corporate governance, leading to higher firm value.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology that was used to carry out the research. It contains the research design, population of the study, data collection and data analysis techniques.

3.2 Research design

The research design for this study was a cross sectional survey. This design was concerned with finding out the relationship between the Board Audit Committee effectiveness variables and financial performance in the commercial banks in Kenya.

The design was formalized and structured with clearly stated investigative questions. The design aimed to provide a more detailed, highly accurate, and complete picture when compared to a case study.

3.3 Population of the study

The target population of interest was all registered commercial banks operating in Kenya. The banks are as listed in the banks and financial institutions directory, to be obtained from the Central Bank of Kenya (Central Bank of Kenya, 2012).

There are 43 commercial banks in Kenya. All the banks were considered for this study, of which data for five year financial periods between 2007 and 2011 was obtained for 25 banks.

3.4 Data collection

The study applied both primary and secondary data. Primary data, both quantitative and qualitative was collected through a structured questionnaire, administered to senior management representatives. The contact details of the commercial banks were obtained from the Central bank of Kenya as outlined in the banks and financial institutions directory.

Secondary data was collected from the audited financial statements of commercial banks in Kenya, and the Bank Supervision Annual Reports of the Central Bank of Kenya. The relevant secondary data included; board and BAC membership, Independent Non Executive Directors in the BAC, BAC members with financial expertise, BAC members retired in the year, BAC meetings held compared to prudential guidelines requirements, BAC attendance rate, outside directorship held by the Independent Non Executive Directors, shareholdings and ROE pertaining to financial years 2007 to 2011.

3.5 Data analysis

This study employed multiple regression analysis using panel data approach. Panel data analysis was employed because of its endowment to deal with spatial and temporal dimensions of the study – dealing with 25 banks across a period of 5 years. In addition panel data analysis has inbuilt capacity to deal with time series issues

including heteroskedasticity and autocorrelation and has the capacity to deal with issues of few data points for regression model while retaining entities' heterogeneity (Baltagi, 2005). Arellano and Bond (1991) propose using a dynamic panel data that optimally exploits the linear moment restrictions embodied in a dynamic panel model.

Pre-estimation tests including analysis of descriptive statistics of the variables were analyzed. The R^2 was observed to indicate significance of variables in the model and p-values to indicate the significance of model parameters (α , β) for each explanatory variable.

The model examining the relationship between bank performance as measured by ROE and Board Audit Committee characteristics (structure and operations) was estimated as shown in equation (1) below:

$$ROE_{it} = \alpha_i + \beta_1 BACS_{it} + \beta_2 BACO_{it} + \beta_3 CON_{it} + \varepsilon$$

Where:

ROE_{it} : - is return on equity;

α_i : - the intercept

$\beta_{1,2,3}$: - the percentage change in ROE caused by a 1% change in the explanatory variables

$BACS_{it}$: - stands for the four Board Audit Committee Structure variables;

$BACO_{it}$: - stands for the two Board Audit Committee operations variables;

CON_{it} : - stands for the two control variables; and

ε : - stands for the error term

Return on equity (ROE) refers to the earnings generated by shareholders' equity over a period of one financial year. It is a composite measure of the management team's ability to balance between profitability, asset management and financial leverage which indicate the financial health of a bank and effectiveness of management.

Board Audit Committee Structure variables used in this study included Percentage of BAC members with financial expertise - this variable is measured by dividing the number of AC members with financial expertise by the total number of AC members expressed as a percentage; Percentage of Independent Non Executive Directors (INEDs) in the BAC - this variable is measured by dividing the number of INEDs in the AC by the total number of AC members expressed as percentage; Percentage of audit committee members retired in the year - this variable is measured by dividing the number of new AC members by the total number of AC members expressed as a percentage and size of the BAC – measured by the percentage of BAC members to the entire board.

Board Audit Committee operations variables used in this study include: Percentage of BAC meetings to prudential guidelines requirements; and attendance rate - this variable is measured by summing up the attendance rate for each of the AC members and then dividing the total by the number of AC members expressed as a percentage.

The control variables used in this study include number of outside directorship held by the Independent Non Executive Directors; and the percentage of largest shareholdings to total shareholding.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter comprises analysis and results on correlations between the banks' Board Audit Committee effectiveness variables and ROE. A comprehensive discussion of results is included.

4.2 Relationship between Board Audit Committee effectiveness variables and financial performance

To study the effect of Board Audit Committee effectiveness variables on bank performance, the board audit committee effectiveness variables were coded and are interpreted as follows:

1. Structural variables:

X 1 - Percentage of BAC members to the entire board

X2 - Percentage of BAC members with financial expertise

X3 - Percentage of Independent Non Executive Directors in the BAC

X4 - Percentage of the BAC members retired in the year

2. Operational variables:

Y1 - Percentage of BAC meetings to prudential guidelines requirements

Y2 - Attendance rate as a percentage

3. Conditioning variables:

C1 - Number of outside directorship held by the Independent Non Executive Directors

C2 - Percentage of largest shareholdings to total shareholding

Using these variables, four models were formulated and applied to determine effect of structural variables, operational variables and conditioning variables on ROE.

4.2.1 Model 1: Effects of the structural variables on ROE

The model is represented by the following equation:

$$ROE_{it} = \alpha_i + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_3 X3_{it} + \beta_4 X4_{it} + \varepsilon$$

The results on running this model are as indicated in table 1 below which contains an extract of the e-views output. (Please see Appendix III for the complete e-views output for this model).

Table 1: Effects of the structural variables on ROE

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.779039	10.15316	0.273712	0.7848
X1	0.14953	0.11311	-1.321985	0.1887
X2	17.95897	7.724271	2.325005	0.0218
X3	0.08997	0.068851	1.30673	0.1938
X4	1.792353	2.537409	0.706371	0.4813

The resultant equation for this model is:

$$ROE_{it} = 2.779039 + 0.14953X1_{it} + 17.95897X2_{it} + 0.08997X3_{it} + 1.792353X4_{it} + \varepsilon$$

This model shows that the following structural variables: The percentage of BAC members to entire board, percentage of Independent Non-Executive Directors in BAC and the percentage of BAC members retired in the financial year do not affect ROE significantly at all the conventional levels of measurement.

However the percentage of BAC members with financial expertise do affect ROE significantly with a percentage change in BAC members with financial expertise positively affecting ROE by 18% at 5% level of significance.

The negative signs in model one above under the random effect category shows that there are bank specific characteristics that negatively affect ROE. This study was however not focused on identifying these characteristics. This is due to the generalization nature of quantitative studies like this one. A qualitative study is recommended to identify the bank specific characteristics that negatively affect ROE.

4.2.2 Model 2: Effects of the operation variables on ROE

The model is represented by the following equation:

$$ROE_{it} = \alpha_i + \beta_1 Y1_{it} + \beta_2 Y2_{it} + \varepsilon$$

The results on running this model are as indicated in table 2 below which contains an extract of the e-views output. (Please see Appendix IV for the complete e-views output for this model)

Table 2: Effects of the operational variables on ROE

Dependent Variable: ROE?				
Method: Pooled Least Squares				
Date: 09/04/13 Time: 20:04				
Sample: 2007 2011				
Included observations: 5				
Number of cross-sections used: 25				
Total panel (balanced) observations: 125				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-10.7016	6.7254	-1.5912	0.11
Y1	0.225231	0.0616	3.6586	0
Y2	3.80669	1.7702	2.1504	0.03

The resultant equation for this model is:

$$ROE_{it} = -10.7016 + 0.225231Y1_{it} + 3.80669Y2_{it} + \varepsilon$$

Model two above shows that all the operational variables i.e. Percentage of BAC meetings to prudential guidelines requirements and attendance rate affect ROE significantly at all the conventional levels of measurement as follows: A percentage change of the percentage of BAC meetings to prudential guidelines requirements affects ROE positively by 22.5% at 1% level of significance. A percentage change in attendance rate affects ROE positively by 380% at 5% level of significance.

4.2.3 Model 3: Combined effect of structural and operation variables on ROE

The model is represented by the following equation:

$$ROE_{it} = \alpha_i + \beta_1X1_{it} + \beta_2X2_{it} + \beta_3X3_{it} + \beta_4X4_{it} + \beta_5Y1_{it} + \beta_6Y2_{it} + \beta_7C1_{it} + \beta_8C2_{it} + \varepsilon$$

The results on running this model are as indicated in table 3 below which contains an extract of the e-views output. (Please see Appendix V for the complete e-views output for this model)

Table 3: Combined effect of structural and operational variables on ROE

Dependent Variable: ROE?				
Number of cross-sections used: 25				
Total panel (balanced) observations: 125				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-24.1222	7.2645	-3.3206	0
X1	0.221457	0.0573	-3.8668	0
X2	22.05824	4.62	4.7745	0
X3	0.203308	0.0607	3.3494	0
X4	4.063887	4.8716	-0.8342	0.41
Y1	0.178387	0.053	3.3661	0
Y2	0.366095	1.6168	-0.2264	0.82

The resultant equation for this model is:

$$ROE_{it} = -24.12216 + 0.221457X1_{it} + 22.05824X2_{it} + 0.203308X3_{it} + 4.063887X4_{it} + 0.178387Y1_{it} + 0.366095Y2_{it} + \varepsilon$$

Model 3 above shows that apart from the percentage of BAC members retired in the financial year, all the structural variables affect ROE significantly at all the conventional levels of measurement when combined with operational variables as follows: A percentage change in the number of BAC members to entire board affects ROE positively by 22% at 1% level of significance. A percentage change in the number of BAC members with financial expertise affects ROE positively by 22% at 1% level of significance. A percentage change in the percentage of Independent Non Executive Directors affects ROE positively by 20% at 1% level of significance.

In addition, the significance of operational variables changes when combined with structural variables as follows: The number of board audit committee meetings as a

percentage of prudential guidelines requirements affects ROE positively by 18% at 1% level of significance. Attendance rate becomes insignificant when the structural variables are combined with operational variables.

4.2.4 Model 4: Combined effect of structural, operation and conditioning variables on ROE

The model is represented by the following equation:

$$ROE_{it} = \alpha_i + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_3 X3_{it} + \beta_4 X4_{it} + \beta_5 Y1_{it} + \beta_6 Y2_{it} + \beta_7 C1_{it} + \beta_8 C2_{it} + \varepsilon$$

The results on running this model are as indicated in table 4 below which contains an extract of the e-views output. (Please see Appendix VI for the complete e-views output for this model)

Table 4: Combined effect of structural, operation and conditioning variables on ROE

Dependent Variable: ROE?				
Method: Pooled Least Squares				
Date: 09/04/13 Time: 20:31				
Sample: 2007 2011				
Included observations: 5				
Number of cross-sections used: 25				
Total panel (balanced) observations: 125				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-25.447	7.4275	-3.4261	0
X1	0.229075	0.0581	-3.9425	0
X2	24.3326	5.3954	4.5099	0
X3	0.201933	0.0624	3.2372	0
X4	4.046168	4.9016	-0.8255	0.41
Y1	0.185578	0.0538	3.4482	0
Y2	0.240441	1.8408	0.1306	0.9
C1	0.003159	0.0352	-0.0897	0.93
C2	0.325505	0.3355	-0.9702	0.33

The resultant equation for this model is:

$$ROE_{it} = -25.44702 + 0.229075X1_{it} + 24.3326X2_{it} + 0.201933X3_{it} + 4.046168X4_{it} + 0.185578Y1_{it} + 0.240441Y2_{it} + 0.003159C1_{it} + 0.325505C2_{it} + \varepsilon$$

Model 4 above shows how the structural and operational variables behave when the conditioning variables are added. All structural variables affect ROE significantly at all conventional levels of measurement apart from the percentage of BAC members retired in the financial year as indicated below: A percentage change in the percentage of BAC members to entire board affects ROE positively by 23% at 1% level of significance. A percentage change in the percentage of BAC members with financial expertise affects ROE positively by 24% at 1% level of significance. A percentage change in the percentage of Independent Non Executive Directors affects ROE positively by 20% at 1% level of significance. The effect of the operational variables on ROE remains almost the same as indicated by: The percentage of BAC meetings to prudential guidelines requirements affects ROE positively by 19% at 1% level of significance. This represents a slight positive change (1%) in ROE; and the effect of attendance rate on ROE remains insignificant.

4.2.5 Financial expertise

The study establishes a significant positive correlation between percentage of BAC members with financial expertise and ROE. Previous research suggests that financial competency is one of the most important qualities that an AC should possess because all of the major duties of AC members are concerned with accounting, finances and auditing issues (Xie et al., 2003; Tsui and Gul, 2003; Choi et al., 2004).

How active an AC is operating can be measured by the number of AC meetings in a year (Collier and Gregory, 1999; Choi et al., 2004). DeZoort and Salterio (2001) provided a definition of the effectiveness of AC: an effective audit committee has qualified members with the authority and resources to protect stakeholder interests by ensuring reliable financial reporting, internal controls, and risk management through its diligent oversight efforts.

4.2.6 Independent Non Executive Directors

The results reveal that the percentage of Independent Non Executive Directors in the BAC has a significant positive correlation with ROE. These results reinforce previous studies that underscore the importance of the independence of the audit committees.

Non-executive or outside directors, through their expertise and independence, can play an important role at firm level through transferring knowledge as well as at country level through building constituencies for corporate governance reform (Berglöf and Claessens, 2006).

4.2.7 Changes in the BAC membership

The findings establish that changes in the BAC membership do not affect ROE. This result contradicts theory that indicates that the changes in the BAC may have an adverse effect on performance.

The percentage of AC members retired during the year is a key variable of the structure of the AC. While AC members with a short tenure are considered a better

arrangement to enhance the independence of the AC, the extensive replacements of AC members during a year, regardless of whether it is forced or of a voluntary nature, may have an adverse effect on the continuity (Tsui and Gul, 2003) and the operations of an AC.

4.2.8 BAC meetings attendance

The results reveal that attendance rate for BAC meetings have a significant positive correlation with ROE. However, this impact changes when the structural variables are combined with operational variables. Attendance for BAC meetings is a depiction of commitment.

This study did not entail an in-depth investigation on why the significance of attendance rate on ROE diminishes when structural and operational variables are combined. Additional qualitative study to explain this observation is therefore recommended.

4.2.9 Size of BAC

The study establishes a significant positive correlation between size of the BAC and ROE. The size of the BAC has an impact on its independence especially when constituted appropriately by independent non executive directors.

These results are consistent with the results on independence attributable to presence of independent non executive directors. The results therefore imply that size is significant when the committee has proper representation by independent non executive directors.

4.2.10 Number of BAC meetings

The results indicate that the number of BAC meetings affects ROE significantly at all the conventional levels of measurement. AC members need to meet regularly to discuss the financial reporting issues of the firm, and it is generally recommended that it should meet at least four times a year (Tsui and Gul, 2003).

If an AC is not active or is dormant, its effectiveness is not guaranteed even if it is composed entirely of INEDs that are equipped with the necessary expertise (Choi et al., 2004). The number of AC meetings points to the operations of the AC and it indicates how many regular issues require discussion and decisions by the AC members.

4.2.11 Outside directorship and shareholding

The study further indicates that the number of outside directorship does not have a significant impact on the effect of the structural and operational variables impact on ROE. Existing literature contains contradictory results on the effect of outside directorship.

The average number of AC members' outside directorship impacts on the structure of the AC. The literature contains growing concerns about the costs and benefits of multiple boards served by board members in general. Core, Holthausen and Larcker (1999) found that busy directors set excessively high levels of CEO compensation, which in turn led to poor firm performance.

The study reveals that the percentage of largest shareholding to total shareholding does not have a significant impact on the effect of the structural and operational

variables impact on ROE. This could be attributable to the stringent regulatory environment for the commercial banks in Kenya that demand high standards of corporate governance hence rendering it difficult for majority shareholders to have a significant influence on BAC.

4.3 Discussion

In discussing the results of the study, both existing theory and previous studies have been considered. A comparison between the theory and previous studies was conducted as discussed below.

4.3.1 Comparison with theory

The study establishes a significant positive correlation between percentage of BAC members with financial expertise and ROE. This is consistent with the existing literature which assert, ‘the members of an AC should be of appropriate competency (Xie, Davidson and DaDalt, 2003; Choi et al., 2004). AC members with financial or accounting expertise are thought to be able to unveil any opportunistic earnings management activities more effectively (Choi et al., 2004).’

Further the study reveals that the percentage of Independent Non Executive Directors in the BAC has a significant positive correlation with ROE. Existing theory underlines the importance of independence of the AC as it leads to better checks against misappropriation of assets hence enhanced performance. The existence of INEDs in an AC enhances the independence of the committee (Tsui and Gul, 2003; Blue Ribbon Committee, 1999; Razaee et al., 2003; Zhang, Zhou and Zhou, 2007). Because an NED may have business or family relationships with the company’s controlling shareholders, an AC composed of more INEDs is perceived to be more

independent from management and the largest shareholder and is likely to be more effective. The findings establish that changes in the BAC membership do not affect ROE. This result contradicts theories that indicate that the changes in the BAC may have an adverse effect on performance. The extensive replacements of AC members during a year, regardless of whether it is forced or of a voluntary nature, may have an adverse effect on the continuity (Tsui and Gul, 2003) and the operations of an AC.

The results reveal that attendance rate for BAC meetings have a significant positive correlation with ROE. Attendance rate is an indicator of commitment. The former chair of the SEC, Arthur Levitt, pointed out the importance of an AC in a financial reporting process: Qualified, committed, independent, and tough-minded ACs represent the most reliable guardians of the public interest; nevertheless, there were stories abound of ACs' members who lacked the expertise in the basic principles of financial reporting as well as the mandate to ask probing questions (Levitt, 1998, p. 19).

The results indicate that the number of BAC meetings affects ROE significantly at all the conventional levels of measurement. A certain number of meetings are necessary because one of the major duties of an AC is to approve interim and annual reports before their publications. Every AC is recommended to hold at least four meetings each year (Collier and Gregory, 1999; Tsui and Gul, 2003; Choi et al., 2004). The study further indicates that the number of outside directorship does not have a significant impact on the effect of the structural and operational variables impact on ROE.

4.3.2 Comparison with other empirical studies

In their study, (Ferris, Jagannathan and Pritchard, 2003) found no relation between the average number of directorships held by outside directors and a firm's market-to-book ratio. The study also reveals that the percentage of largest shareholding to total shareholding does not have a significant impact on the effect of the structural and operational variables impact on ROE. In his study, (Coffee, 2005) suggested that ownership structures had a common problem in the absence of an effective checks-and-balances system. The regulatory environment with stringent corporate governance requirements provides the required checks-and-balances.

The results of this study are consistent with findings of previous local studies in Kenya. Previous local studies, (Otieno, 2011; Ombayo, 2008; Ochieng, 2011; Kibugi, 2012) established a relationship between corporate governance and financial performance of firms mostly banks in Kenya. The results are also consistent with (Matama, 2008) who studied the relationship between corporate governance and financial performance of selected commercial banks in Uganda. Though Matama's study was studying corporate governance in a more generalized manner unlike the focus on board audit committee effectiveness variables specifically; his study concluded that corporate governance predicts 34.5% of the variance in the general financial performance of commercial banks in Uganda.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter comprises summary, conclusions and recommendations based on the findings from data analysis results in chapter four of this study. The chapter has also addressed limitations of the study and suggestions for further research.

5.2 Summary

The study objective was to establish the link between the Board Audit Committee effectiveness variables, as determined by structural and operational variables of the committee, and financial performance among commercial banks in Kenya, represented by Return on Equity. The purpose of this study was to contribute to efforts made towards enhancing corporate governance in commercial banks in Kenya. The analysis of variables was based on structural and operational variables of Board Audit Committee correlated to Return on Equity as the standardized measure of financial performance. The study was motivated by the fact that the Central Bank of Kenya supervisory reports of 2010 and 2011 contain incidences of non compliance with the Banking Act and CBK Prudential Guidelines which serve to enhance prudent corporate governance safeguarding stakeholder's interest. The research entailed a study of 25 commercial banks in Kenya over the period 2007 – 2011. The main findings of the study are as follows: (1) a significant positive correlation between percentage of BAC members with financial expertise and ROE; (2) the percentage of Independent Non

Executive Directors in the BAC has a significant positive correlation with ROE; (3) changes in the BAC membership do not affect ROE; (4) the attendance rate for BAC meetings has a significant positive correlation with ROE; (5) there exists a significant positive correlation between size of the BAC and ROE; and (6) the number of BAC meetings in a financial year has a significant effect on ROE. Additionally, outside directorship and percentage of majority shareholders do not have a significant effect on the board audit committee's effectiveness variables impact on ROE. The results of this study indicate that there is no variation among locally owned, foreign owned and government owned banks.

5.3 Conclusion

This study used annual cross section data for analysis to examine effect of board audit committee effectiveness variables on financial performance among commercial banks in Kenya. The study found evidence that, board audit committee effectiveness variables specifically BAC members with financial expertise, Independent Non Executive Directors in the BAC, attendance rate for BAC meetings, size of the BAC and number of BAC meetings in a financial year have a significant positive correlation with financial performance of commercial banks in Kenya. The results, however reveals that changes in the BAC membership, outside directorship held by BAC members and percentage of majority shareholders do not affect have a significant effect on financial performance of the banks. The results of this study indicate that there is no variation among locally owned, foreign owned and government owned banks. This could be attributable to the regulatory environment where there are standard minimum expectations from all commercial banks in Kenya regardless of classification.

This study reinforces previous efforts emphasizing the criticality of good and sound corporate governance practices among commercial banks. In concurrence, (Haron, Jantan and Pheng, 2005) indicated that audit committee helps determine indicators of problems and address these problems, mitigate possible damage and enhance shareholder value. For the banks to play the important role in the developing-economy financial systems as engines of growth, sources of finance for majority of firms, enable the payment system and as the main depository for the economy's savings; there is need to have effective board audit committees in addition to other corporate governance mechanisms. More specifically the BAC members need to be competent, commitment and independent as evidenced by the findings of this study.

5.4 Recommendations

From the empirical evidence and conclusions drawn from the analysis of the effect of board audit committee effectiveness variables on ROE, the following policy implications were drawn. Firstly, commercial banks in Kenya and elsewhere should pay attention to board audit committee effectiveness variables particularly emphasizing on competence, commitment and independence. This is important especially appreciating the watchdog role that the committee plays in checking management practice and conduct. An effective audit committee will help curtail incidences of non compliance to the set regulations and guidelines; and by extension enhance the financial performance of the banks.

Secondly, the regulators and policy makers should consider applying the findings of this study to improve the regulatory and policy framework by laying emphasis on the competence, commitment and independence of the audit committees. Thirdly, researchers and academics should consider results of this study in building theory and advancing the frontiers of knowledge.

5.5 Limitations of the study

The key limitation of this study is the use of a quantitative approach. The study is not supplemented by in-depth case studies that lead to generalization without investigating specific factors typical of a qualitative study.

The negative sign in the analysis model under the random effect category shows that there are bank specific characteristics that negatively affect ROE. This study was however not focused on identifying these characteristics.

5.6 Suggestions for further research

The study recommends a qualitative study to identify the bank audit committee specific characteristics that negatively affect ROE. In undertaking the study, it is recommended that it take the nature of an in-depth case study.

It is further suggested that a similar study be conducted in a country with a different regulatory environment. This will guide the determination of the extent to which the existing regulatory framework impacts on the study results.

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APPENDIX I: RESEARCH QUESTIONNAIRE

This questionnaire is designed to collect information on structural and operational variables determining the effectiveness of the Board Audit Committees in Commercial Banks in Kenya. The information obtained will only be used for academic purposes and shall be treated in confidence.

Thank you for your time.

SECTION A: RESPONDENT'S PROFILE

1. Name of the Bank:

2. Designation:

3. Gender: Male () Female ()

4. Years of service with the Bank:

0 – 5 () 16 – 20 ()

6 – 10 () 21 – 25 ()

11 – 15 () Over 25 ()

5. Bank classification:

Locally owned ()

Foreign owned ()

Government and State Corporations major
shareholders ()

SECTION B:**BOARD AUDIT COMMITTEE STRUCTURAL AND OPERATIONAL FACTORS**

	Board Audit Committee (BAC) structural and operational factors.	Financial year				
		2007	2008	2009	2010	2011
1	How many members did the BAC comprise of in each of the indicated financial years?					
2	How many of the BAC members possessed financial expertise in each of the financial years?					
3	How many Independent Non Executive Directors (INEDs) were in the BAC in each of the financial years?					
4	How many members of the BAC were retired in each of the financial years?					
5	Please indicate the total number of outside directorship held by members of the BAC in each of the financial years.					
6	Did the BAC have documented terms of reference (TOR) in each of the financial years? <i>(Yes/No)</i>					
7	How many major topics were					

	contained in the TORs in each of the financial years?					
8	How many meetings did the BAC hold in each of the financial years?					
9	What was the BAC members' attendance rate in each of the financial years? (<i>Measure by summing up attendance rate for each of the BAC members and then dividing the total by the number of BAC members</i>)					
10	What was the ownership percentage of the largest shareholder in each of the financial years?					
11	Did the Chief Executive Officer (CEO) serve as the Board Chairman in any of the financial years? (<i>Yes/No</i>)					
12	Financial performance – What was the Return on Equity (ROE) in each of the financial years?					

Thank you for your time and contribution.

APPENDIX II: LIST OF COMMERCIAL BANKS IN KENYA

1. African Banking Corporation Ltd
2. Bank of Africa Kenya Ltd
3. Bank of Baroda (K) Ltd
4. Bank of India
5. Barclays Bank of Kenya Ltd
6. CFC Stanbic Bank Ltd
7. Charterhouse Bank Ltd
8. Chase Bank (K) 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 Kenya Ltd
16. Dubai Bank Kenya Ltd
17. Ecobank Kenya Ltd
18. Equatorial Commercial Bank Ltd
19. Equity Bank Ltd
20. Family Bank Ltd
21. Fidelity Commercial Bank Ltd
22. Fina Bank Ltd
23. First Community Bank Ltd
24. Giro Commercial Bank Ltd

25. Guardian Bank Ltd
26. Gulf African Bank Ltd
27. Habib Bank A.G. Zurich
28. Habib Bank Ltd
29. Imperial Bank Ltd
30. I & M Bank Ltd
31. Jamii Bora Bank Ltd
32. Kenya Commercial Bank Ltd
33. K-Rep 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 Kenya Ltd
41. Trans-National Bank Ltd
42. UBA Kenya Bank Ltd
43. Victoria Commercial Bank Ltd

Source: Central Bank of Kenya (December, 2012)

APPENDIX III: MODEL 1 – EFFECTS OF THE STRUCTURAL VARIABLES ON ROE

Dependent Variable: ROE?				
Sample: 2007 2011				
Included observations: 5				
Number of cross-sections used: 25				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.77904	10.1532	0.273712	0.7848
X1	0.14953	0.11311	-1.321985	0.1887
X2	17.959	7.72427	2.325005	0.0218
X3	0.08997	0.06885	1.30673	0.1938
X4	1.79235	2.53741	0.706371	0.4813
Random Effects				
_A--C	14.9292			
_B--C	7.05503			
_C--C	-6.5277			
_D--C	0.13987			
_E--C	-0.1762			
_F--C	-1.7947			
_G--C	6.87184			
_H--C	-9.6736			
_I--C	-0.1608			
_J--C	0.27191			
_K--C	-2.3223			
_L--C	6.89908			
_M--C	4.44632			
_N--C	4.59051			
_O--C	-0.9385			
_P--C	13.8502			
_Q--C	-7.5048			
_R--C	-8.019			
_S--C	-13.634			
_T--C	3.01823			
_U--C	-3.9199			
_V--C	-10.142			
_W--C	2.57681			
_X--C	-20.72			
_Y--C	20.8842			
R-squared	0.86582	Mean dependent var	16.43184	
Adjusted R-squared	0.86135	S.D. dependent var	12.72848	
Durbin-Watson stat	1.75005			

**APPENDIX IV: MODEL 2 – EFFECTS OF THE OPERATIONAL
VARIABLES ON ROE**

Dependent Variable: ROE?				
Method: Pooled Least Squares				
Date: 09/04/13 Time: 20:04				
Sample: 2007 2011				
Included observations: 5				
Number of cross-sections used: 25				
Total panel (balanced) observations: 125				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-10.70160	6.725406	-1.591220	0.1141
Y1	0.225231	0.061562	3.658598	0.0004
Y2	3.806690	1.770225	2.150399	0.0335
R-squared	0.125622	Mean dependent var		16.43184
Adjusted R-squared	0.111288	S.D. dependent var		12.72848
S.E. of regression	11.99934	Sum squared resid		17566.06
F-statistic	8.763846	Durbin-Watson stat		0.272415
Prob(F-statistic)	0.000278			

APPENDIX V: MODEL 3 – COMBINED EFFECTS OF THE STRUCTURAL AND OPERATIONAL VARIABLES ON ROE

Dependent Variable: ROE?				
Number of cross-sections used: 25				
Total panel (balanced) observations: 125				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-24.12216	7.264480	-3.320562	0.0012
X1	0.221457	0.057272	-3.866760	0.0002
X2	22.05824	4.620041	4.774469	0.0000
X3	0.203308	0.060700	3.349375	0.0011
X4	4.063887	4.871576	-0.834204	0.4059
Y1	0.178387	0.052995	3.366130	0.0010
Y2	0.366095	1.616772	-0.226436	0.8213
R-squared	0.451435	Mean dependent var		16.43184
Adjusted R-squared	0.423542	S.D. dependent var		12.72848
S.E. of regression	9.664078	Sum squared resid		11020.54
F-statistic	16.18446	Durbin-Watson stat		0.474930
Prob(F-statistic)	0.000000			

**APPENDIX VI: MODEL 4 – COMBINED EFFECTS OF THE
STRUCTURAL, OPERATIONAL AND CONDITIONING
VARIABLES ON ROE**

Dependent Variable: ROE?				
Method: Pooled Least Squares				
Date: 09/04/13 Time: 20:31				
Sample: 2007 2011				
Included observations: 5				
Number of cross-sections used: 25				
Total panel (balanced) observations: 125				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-25.44702	7.427457	-3.426074	0.0008
X1	0.229075	0.058105	-3.942461	0.0001
X2	24.33260	5.395387	4.509889	0.0000
X3	0.201933	0.062379	3.237186	0.0016
X4	4.046168	4.901573	-0.825483	0.4108
Y1	0.185578	0.053818	3.448230	0.0008
Y2	0.240441	1.840774	0.130620	0.8963
C1	0.003159	0.035194	-0.089746	0.9286
C2	0.325505	0.335497	-0.970216	0.3340
R-squared	0.455851	Mean dependent var		16.43184
Adjusted R-squared	0.418323	S.D. dependent var		12.72848
S.E. of regression	9.707724	Sum squared resid		10931.83
F-statistic	12.14711	Durbin-Watson stat		0.489450
Prob(F-statistic)	0.000000			