

**INTERNAL CONTROLS AND FINANCIAL PERFORMANCE OF COMMERCIAL
BANKS IN KENYA**


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DECLARATION

This thesis is my original work and has not been submitted for any award in any other university.

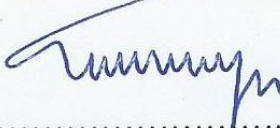
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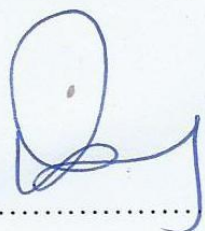
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DEDICATION

This thesis is dedicated to my parents. For their endless love, support and encouragement all through my studies.

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ABBREVIATIONS AND ACRONYMS

AAER	Accounting and Auditing Enforcements Release
AfDB	African Development Bank
FLSTAP	Financial and Legal Sector Technical Assistance Project
GoK	Government of Kenya
ICS	Internal Control System
ICT	Information and Communication Technology
NALD	National Association of Corporations
NGO	Non-Governmental Organization
NSSF	National Social Security Fund
PwC	PriceWaterhouseCoppers
RMC	Regional Member Country
SEC	Securities and Exchange Commission
SIC	Standard Industrial Classification

OPERATIONAL DEFINITION OF TERMS

Financial Performance: A subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. The financial performance will be measured in terms of return on assets.

Internal Controls: Internal controls are measures that organizations institute with the aim of ensuring that the objectives, goals, and mission of the organization are met. The main components of internal control are; communication, assessing and managing risk, control environment, control activities and monitoring.

Monitoring: Assessing the quality of the internal control structure over time. Since internal controls are processes, it is usually accepted that they need to be adequately monitored in order to assess the quality and the effectiveness of the system's performance over time.

Risk Assessment: Assessment of factors that affect possibility of objectives of the organization not being achieved. It refers to the identification and analysis of relevant risks associated with achieving the objectives of the organization.

Control Activities: Control activities refer to policies, procedures, and mechanisms put in place to ensure directives of the management are properly carried out.

Control Environment: Actions, policies, values, and management styles that influence and set the tone of a firm's day-to-day activities

ABSTRACT

In the recent past there has been failure of some of the largest commercial banks in the Kenya. This trend puts into question the ability of the internal control systems and the Central Bank of Kenya prudential guidelines to steer the commercial banks stability and performance. However, the recent failures have put pressure on the industry regulators and players to rethink how best the institutions can align their internal control systems and compliance as tools of ensuring stability and positive performance. The study sought to assess the effects of internal controls on financial performance of commercial banks in Kenya. Specifically, the study assessed the effect of the control environment, risk assessment, information and communication, control activities and monitoring on the performance of commercial banks in Kenya. Both primary and secondary data was collected. Primary data was for Questionnaire feedback while secondary data was extracted from audited financial reports of all the 43 commercial banks. The research philosophy of the study is positivism. The study used a descriptive research design with census methods being used. The study targeted all the 43 commercial banks as unit of analysis. The unit of observation in the commercial banks was the senior operations manager, senior risk manager and senior internal auditor per each bank. The study involved a census of 129 respondents. Qualitative data was analyzed using content analysis with themes being developed as per the responses obtained. Using SPSS, quantitative data was analyzed and findings presented and organized in tables for easy understanding and this was inline with the specific objectives. A multiple linear regression was used to determine the extent to which each internal control affect financial performance among commercial banks in Kenya. The study findings established a positive and significant relationship between control environment and financial performance of the commercial banks. Findings also showed a positive and significant relationship between risk assessment and financial performance of the commercial banks. There is also a positive and significant relationship between information and communication systems and the level of the banks' performance. The study also established a significant positive relationship between control activities and financial performance of commercial banks as well as a positive and significant relationship between monitoring strategies and financial performance of the commercial banks in Kenya. The CBK prudential regulations indicated a significant moderating effect on the relationship between internal controls and financial performance of the commercial banks. The study therefore recommends that there is need therefore for the banks to ensure suitable environment where internal controls are supported for the improved performance of the banks. There is need also for proper checks and balances in all financial transactions in the banks. The banks' management should examine the level of employee integrity in allocating them responsibilities especially where employees are to deal with confidential information involving the banks' vital documents. The banks should regularly check on their operations and the policies to deal with threats and examine whether these meets all the banks' requirements to safeguard commercial banks from losses. The CBK should as well provide more training to the commercial banks' management on the effective monitoring strategies and policies that they should apply to ensure increased profitability of the banks.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Internal controls have become of paramount importance today in Kenyan banks. The reason being that the control systems in any organization are a pillar of an efficient accounting system (Wanemba, 2010). The increasing volatility in global markets and need for enhanced shareholder returns has motivated the management of firms to foster the internal control mechanisms as an element of enhancing the competitive edge of firms (Rittenberg&Schwieger, 2005). This is particularly important for banks as weak internal control system stands as one of the major cause of dismal performance in banks mainly due to undetected frauds (Etuk, 2011). From a management point of view there is need to ensure that internal control systems are put in place in order to reduce the occurrence of fraud. Internal control is a dynamic integral process that is adapting continuously to the changes facing modern banking industry (Wielstra, 2014).

Within every financial institution there is a need to provide products and services at an equitable price that ensures cost efficiency in the production service. In Kenya, commercial banks failures and widespread dip in revenues over the past two decades have been due to ineffective internal control within the formal business sectors (Nyambura, 2013). Internal control, which assures the stability of every organization, therefore, has gained importance today (Rezaee, 2002). This is because the control systems in place are a pillar of an efficient accounting system as well as the achievement of organizational goals.

Most organizations are continuously realigning their internal policies in order to enhance their internal control systems. The internal control mechanism of organizations is key to fostering the efficiency and returns of an organization (Kantzos & Chondraki, 2006). The internal control of an

organization is composed of the control environment, the risk assessment, the control activities, the information communication and monitoring (Carmichael, 1996). According to Fadzil et. al, (2005) an effective internal control system ensures the attainment of organization performance. This is ensured through regular review of the financial information, ensuring safeguarding of the firm assets, compliance with regulatory guidelines and ensuring effectiveness in the management activities.

In his study Mawanda, (2008) states that “there is a general perception that institution and enforcement of proper internal control systems will always lead to improved financial performance”. It is also a general belief that properly instituted systems of internal control improve the reporting process and also give rise to reliable reports which enhances the accountability function of management of an entity. Preparing reliable financial information is a key responsibility of the management of every public company. The ability to effectively manage the firm’s business requires access to timely and accurate information.

According to Wanjohi (2013) the measurement and evaluation of performance is central to control, and addresses three questions namely; what happened, why it happened and what to do about it. Financial performance provides short term feedback to the control systems as they monitor the implementation of strategic objectives by checking the organization’s position, communicating the position, confirming priorities and compelling progress. It can therefore be construed that internal controls are the means while financial performance is the end.

1.1.1 Measures of Financial Performance

According to Dixon et. al, (1990) the best financial performance measures are those that enable the firm to direct its operations towards the attainment of the organizations strategic objectives.

Kotey, Reid and Ashelby (2002) posit that performance can be measured using subjective or objective criteria; however subjective measures are difficult to adopt in small firms owing to the strain in collecting data and the reliability of the available financial information.

Whittington and Kurt (2001) indicated that objective measures of performance included financial metrics such as profit growth, revenue, and the return on capital employed. Further indicators include the market value added (MVA) measure which measures the firm value based on the shareholders holding against the total amount of investments (John & Morris, 2011). This ranking is based on some traditional aspects of financial performance including: total returns, sales growth, profit growth, net margin, and return on equity

Dwivedi (2002) however, mentions other financial measures to include value of long-term investment, financial soundness, and use of corporate assets. John and Morris (2011) mentions accounting based performance using three indicators: return on assets (ROA), return on equity (ROE), and return on sales (ROS). Each measure is calculated by dividing net income by total assets, total common equity, and total net sales, respectively.

1.1.1 Internal Control Systems Framework

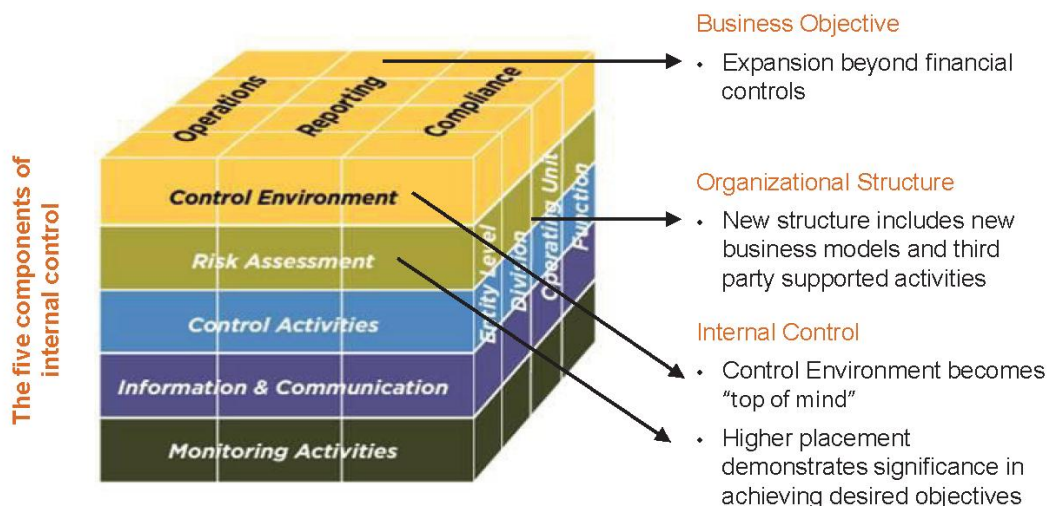


Figure 1.1: Internal Control Framework Model

Source (COSO, 2013)

Internal control framework as illustrated in figure 1.1 above refers to the whole system of controls, both financial and non-financial, established by the management in order to carry on the business of the enterprise in an orderly and efficient manner (Okozie, 1999). Rezaee (2002) adds that through internal control systems, commercial banks achieve their financial performance targets, minimize or prevent loss of resources, enable the production of reliable financial reports and ensure compliance with laws and regulations.

As shown in figure 1.1, a direct relationship exists between objectives, which are what an entity strives to achieve, components, which represent what is required to achieve the objectives, and the organizational structure of the entity (the operating units, legal entities, and other). The relationship can be depicted in the form of a cube. The three categories of objectives; operations, reporting, and compliance are represented by the columns. The five components are represented by the rows. An entity's organizational structure is represented by the third dimension.

The Internal Control update released in May 2013 by the CBK (2012) emphasizes the importance of internal control to mitigating risk and achieving business objectives. Currently, many companies enjoy mature, tested internal control systems related to external financial reporting that will not require significant modification or enhancement under the updated Framework. The goal, then, is to apply the Framework to new challenges. That is, if organizations have been successful in having internal control over financial reporting taken seriously, why not consider how the same concepts can be applied to other major business objectives. The new Framework gives management an opportunity to adopt a principles-based approach to establishing, maintaining, and evaluating internal control to address the specific risks

of greatest concern to the organization. It also provides them with an opportunity to apply a consistent, company-wide approach to internal control, embedding accountability and responsibility throughout the enterprise to reduce the likelihood of risks interfering with business objectives.

According to Liu (2005) and Rittenberg et al. (2005), under the current operations of organizations in general, the importance of internal control can be divided into six major categories; detecting error and fraudulence, decreasing illegal conduct, improving the competence of the business entity, improving the quality of financial data, helping to create the business infrastructure, and decreasing auditors' fee. According to Stratton (2007), recent developments in financial accounting systems have increased the value to the management of objective methodologies for the evaluation of internal control systems. Firm managers are therefore required to assure the accuracy of these systems. Stratton (2007) also adds that the process of evaluation of the internal control system by both management and external auditors is judgmental in nature.

According to Price (2005), the accountability and corporate governance practices by firms are geared towards the protection of the shareholders interest. An effective internal control mechanism is able to foster the earnings and performance of a firm by reducing the level of frauds and losses. Sarens and De Beelde (2006) posit that setting up checks and balances within the organization enables the management to minimize inherent losses and wastage of resources. In general firms with poor internal control systems are more prone to low income due to irregularities and errors. According to Hayes et al. (2005), internal control comprises five components; the control environment, the entity's risk assessment process, the information and communication systems, control activities and the monitoring of controls.

1.1.3 Elements of Internal Control Systems

An entity's system of internal control consists of policies and procedures designed to provide management with reasonable assurance that the company achieves its objectives and goals including: Reliability of financial reporting, Compliance with applicable laws and regulations and Effectiveness and efficiency of operations.

1.1.3.1 Control Environment

In internal control, the control environment sets the tone of the organization by influencing the control consciousness of its people (Whittington and Pany, 2001). The control environment is the central component of internal control system. It is made up of aspects such as ethical values, the integrity of personnel tasked with formulating, setting up and administering the controls, the directors, audit committees and the organization structure. The control environment is highly dependent on the effectiveness of the management and the board of directors. The control environment influence the consciousness of personnel (Aldridge and Colbert, 1994). It reflects the attitude and policies of management in regard to the importance of internal controls in banks; performance. Furthermore the control environment influences the history and culture of the organization; thus it sets the supportive attitude towards internal control and management.

Cases of major loss within banks reflect management's inattention to and laxity in the control culture of the banking institution. Further losses are attributable to laxity by the directors and senior management. These cases also reflect a lack of appropriate incentives for management to carry out strong line supervision and maintain a high level of control consciousness within the banking sector. It is the responsibility of the board of directors and senior management to emphasis the importance of internal control through their actions and words. This includes the ethical values that management displays in their business dealings, both inside and outside the

organization. The words, attitudes and actions of the board of directors and senior management affect the integrity, ethics and other aspects of the bank's control culture (Basle, 1998)

1.1.3.2 Risk Assessment

Risk assessment refers to the assessment of factors that may have an inherent possibility of affecting the attainment of the organization objectives. The risk assessment process enables the organization to actively analyze all the relevant risk facing the firm (Karagiorgos et al., 2009). Within most organizations the management is mandated with the responsibility of ensuring that only acceptable risk face the firm. It is the managements responsibility to design internal control systems that will ensure efficiency and effectiveness is ensured. Furthermore the internal control system ensures reliability on the financial reporting of the institution in line with regulatory and compliance requirements. This is ensured through periodic revier and evaluation of the control systems.

Many banks that have suffered major losses neglected to recognize and assess the risks of new products and activities, or update their risk assessments when significant changes occurred in the environment or business conditions. Majority of the recent cases highlight the fact that control systems that function well for traditional or simple products are unable to handle more sophisticated or complex products. Banks are in the business of risk-taking ((Karagiorgos et al., 2009). Banking is a business mostly associated with risk because of its large exposure to uncertainty and huge considerations. Risk assessment is one of the most important practices to be used especially in banks, for getting assurance about the reliability of the operations and procedures being followed. In today's dynamic environment, all banks are exposed to a large number of risks such as credit risk, liquidity risk, foreign exchange risk, market risk and interest rate risk, among others which may create some source of threat for a bank's survival and success.

Due to such exposure to various risks, efficient risk management is required. Managing risk is one of the basic tasks to be done, once it has been identified and known. The risk and return are directly related to each other, which means that increasing one will subsequently increase the other and vice versa (Basle, 1998).

Effective risk management leads to more balanced trade-off between risk and reward, to realize a better position in the future (Fatemi & Fooladi, 2006). It is also realized recently that Risk assessment is essentially more important to be carried upon in the financial sector than any other part of the economy. It makes more sense when it is known that the main purpose of the financial institutions is to maximize revenues and offer the maximum value to the shareholders by facilitating them with a variety of financial services especially by administering risks (Al-Tamimi & Al-Mazrooei, 2007). The prime reason to adopt risk assessment practices is to avoid the probable failure in future. But, in realistic terms, risk assessment is clearly not free of cost. In fact, it is expensive in both resources and in institutional disruption. But the cost of delaying avoiding proper risk management can lead to some adverse results, like failure of a bank and possibly failure of a banking system.

1.1.3.3 Information and Communication System

According to Aldridge and Colbert (1994), internal control requires that all pertinent information be identified, captured, and communicated in a form and time frame that enable people to carry out their financial reporting responsibilities. Effective communications should occur in a broad sense with information flowing down, across, and up within all the sections of the organization (Theofanis et al., 2011). Recent literature on internal control system frameworks has raised some concerns on information and communication as one of the internal control system components because of their importance in influencing the working relationship within the organization at all levels (Amudo

&Inanga, 2009). Hence, such information must be communicated throughout the entire organization in order to permit personnel to carry out their responsibilities with regard to objective achievement.

Some losses in banks occur because relevant personnel are not aware of or do not understand the bank's policies. In several instances, information about inappropriate activities that should have been reported upward through organizational levels is not communicated to the board of directors or senior management until the problems became severe. In other instances, information in management reports is not complete or accurate, creating a falsely favorable impression of a business situation. Adequate information and effective communication are essential to the proper functioning of a system of internal control. From the bank's perspective, in order for information to be useful, it must be relevant, reliable, timely, accessible, and provided in a consistent format. Information includes internal financial, operational and compliance data, as well as external market information about events and conditions that are relevant to decision making. Internal information is part of a record-keeping process that should include established procedures for record retention(Theofanis et al., 2011).

1.1.3.4 Control Activities

Control activities refer to policies, procedures, and mechanisms put in place to ensure directives of the management are properly carried out (Aikins, 2011; Rezaee et al., 2001). Appropriate and accurate documentation of policies and procedural guidelines helps to determine how the control activities are to be executed. It also provides adequate information for auditors' examination of the overall adequacy of control design over financial management practices (Aikins, 2011). These control activities ensure that all necessary actions should be taken with the aim to address risks so that organizational objectives are achieved. According to Rezaee et al. (2001), internal control activities occur throughout the organization. They include a range of activities like; approvals,

authorizations, verifications, reconciliations, reviews of operating performance, security of asset and segregation of duties. Most of them are made possible through the help of the internal audit function.

Banks' department or division level management receives and reviews standard performance and exception reports on a daily, weekly or monthly basis. Functional reviews occur more frequently than top-level reviews and usually are more detailed. For instance, a manager of commercial lending may review weekly reports on delinquencies, payments received, and interest income earned on the portfolio, while the senior credit officer may review similar reports on a monthly basis and in a more summarized form that includes all lending areas. As with the top-level review, the questions that are generated as a result of reviewing the reports and the responses to those questions represent the control activity. Control activities are most effective when they are viewed by management and all other personnel as an integral part of, rather than an addition to, the daily activities of the bank (Rezaee et al., 2001).

When controls are viewed as an addition to the day-to-day activities, they are often seen as less important and may not be performed in situations where individuals feel pressured to complete activities in a limited amount of time. In addition, controls that are an integral part of the daily activities enable quick responses to changing conditions and avoid unnecessary costs. As part of fostering the appropriate control culture within the bank, senior management should ensure that adequate control activities are an integral part of the daily functions of all relevant personnel. It is not sufficient for senior management to simply establish appropriate policies and procedures for the various activities and divisions of the bank. They must regularly ensure that all areas of the bank are in compliance with such policies and procedures and also determine that existing policies and procedures remain adequate. This is usually a major role of the internal audit

function (Basle, 1998)

1.1.3.5 Monitoring

Monitoring refers to the process of assessing the quality of the internal control structure over time. Since internal controls are processes, it is usually accepted that they need to be adequately monitored in order to assess the quality and the effectiveness of the system's performance over time. By monitoring, the organization gets provided with assurance that the findings of audits and other reviews are promptly determined (Theofanis et al, 2011; Rezaee et al., 2001). Amudo and Inanga (2009) add that monitoring of operations ensures effective functioning of internal controls system. It's through monitoring that an organization determines whether or not its policies and procedures designed and implemented by management are being carried out effectively by employees.

According to Bowrin (2004), monitoring can be achieved by regularly supervising and managing activities like monitoring of customer complaints and feedback and audits conducted periodically by internal auditors. Internal auditors can investigate and appraise internal control structure and the efficiency with which the various functions are performing their assigned duties. This way, they can bring a systematic and disciplined approach for the evaluation and improvement of risk management activities and good governance process by examining of the internal controls and evaluating how adequate and effective the controls are. Monitoring ensures that the findings of audits and other reviews are promptly resolved (Rezaee et al., 2001).

In many cases, audits are not sufficiently rigorous to identify and report the control weaknesses associated with problem banks. In other cases, even though auditors reported problems, no mechanism is in place to ensure that management correct the deficiencies. The internal control

framework underlying this guidance is based on practices currently in place at many major banks, securities firms, and non-financial companies, and their auditors. Moreover, this evaluation framework is consistent with the increased emphasis of banking supervisors on the review of a banking organization's risk management and internal control processes. It is important to emphasize that it is the responsibility of a bank's board of directors and senior management to ensure that adequate internal controls are in place at the bank and to foster an environment where individuals understand and meet their responsibilities in this area. In turn, it is the responsibility of banking supervisors to assess the commitment of a bank's board of directors and management to the internal control process (Basle, 1998)

1.1.4 The Financial Performance of Commercial Banks in Kenya

The performance of commercial banks is portrayed by the levels of asset base, revenue growth, and the level of customer satisfaction. (Kloot, 1999; Adhiambo&Memba, 2012). According to Central Bank of Kenya (2014) Supervision Report as of December 2014, there are 43 commercial banks in Kenya. The banking structure in Kenya is generally oligopolistic with less than 10 commercial banks controlling 75% of the market share. This has created intense competition for revenue. Further, commercial banks have a high-cost structure with operational costs averaging about 56% of their revenue per annum (CBK, 2014).

Commercial banks are adopting new strategies to increase profitability and reduce the operating costs. One of the measures is having effective internal control systems. According to a survey by KPMG (2012), internal controls provide appropriate strategies of minimizing operational costs for maximum profits. The systems support employees in the achievement of the banks' financial goals by responding to significant business, operational, financial, compliance and other risks. The controls are designed in a way that safeguards the banks from fraud and losses and ensures a secure

liability management (Ekut, 2011).

Commercial banks` performance in Kenya over the last decade has not been impressive. Several reforms have been implemented in the financial sector since the 1990s aiming at increasing performance, stability, productivity, financial access and efficiency. However, bank profitability on average has been erratic. In the period 2008-2013, increases in Profits before Tax (PBT) has been below 20% on average terms. In the year 2013 PBT of the Kenyan commercial banks increased by 16.6% as compared to the year 2012 when PBT increased by 20.6% (Onuonga, 2014). In the year 2009, PBT of the Kenyan banks increased by 12.9% as compared to the year 2008 when PBT increased by 13.4%.The year 2010 is the only year that PBT increased by around 52 percent. This trend is not impressive given that a lot of reforms have been done to enhance the performance of the banking sector. Because of erratic performance, commercial banks in Kenya have invested in internal control systems. It's, therefore, imperative to relate internal control systems and performance of commercial banks.

1.1.5 Relationship between Internal Controls and Financial Performance

Internal control systems including internal audits are intended primarily to enhance the reliability of financial performance, either directly or indirectly by increasing accountability among information providers in an organization (Jensen, 2003). Internal control therefore has a much broader purpose such that the organization level of control problems associated with lower revenues, which explore links between disclosure of material weakness and fraud, earnings management or restatements (Doyle et al., 2005).

Internal controls provide an independent appraisal of the quality of managerial performance in carrying out assigned responsibilities for better performance (Beeler et al., 1999). According to

Fadzil et al. (2005), an effective internal control system unequivocally correlates with organizational success in meeting its revenue target level. Effective internal control overperformance involves; regular a review of the reliability and integrity of financial and operating information, a review of the controls employed to safeguard assets, an assessment of employees' compliance with management policies, procedures and applicable laws and regulations, an evaluation of the efficiency and effectiveness with which management achieves its organizational objectives (Ittner et al., 2003).

Most organizations no longer set up internal control system as a regulatory requirement but also because it helps in ensuring that all management activities are appropriately carried out (Kenyon and Tilton, 2006). Further, organizations are making it a point of duty to train, educate, and sensitize their employees on how to use these internal control systems since its effectiveness depends on the competency and dependability of the people using it. All these control actions ensure that any risks that may affect the company's ability to achieve its goals are appropriately avoided and should occur at all levels and in all functions of the organization.

Further, there are three major classifications of internal controls; preventive, detective, and corrective (Singleton, 2006). Preventive controls predict potential problems before they occur, make adjustments, and prevent error, omission or malicious act from occurring. The detective controls are used to detect and report the occurrence of an omission, error or malicious act. Finally, the corrective controls help in ensuring that the impact of a threat is minimized, identify the cause of a problem as well as the correct errors arising from the problem. Corrective controls correct problems discovered by detective controls and modify the processing system to minimize the future occurrence of the problem.

Risk management encompasses a set of resources, behaviors, procedures and actions that is adapted to the characteristics of each organization, and that enables managers to keep risks at an acceptable level for the company. Risk management and internal control systems complement each other in controlling the company's activities. Its aim is to identify and analyze the company's main risks. Risks that exceed the acceptable levels set by the organization are dealt with subject to plans of action. For some time now, risk management in general and internal control more specifically; have been considered as fundamental elements of organizational governance. As a consequence, risk management is beginning to be perceived as a new means of strategic business management, linking business strategy to daily risks and then optimizing those risks in order to realize value (Saarens & de Beelde 2006). In the United States for instance in 1992, a group of companies sponsored the formation of the thread way commission to study and report on how to improve the effectiveness of internal control systems, and more recently in 2002 the US congress passed the Sarbanes-Oxley act giving new directives on how companies are to report on the effectiveness or otherwise of their internal control systems.

1.1.6 CBK Prudential Guidelines

The Banking sector is so sensitive and sacrosanct to the economy in term of stability and growth that it must not be let loose by the Government. Regulations and supervisions have therefore become imperative not only in the enforcement of rule and regulation but also judgment concerning the soundness of bank asset, its capital adequacy, and management (CBK, 2013). This regulatory structure creates transparency between banking institutions and the individuals and corporations with whom they conduct business with (Oloo, 2010). The goal of regulatory reforms and guidelines is to help banks and other financial institutions become stronger players and in a manner that will ensure longevity and hence higher returns to the shareholders over time

as well as greater impacts on the Kenyan economy (Ndung'u, 2010).

Prudential guidelines are issued by CBK to reduce the level of risk to which bank creditors are exposed whereas Bank supervision entails not only enforcement of rules and regulations but also judgment concerning the soundness of bank assets, its capital adequacy and management. It's, therefore, imperative that an effective supervision is expected to lead to a healthy banking industry that possesses the power to propel the economic growth (Soludo, 2007). The reform programme is also expected to engender a diversified, strong and reliable banking sector in the country. Studies have shown that the objectives of financial sector reforms are broadly the same in most countries of Sub-Saharan Africa (Balogun, 2007).

Oluyemi (2006) studied the effect of banking sector reforms on corporate governance and concluded that to check abuses in the emerging consolidated banking system, Institutionalization of good corporate governance practice is both necessary and desirable. Pasiouras, Tanna, and Zopounidis (2009) assessed the impact of regulatory conditions on profit and cost efficiency of banks using similar data. The authors found that regulations that improve supervisory power and market discipline tended to have a positive impact on both of the measures.

1.2 Statement of the Problem

Despite the guidelines set out by Central Bank of Kenya in accordance with the Banking Act Cap, there has been numerous cases of bank failures in performance due to fraud and lack of elaborate internal controls as well as compliance with internal and external regulations within the industry (FLSTAP, 2011). For instance within a period of nine months, the Central Bank of Kenya put three banking institutions under receivership. Imperial bank of Kenya the 19th largest

bank in Kenya was put under receivership due to what the regulator termed as inappropriate banking practices (Kuo, 2015). In another case the Dubai Bank of Kenya was put under receivership for flouting banking guidelines for a spate of years. Chase bank was later on put under receivership in what the regulator termed as unsafe financial conditions thus; leaving the questions of the gaps that exist within the banking sector owing to such multiple breaches without any action being taken (Ngigi, 2015).

Muio (2012) studied the impact of internal control systems on the financial performance of private hospitals in Nairobi. This study however, did not incorporate the commercial banks. Olumbe (2012) studied the relationship between internal control systems and corporate governance in commercial banks in Kenya. This study, however, did not measure the moderating effect of the CBK prudential guidelines. Njenga and Osiemo (2013) studied the effect of fraud detection through an internal control on the performance of deposit-taking microfinance institutions in Kenya. However, this research did not review in detail all the internal control system aspects. Ochoke (2011) was emphasizing on the internal control and organizational performance, the above research failed to show the direct contribution of internal control to the financial performance.

From the mentioned literature it was evident that internal control systems influence the performance of both financial and non-financial institutions. In the current market environment where financial institutions have been on the receiving end due to unethical issues and increase in banking fraud it's imperative to assess the role of internal control systems in mitigating losses and fraud in the banking industry. The scanty evidence on the relationship between internal control systems and performance of commercial banks has motivated the current research. This will enhance both the practices and academic knowledge gap. Further, this research was undertaken to fill this knowledge gap by studying the effects of internal controls on the financial performance of commercial banks in

Kenya.

1.3 Objectives of the Study

The broad objective of this study was to assess the effect of internal control on the financial performance of commercial banks in Kenya.

The specific objectives include:

- i) To establish the effect of control environment on the financial performance of commercial banks in Kenya.
- ii) To determine the effect of risk assessment on financial performance of commercial banks in Kenya.
- iii) To assess the effect of information and communication on financial performance of commercial banks in Kenya.
- iv) To establish the effect of control activities on the financial performance of commercial banks in Kenya.
- v) To assess the effect of monitoring on the financial performance of commercial banks in Kenya.
- vi) To determine the moderating effect of CBK prudential regulation on the relationship between internal controls and financial performance of commercial banks in Kenya.

1.4 Hypothesis of the Study

- i) H_{01} : There is no statistically significant influence of the control environment on financial performance of commercial banks in Kenya.
- ii) H_{02} : There is no statistically significant relationship between risk assessment and financial performance of commercial banks in Kenya.
- iii) H_{03} : There is no statistically significant relationship between information and communication and financial performance of commercial banks in Kenya.

- iv) Ho₄: There is no statistically significant effect of control activities on the financial performance of commercial banks in Kenya.
- v) Ho₅: There is no relationship between monitoring and financial performance of commercial banks in Kenya.
- vi) Ho₆: CBK prudential regulation does not moderate the relationship between internal control and financial performance of commercial banks in Kenya.

1.5 Significance of the Study

The study would benefit the commercial banks Audit Committee by assuring itself that appropriate processes are functioning effectively to monitor the risks to which the company is exposed and that the system of internal control is effective in reducing those risks to an acceptable level. Secondly, the findings would be of great use to bank's management in accounting to the Board for developing, operating and monitoring the system of internal control and for providing assurance to the Board that it has done so. Third, the results of the findings would be used by the employees to improve their financial performance through effective implementation of the internal control systems and processes.

This study contributes to the existing knowledge, address and provides the background information to research organizations, individual researchers and scholars who would want to carry out further research in this area. The study would help researchers and academicians to expand their research into the effect of internal control on performance (both public and private) in Kenya as a literature review. The study findings are expected to guide the government in ensuring quality of internal and external reporting and maintenance of proper records and processes that generate a flow of timely relevant and reliable information from within and outside the organization. The findings are anticipated to benefit strategic partners and regulatory bodies in the banking industry

like the Kenya Bankers Association (KBA) and the Central Bank of Kenya (CBK) by forming a basis for the formulation of appropriate regulations and policies pertaining to the social media in the banking industry.

1.6 Scope of the Study

The study was contextually limited to the review of the internal control systems of commercial banks and how the effects they have on the financial performance of the banks. The study was limited only to the licensed commercial banks that are under the regulation of the CBK. Further the study was limited geographically to commercial banks operating in Kenya. The methodology of the study was constrained to the positivism philosophy and the descriptive research design.

1.7 Limitations of the Study

The researcher anticipated the respondents to be unwilling to divulge information that they may view as confidential or against their employment laws thus limiting the accessibility of feedback. However, the researcher assured the respondents of the purely academic orientation of the sought data and at no time would the respondents be required to give their names. The study was only limited to the commercial banks within the financial sector thus limiting the findings to a particular industry; this implies in extension the study findings cannot be comprehensive of the entire industry. The study was further limited by the research instrument; that is the limitations of the questionnaire i.e. Lack of personal appeal may compromise the feedback obtained.

1.8 Organization of the Study

Chapter one of this study formed the basis of the research problem. It entailed the following sections in order; background of the study, statement of the research problem, research objectives and hypothesis. The chapter also presents the significance of the study, the scope and limitations of the study. The second chapter of this study reviewed all the relevant literature with reference to

our study variables. The chapter also reviewed the theories that anchored this study. All related empirical literature was reviewed and the research gaps mapped. The chapter also outlined the relationship of the study variables in a graphical representation (conceptual framework). The last section provided a brief summary of the aspects reviewed throughout the study.

The third chapter of this study reviewed the research methodology that was applied in solving the research problem. The research methodology is a blue print that guides the researcher in systematically solving the research problems. The research methodology guided the study in identifying the target population, the appropriate sample size for the study. The methodology further guided the research in designing the data collection instruments, the data collection procedures that were used, the data analysis method and the ethical considerations that were adhered to in the course of this study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presented a broader context of the study subject in terms of past scholarly works and what other author have written about internal controls and performance. This section reviewed the correlation between internal control systems as an independent variable and financial performance as a dependent variable by particularly focusing on the control environment, the entity's risk assessment process, the information and communication systems, control activities and the monitoring of controls as the main components of internal control. The review also examined the common systems of internal controls employed by organizations, the theories surrounding systems of internal control, and the methods used by previous researchers in dealing with internal control systems.

2.2 Theoretical Literature Review

The study was grounded on the agency theory, the theory of firm, the attribution theory and the reliability theory.

2.2.1 The Agency Theory

The agency theory holds that a firm is made up of owners of the resource (principals) and the managements (agents) (Jensen & Meckling, 1976). The agents of the firm have more information than the principals which creates an information asymmetry which affects the ability of the firms owners to monitor whether there interests are being protected by the agents (Jensen & Meckling, 1976).

In order to ensure harmonization of the interests of the principal and their agents the theory posits

that a comprehensive contract is necessary to ensure that the interests of the principals are met. The relationship between the agent and principal is further strengthened by employing experts and systems such as audit and control environment (Jussi& Petri, 2004). Further, the theory recognizes that any incomplete information about the relationship, interests or work performance of the agent described could lead to selection problem. Adverse selection and moral hazard impact on the output of the agent in two ways; not possessing the requisite knowledge about what should be done and not doing exactly what the agent is appointed to do respectively. The agency theory, therefore, works on the assumption that principals and agents act rationally and use contracting to maximize their wealth (Jensen and Meckling, 1976). This theory was essential to the study since the internal control systems is one the mechanisms employed to ensure that no agency problem exists within the firm. The internal control system further helps to reduce information asymmetry within the firm.

2.2.2 Attribution Theory

Attribution theory is a social psychology theory that explores how people interpret events and behaviors and how they ascribe causes to the events and behaviors. According to Schroth and Shah (2000), studies using attribution theory examine the use of information in the social environment to explain events and behaviors. Reffett (2007) asserts that when evaluators believe comparable persons would have acted differently in a given circumstance, they (evaluators) tend to attribute responsibility for an outcome to the person. According to Wilks and Zimbelman (2004), the first case refers to internal or dispositional attributions while the second one refers to external or situational attributions.

The auditor's accountability for detecting fraud is extended by Reffett's (2007) study which predicted that auditors are more likely to be held accountable by evaluators when the auditors fail to detect fraud after they had identified the fraud occurrence as a fraud risk. The result of Reffett's

study shows an increase in auditors' liability when an audit fails after the auditors had identified the perpetrated fraud as a fraud risk and performed procedures to investigate the identified fraud risk.

Attribution theory thus advocates for auditors to report on the effectiveness of firms' internal control. Auditors are therefore expected to gain a better understanding of the internal controls in place, assess the design and implementation of the internal controls, and test the operating effectiveness of the internal controls. This is deemed necessary for the auditors' reliance and possibly scaling back of other substantive audit procedures for the required performance.

The attribution theory suggests that when fraud occurs, identified parties should be held accountable and auditors, being the "public watchdogs" are most likely to be held accountable if evaluators determine substandard audit services were provided (Reffett, 2007). In reference to the study the attribution theory place the burden of fraud reporting to the relevant individuals within the institutions. Despite growth in technology that has changed the internal control systems structure there will always be a need for a person to manage these systems. As such its upon such authority figures i.e. managers and the board of directors who should ensure that all the relevant regulatory and compliance issues are adhered with. In reference to our study this theory seeks auditors to be in the forefront of reporting fraud when it occurs.

2.2.3 Reliability Theory

Reliability theory simply describes the probability of a system completing its expected function during an interval of time (Gavrilov & Gavrilova, 2001). The theory has been used as a model by insurance and life insurance companies in computing profitable rates to charge their customers. The theory stipulates that internal control systems are primarily set up for assessment and control

of risks. The theory further argues that weak internal control systems result in more substantive work and hence greater cost (Kinney, 2000).

According to Gavrilov and Gavrilova (2001), the determination of the "weakness" of any internal control system is primarily judgmental. Upon the formulation of the process and system reliability estimates, comparison with financial data from the organization's past performances may provide a more solid basis for judgment of the impact of an internal control system on the firm's income risk. Messier Jr. and Austen (2000) state that one of the primary advantages of the reliability theory is its close relationship to the needs of an organization regarding understanding the internal control system and control risk assessment. The reliability theory is based on the notion that an implemented system should be able to meet its expected function. The reliability theory is relevant to this study based on the second objective of the study. The theory focuses on the effect of risk assessment on financial performance of firms; in this case, the commercial banks in Kenya.

2.3 Empirical Literature Review

Empirical literature review is an account of what has been published on a topic by accredited scholars and researchers. It brings out the knowledge and ideas that have been established on a topic, and what their strengths and weaknesses are. It uses secondary sources, and do not report new or original experimental work.

Mwachiro (2013) investigated the internal controls in operation at Kenya Revenue Authority with a view to establishing whether such internal controls have produced any meaningful results in increased collected revenue. The study used control environment, risk assessment, control activities, Information and communication and monitoring components of internal controls as the variables. The study was conducted using descriptive case study using causal/explanatory research design.

The data was analyzed using both statistical and narrative methods while correlation was used as a way of assessing the effect of internal controls and revenue collection. The findings revealed that the five components of the control environment, risk assessment, control activities, information and communication and monitoring must be available for internal controls to work. The study established that weak internal controls and especially poor ethical values in the organization have encouraged collusion to fraud, loss of revenue and embezzlement of collected revenue. The study, therefore, concluded that internal controls do function although with hiccups and that there is a significant effect between internal controls and revenue collection in KRA.

Magara (2013) sought to find out the effect of internal controls on the financial performance of deposit taking Savings and Credit Cooperative Societies (SACCOs) in Kenya. The independent variables for the study included; control environment, risk assessment, control activities and monitoring mechanisms while the dependent variable was financial performance. The findings of this study conducted on 122 deposit taking SACCOs in Kenya relied on both primary and secondary data which was obtained from the annual reports of the SACCOs. A multiple regression model was adopted to check the form of relationship between the dependent and the independent variables. The regression analysis conducted established that the independent variables have a positive strong correlation with the dependent variable. Each of the independent variables namely, the control environment, risk assessment, control activities and monitoring mechanisms contribute positively to the financial performance of SACCOs in Kenya. It is also evident from the study that without the presence of strong internal controls within these institutions, the SACCOs would be performing poorly with the risk of eventual collapse as a result of poor financial performance.

Ondieki (2013) conducted a study on effects of internal audit on financial performance of commercial banks. The independent variables for the study included; control environment, risk

assessment, control activities and monitoring mechanisms while the dependent variable was financial performance. The findings of the study were that internal controls can have features built into them to ensure that fraudulent truncations are flagged or made difficult, if not impossible, to transact. Internal control audits provide assurance that controls are working, but they do not necessarily detect fraud or corruption. The objectives of internal controls audit relate to management's plans, methods, and procedures used to meet the organization's mission, goals, and objectives.

Muio (2012) investigated on the impact of internal control systems on the financial performance of private hospitals in Kenya. The study was anchored on monitoring, control activities, risk assessment, information and communication, control environment as the variables representing internal control systems. A descriptive research design was adopted while the target population consisted of all the private hospitals accredited by National Hospital Insurance Fund (NHIF) operating within the County of Nairobi. Linear regression analysis was used to find the relationship between monitoring, control activities, risk assessment, information and communication, control environment and financial performance of private hospitals in Kenya. The findings of the study indicate that all the five components that are Monitoring, Control Activities, Risk Assessment, Information and Communication and Control Environment must be present for an internal control system to be considered effective. The findings also indicated that Monitoring had the highest influence on the financial performance of private hospitals in Kenya followed by control environment, information and communication, risk assessment and control activities respectively.

Olumbe (2012) carried out a study to establish the relationship between internal control and corporate governance in commercial banks in Kenya. The variables included; equity structure,

enterprise internal and external supervision vacancy, the board of directors and board of supervisors. The study adopted a descriptive research design and all the 43 commercial banks in Kenya were considered. The primary data was collected by use of a structured questionnaire and an unstructured interview guide. Data was analyzed through a linear regression analysis on the basis of descriptive statistics and performance comparison done across time between the years 2009-2011. The study found that most of the banks had incorporated the various parameters which are used for gauging internal controls and the corporate governance as was indicated by the means which were obtained enquiring on the same and this showed that the respondents agreed that their banks had instituted good corporate governance with a strong system of internal controls, and there is a relationship between internal control and corporate governance.

Ewa and Udoayang (2012) carried out a study to establish the impact of internal control design on bank's ability to investigate staff fraud and staff lifestyle and fraud detection in Nigeria. The study found that internal control design influences staff attitude towards fraud. Strong internal control mechanism is deterrence to staff fraud since all the necessary checks are in place and hence limiting staff from succeeded in any planned fraudulent activity. Contrally a weak mechanism exposes the system to fraud and creates opportunity for staff to commit fraud due to the existing gaps. The study therefore emphasized on the need to have a strong internal control mechanism in order to curb fraud.

Wainaina (2011) investigated on internal control function of the Kenya Polytechnic University College. The variables for the study included; Control environment, Risk assessment, Control activities, Information & Communication, Monitoring and Information technology. The finding of the study showed that as a substitute for its presence on the scene of operations, management must rely on internal control techniques to implement its decisions and to regulate the activities for which

she would ultimately be responsible for. It is in this light that use of effective Internal Control Systems (ICS's) is deemed crucial in the management of business resources. As a result, the management of any organization designs internal control procedures to allocate, control and ensure efficient utilization of resources, in order to achieve the overall corporate goals. It was found that Internal Control Systems (ICS's) play an important role in preventing and detecting fraud and protecting the organization's resources, both physical and intangible. This is achieved through proper authorization controls and documentation.

Ngungi (2011) carried out research aimed to find out the practice in regard to design and implementation of internal control systems in the private and the public sector and whether there was any difference in effectiveness and efficiency as the result. The research focused on the key components of internal control systems namely control environment, risk assessment, control procedures, information and communication and finally monitoring. The study explored the designs of the respective sectors to find out their similarities and differences. Data of this study was collected by questionnaires and focused group discussion. The data collected was analysed by use of descriptive and inferential statistics. The results showed that the private sector has a strong internal control system than the public sector in all the component of internal control. However both the public and private sector do not have a significant difference in monitoring and control activities and the public sector even has stronger elements of preventive controls.

Barra (2010) investigated on the effect of penalties and other internal controls on employee's propensity to be fraudulent. The results showed that the presence of the control activities and separation of duties, increases the cost of committing fraud. Thus, the benefit from committing fraud has to outweigh the cost in an environment of segregated duties for an employee to commit fraud. Further, it was established that segregation of duties is a "least-cost" fraud deterrent for non-

managerial employees, but for managerial employees, maximum penalties are the “least-cost” fraud disincentives. The results suggest the effectiveness of preventive controls control activities such as segregation of duties is dependent on detective controls.

Kakucha (2009) evaluated the level of effectiveness of internal controls operating in Nairobi. The study was based on a number of variables including: age of an enterprise and effectiveness of its system of internal control; the amount of resources held by an enterprise and its effectiveness of its system of internal control; the nature of the relationship between internal control and financial performance. The study was quantitative and used a sample of 30 small businesses as listed in the National Social Security Fund (NSSF) Register of Kenya, 2008. The study found that there are deficiencies in the systems of internal controls, with the degree of deficiencies varying from enterprise to another. The components of internal control that were missing in most businesses surveyed were: firstly, risk analysis, and secondly lack of proper flows of information. In addition, the study established that the sample population lacked awareness of what constituted an effective system of internal control. The study also found that there is significant statistical evidence to support the negative relationship between the age of an enterprise and the effectiveness of its system of internal control. In addition, the study established that there is a negative correlation between the resources held by an enterprise and its internal control weaknesses. Finally, the study found that there is a weak negative relationship between the internal control weaknesses and financial performance. However, this study did not take into account the effects of the specific aspects of internal control such as the monitoring and evaluation and risk auditing and management within small businesses.

Amudo and Inanga (2009) carried out an evaluation of Internal Control Systems in the Regional Member Countries (RMCs) of the African Development Bank Group (AfDB) focusing on Uganda

in East Africa. The variables included; monitoring, control activities, risk assessment, information and communication and control environment. The study established that some control components of effective internal control systems lack in these projects which render the current control structures ineffective. The study recommended an improvement of the existing internal control systems in the projects.

Wee Goh (2009) studied on audit committees, boards of directors, and remediation of material weaknesses in internal control. He measured the effectiveness of the audit committee by its independence, financial expertise, size, and meeting frequency, and the effectiveness of the board by its independence, size, and meeting frequency, and by the duality of the chief executive officer (CEO) and chair positions (CEO duality). He also examined other factors that can affect firms' timeliness in the remediation of material weaknesses, such as the severity of material weaknesses, firms' profitability, the complexity of firms' operations, and so on. He found out that the proportion of audit committee members with financial expertise is positively associated with firms' timeliness in the remediation of material weaknesses. Second, firms with larger audit committees are more likely to remediate material weaknesses in a timely manner. Third, that a more independent board is less susceptible to the undue influence of management and more likely to exert pressure on management to remediate material weaknesses.

Olatunji (2009) Sought to find out the impact of internal control system in banking sector. The study categorized controls into three major classifications: Preventive controls, detective controls and corrective controls. Data, from which the information constitutes the findings, were collected from fifty branches of Wema Bank Plc. This involved traveling to all the above mentioned states and asking the officers in charge, some prepared questions in which answers were provided accordingly. Data were obtained from both the primary and secondary sources, which includes;

interview, structured questionnaire, journal publications, textbooks, newspapers, internet facilities. Secondary data are used to complement the primary data as the primary data is the original work. Data captured for this study were analyzed through descriptive and inferential statistical methods. The descriptive analysis involves the use of percentages, tabulation and graphical presentation. While, the inferential statistical method involved the use of the chi-square. According to his findings, the lack of an effective internal control system is the major cause of bank frauds in Nigeria. It is then concluded that the management of every bank should create and establish a standard internal control system, strong enough to stand against the wiles of fraud in order to promote continuity of operations and to ensure the liquidity, solvency and going concern concept of the bank.

Jones (2008) investigated on internal controls, accountability and corporate governance in medieval and modern Britain. The variables included control environment, risk assessment, information and communication, monitoring and control activities. He used a modern referential framework as a lens to investigate medieval internal controls used in the twelfth century royal exchequer and other medieval institutions. He demonstrated that most of the internal controls found today were present in medieval England. Stewardship and personal accountability were found to be the core elements of medieval internal control. The recent recognition of the need for the enhanced personal accountability of individuals is reminiscent of medieval thinking.

Mawanda (2008) conducted a research on effects of internal control systems on financial performance in institution of higher learning Uganda. In his study he investigated and sought to establish the relationship between internal control systems and financial performance in an Institution of higher learning in Uganda. Internal controls were looked at from the perspective of Control Environment, Internal Audit and Control Activities whereas Financial performance

focused on Liquidity, Accountability and Reporting as the measures of Financial performance. The Researcher set out to establish the causes of persistent poor financial performance from the perspective of internal controls. The study established a significant relationship between internal control system and financial performance. The investigation recommends competence profiling in the Internal Audit department which should be based on what the University expects the internal audit to do and what appropriate number staff would be required to do this job. The study therefore acknowledged role of internal audit department to establish internal controls which have an effect on the financial performance of organizations.

Crutchley et al. (2007) studied the likelihood of a firm being involved in an accounting scandal. The study found that certain characteristics increased the likelihood of a firm being involved in an accounting scandal. The characteristics included high levels of growth of a firm, engaging in earnings management techniques, audit committees composed of few directors and overextended outside directors. However, firms with low level of growth and having audit committees composed of more directors had a lesser likelihood of being involved in accounting scandal. Strong internal controls and an ethical organizational culture were found key in preventing a firm from being involved in accounting scandal.

Beasley et al. (2000) examined the differences in corporate governance mechanisms between organization that were guilty of financial reporting fraud and those that were not. Unlike previous researchers, Beasley et al. segmented the organizations by industry concentration, technology, health care and financial services. Beasley et al used allegations made by the Securities and Exchange Commission (SEC) during the period 1987 and 1997 of fraudulent financial reporting to establish fraud organizations and data from the National Association of Corporations (NALD) to match the fraud organizations and establish a no fraud company comparison base. Beasley et al.'s

findings indicated that organizations found guilty of financial reporting fraud had less independent boards, had few audit committees, the audit committee met less often, the audit committees were less independent, the board and audit committees had less internal audit support.

Table 2.1: Summary of Empirical Studies

Author(s)(Year)	Topic and Key Variables	Research gap	Addressing the gaps
AmudoandInanga (2009)	<p>Topic: Evaluation of Internal Control Systems: A Case Study from Commercial Banks in Uganda.</p> <p>Key Variables: monitoring, control activities, risk assessment, information and communication and control environment.</p>	<p>The study focused on commercial banks in Uganda.</p> <p>The study was simply evaluating ICS of commercial banks and not relating it to any key outcome like in our study financial performance.</p>	<p>This research will concentrate on the effects of ICS on the financial performance of commercial banks.</p>
Kakucha (2009)	<p>Topic: An Evaluation of Internal Controls: The Case of Nairobi Small Businesses</p> <p>Key Variables: enterprises age and the amount of resources held.</p>	<p>The study focused on small institutions in Kenya.</p> <p>The concepts were different from the current study.</p>	<p>This study will focus on aspects such as control environment, control activities, risk assessment and information & communication.</p>
Magara (2013)	<p>Topic: Effect of internal controls on the financial performance of deposit-taking savings and credit cooperative societies (SACCOs) in Kenya.</p> <p>Key Variables: control environment, risk assessment, control activities and monitoring mechanisms</p>	<p>Although the study was interested in financial performance, it focused on SACCOs rather than commercial banks. Commercial banks are highly regulated compared to SACCOs.</p>	<p>Will focus on the financial performance of commercial banks.</p> <p>Will concentrate on the moderating variable which is the regulation requirements by CBK.</p>

<p>Muio (2012)</p>	<p>Topic: The impact of internal control systems on the financial performance of private hospitals in Kenya.</p> <p>Key Variables: monitoring, control activities, risk assessment, information, and communication, control environment</p>	<p>The study focused on the health sector with a different regulatory environment. The focus was simply on non-financial institutions.</p>	<p>Will focus on commercial banks and how their performance relates to ICS. Regulator is CBK and not NHIF.</p>
<p>Mwachiro (2013)</p>	<p>Topic: Impact of internal controls on revenue collection in KRA.</p> <p>Key Variables: Control environment, risk assessment, control activities, Information and communication and monitoring</p>	<p>The study explored the relationship between internal controls on revenue collection rather than financial performance. The study's main interest was KRA and not commercial banks. Weak methodological framework as study adopted an explanatory research design, and a population sample of 38 was smaller.</p>	<p>This research will specifically dwell on the financial performance of commercial banks. The financial performance will be measured in terms of return on assets. The study will focus on all the 43 commercial banks.</p>
<p>Ngungi (2011)</p>	<p>Topic: A survey of Internal Control Systems among the Listed Private Companies and the Public Sector Companies in Kenya.</p> <p>Key Variables: control environment, risk assessment, control procedures, information and communication and monitoring</p>	<p>The study did not focus on internal controls in relation to financial performance but rather a comparison of internal controls between private and public sector.</p>	<p>The study will focus on internal controls in relation to financial performance of commercial banks in Kenya.</p>

<p>Olumbe (2012)</p>	<p>Topic: The Relationship between Internal Controls and Corporate Governance in Commercial Banks in Kenya.</p> <p>Key Variables: equity structure, enterprise internal and external supervision vacancy, board of directors and board of supervisors</p>	<p>The conceptual framework focused on relating ICS and corporate governance rather than financial performance.</p> <p>The variables used were completely different.</p>	<p>Will focus on the effects of different aspects of ICS on the financial performance.</p> <p>The study sought to link ICS and the corporate governance performance not the financial performance.</p>
<p>Wainaina (2011)</p>	<p>Topic: An Evaluation of the Effectiveness of an Internal Control Function: The Case of Kenya Polytechnic University College</p> <p>Key Variables: Control environment, Risk assessment, Control activities, Information & Communication, Monitoring</p>	<p>The population used was small. The study focused on learning Institutions rather than commercial banks. The basis of the study was ideally not on financial performance.</p>	<p>Will dwell on a financial institution and the effects of ICS on the financial performance.</p>

(Researcher,2015)

2.4 Summary and Research Gap

Most of the highlighted studies in the literature review do not explicitly address the effect of internal control on the financial performance of commercial banks in Kenya. A scarcity of literature in the area of study exists, particularly in the developing states like Kenya. The few that have been conducted in the third world nations have eluded criticism in the criteria, title, scope and methodology used hence the research gaps in terms of literature. The literature review highlights a number of theories in relation to the variables (independent and dependent) and the conceptual framework of the variables by analyzing the relationships between them.

2.5 Conceptual Framework

A conceptual framework is defined as the result of when a researcher conceptualizes the relationship between variables in the study and shows the relationship graphically or diagrammatically (Mugenda and Mugenda, 2003). It allows the quantitative conceptualization; operationalization, data collection and measurement of the variables identified (Neuman, 2000). According to Cooper and Schindler (2003) conceptual framework also presents the various variables in the study. This study will be guided by the conceptual framework shown in figure 2.1. The conceptual framework of the study will consist of the independent variables; control environment, risk assessment, information & communication, Control Activities and Monitoring while the dependent variable will be financial performance.

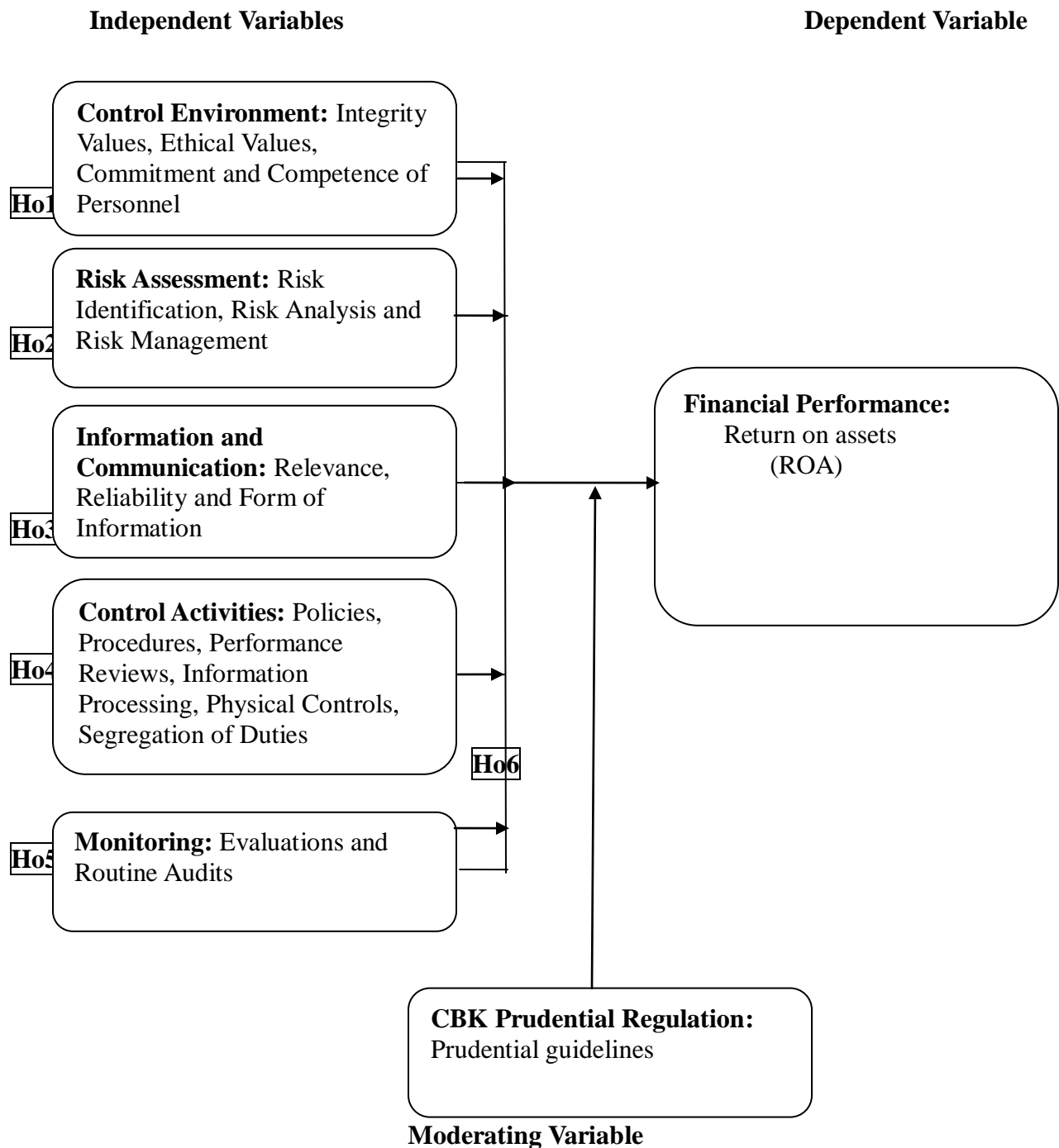


Figure 2.1: Conceptual Framework

(Researcher, 2015)

From Figure 2.1 above conceptual framework proposes a direct relationship between the independent variables; control environment, risk assessment, information and communication, control activities and monitoring with the financial performance of commercial banks. According to the conceptual framework the CBK prudential guidelines will play a moderating role in the relationship.

The control environment is the foundation upon which any effective internal control system should be premised upon. It guides in the attainment of the strategic objectives of the ICS and the support of adequate financial reporting to all stakeholders (Cohen & Sayag, 2010). The control environment will be conceptualized by the integrity values, the ethical values, the commitment and competence of personnel. Risk assessment is a systematic process that seeks to identify potential hazards and identify their implications before they occur. This will be conceptualized in the study by risk identification, analysis and risk management.

Control activities are the policies, procedures, techniques, and mechanisms that help ensure that management's response to reduce risks. In this study the control activities was conceptualized through the Policies, Procedures, Performance Reviews, Information Processing, Physical Controls, and Segregation of Duties. Monitoring is the process of routine checkup on performance of an aspect. In this study monitoring will be conceptualized using Evaluations and Routine Audits. Information and communication will be measured using Relevance, Reliability and Form of Information and communication tools. The dependent variable for the study will be the financial performance of commercial banks that will be measured using the Return on Assets (ROA).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter described the research methodology of the study. It explained the procedural plan that was used by the researcher to validly, objectively, economically and accurately answer the research questions. This section of the study therefore describes the research philosophy, research design, target population, data collection instruments, procedures and data analysis.

3.2 Research Philosophy

Research philosophy is an over-arching term relating to the development of knowledge and the nature of that knowledge (Saunders et al, 2009). The principle of positivism was applied since the research builds on existing theory to develop hypotheses and had they tested by using a quantitative survey. Researchers who adopt a positivistic view strive to be independent, which means that they do not want to affect or be affected by the subject or the research (Saunders, Lewis, & Thornhill, 2007). In addition, the philosophy enabled comparison of the current research with previous and future research. The replication of the studies would add genuine scientific knowledge in the field of research. This also acts as an extension of knowledge which is highly appropriate for future researchers in developing the current study (Holstein & Gubrium, 2013).

The research philosophy for this study is positivism as it's the best research approach that employs empirical methods and makes extensive use of quantitative and qualitative analysis while making inferences.

3.3 Research Design

A research design describes the arrangement and procedure utilized with an aim of solving the research problem (Babbie, 2002). This study used a descriptive research design. According to Cooper and Schindler (2000), descriptive statistics discover and measure cause and effect relationships among variables. The study used a descriptive design which enabled the researcher to collect in depth information about the population being studied. The descriptive design also provided proper recommendations to the management of the commercial banks in Kenya for better financial performance.

3.4 Empirical Model

Internal control and financial performance relationship can be modeled using the following linear regression model:

3.4.1 Basic Model

$$ROA_i = \alpha + \beta_1 CE_i + \beta_2 RA_i + \beta_3 ICS_i + \beta_4 CA_i + \beta_5 Mon_i + \varepsilon \text{ ----- Equation 3.1}$$

Where:

ROA = Dependent variable (Return on Assets – Financial Performance)

α = the constant term

β_{1-5} = Regression Coefficients of independent variables

CE= control environment

RA= risk assessment

ICS = information and communication systems

CA= control activities

Mon = monitoring

ε = Error Term

The above Model shows a direct relationship between dependent and independent variables based on the conceptual framework.

3.4.2 Model with Moderating Variable.

$$ROA_i = \alpha + \beta_1 CE_i + \beta_2 RA_i + \beta_3 ICS_i + \beta_4 CA_i + \beta_5 Mon_i + \beta_6 PG_i + \varepsilon \text{----- Equation 3.2}$$

Where;

ROA = Dependent variable (Return on Assets – Financial Performance)

α = the constant term

β_{1-5} = Regression Coefficients of independent variables

CE= control environment

RA= risk assessment

ICS = information and communication systems

CA = control activities

Mon = monitoring

PG = CBK Prudential Guidelines

ε = Error Term

The above Model shows a moderated relationship between dependent and independent variables. The study utilized the coefficient of determination expressed by the R^2 of the regression results generated by SPSS. First, the study conducted a linear regression to estimate the interaction between internal control systems and banks' performance with the resulting regression coefficients being the reduced model results which resulted in an R^2 -value of .615. The researcher then ran the full model to estimate the moderating variable of prudential guidelines on the interaction between internal control systems and bank performance which resulted in a coefficient of determination of R^2 -value of .643. Further from the resulting regression results the study evaluated the statistical significant of the models by utilizing the F-test statistics from the ANOVA model. Lastly the resulting regression coefficients were utilized in estimating the coefficients of each predictor variables and moderator variable and their influence on the dependent variable. The study utilized the unstandardized beta coefficients and the sig-value to measure the magnitude of the influence.

Table 3.1: Operationalization and measurement of variables

VARIABLE	VARIABLE TYPE	OPERATIONALIZATION	MEASUREMENT
PERFORMANCE	Dependent	Return on assets (ROA)	Net Income / Average Total Assets
CONTROL ENVIRONMENT	Independent	Commitment&Competence, Integrity values and Ethical values	Likert scale
RISK ASSESSMENT	Independent	Risk identification, Risk analysis and Risk management	Likert scale
INFORMATION& COMMUNICATION	Independent	Relevance, Reliability, Form of information, Timely communication	Likert scale
CONTROL ACTIVITIES	Independent	Policies, Procedures, Performance reviews, Information processing, Physical controls and Segregation of duties	Likert scale
MONITORING	Independent	Evaluations and Routine audits	Likert scale
CENTRAL BANK OF KENYA (CBK)	Moderating	(CBK Prudential Regulation)	Likert scale

(Researcher, 2015)

3.5 Population

The study population encompasses all the individuals of interest to the research study with similar characteristics (Mugenda&Mugenda, 2009). The study targeted all the 43 commercial banks licensed by the Central Bank of Kenya.

3.6 Sampling and Sample Size

A sample is a small portion of a target population selected using some systematic procedure for study (Babie, 2008). Census sampling method was used because data will be from all the local commercial banks; further census was chosen since the population is small and therefore

manageable in terms of accessibility during data collection(Kothari, 2004).

Unit of analysis comprised of all the 43 commercial banks operating in Kenya. The sample population included personnel with knowledge on internal control systems as well as financial performance of the commercial banks. Unit of observation therefore targeted the senior operations manager, senior risk manager and senior internal auditor of all the commercial banks in Kenya. Thus, the sample size for the study included 129 respondents.

3.7 Data Collection

The study used both primary and secondary data. Primary data is data collected directly from firsthand experience while secondary data is data that has already been collected by someone else for a different purpose to the researcher's but has some relevance and utility for one's research. Primary data was collected using semi-structured questionnaires through the drop and pick method in an effort to conserve time and money as well as to facilitate in easier analysis as they are in immediate usable form. The semi-structured questionnaires consisted of open and closed ended questions. The pre-requisite to the questionnaire design was the definition of the problem and the specific study objectives (Mugenda & Mugenda, 2003). This method deemed appropriate because questionnaires the respondents were reached easily and were willing to co-operate and able to read and write independently (Creswell, 2009).

Secondary data was gathered using audited financial reports of the commercial banks from the last five years (2011 – 2015). From these reports, the banks' performance was obtained which has been measured through the ROA. The panel data was summarized through a weighted average for the 5 years. The weighted average for the ROA was used as the dependent variable for the various banks which was used to study the relationship between the study variables and

the financial performance (ROA) of the banks.

3.7.1 Data Collection Procedures

The researcher adopted a drop and pick method in collecting the data. This method involved handing out the questionnaires to the respondents and picking them at a later date. This method is favored since it allows the respondent to have ample time in giving out their responses.

3.8 Reliability of Data Collection Instrument

Reliability refers to a measure of the degree to which the responses to the questionnaire are consistent and therefore yield consistent results. The study ensured reliability of the data collection instruments to enable the instruments solve the research problems. Further, the researcher tested the reliability of the research instrument using Cronbach's alpha value. All statements with an alpha of at least 0.7 were considered for the study and satisfy the internal consistency measures (Mugenda & Mugenda, 2003). The following table presents the results on the reliability test for the questionnaire tool that was used in the study;

Table 3.2 Reliability Test Results

Variable	Coefficient Alpha (α)	N (Items)
Control Environment	0.821	6
Risk Assessment	0.765	7
Information and Communication System	0.921	4
Control Activities	0.772	8
Monitoring	0.794	5
CBK Prudential Regulations	0.875	4

(Researcher, 2015)

The findings in table 3.2 clearly indicate that all the coefficients are above 0.70 for all the constructs tested. This implies that the scales used to measure these variables were consistent and

therefore reliable for the data collection.

3.9 Validity Tests

Validity as noted by Robinson (2002) is the degree to which result obtained from the analysis of the data actually represents the phenomenon under study. It is used to ensure that the study actually measures what it intends to measure from the beginning. To ensure validity of the instruments, the study considered both the face and content validity of the questionnaire. To ensure validity of the instrument, face to face validity was assessed by having all the questions phrased in line with the study objectives. Content validity was undertaken through a review of the questionnaire by an expert in the study field. The researcher relied on the supervisor to assist in undertaking the content validity of the data collection instrument. The study also adopted a census sampling where all the commercial banks were selected for the study a fact that enhanced the validity of the collected data.

3.10 Data Analysis

The data collected was both quantitative and qualitative data. Quantitative data was analyzed using Statistical software (SPSS, v.22) and the output presented using descriptive statistics namely: mean, standard deviation, percentages proportions and five-point Likert scale.

A multiple linear regression model was used to assess whether commercial banks' performance is a function of the variables indicated on the specific objectives. It provided information on impact of an independent variable while simultaneously controlling the effects of other independent variables. A diagnostic test was carried out for regression analysis to assess the validity of a model. Test for Multicollinearity was undertaken to establish whether the predictor variables in the regression model were highly correlated.

3.11 Diagnostic Tests

Regression assumptions were taken into consideration in order to validate the regression equation and reduce the probability of type I and type II errors. The researcher therefore, conducted the following: Multicollinearity test and heteroscedasticity.

3.11.1 Multicollinearity

The multicollinearity is an often encountered statistical phenomenon in which two or more independent variables in a multiple regression model are highly correlated (Robert, 1967). If the correlation is 1 or -1, in its most severe case this makes the estimation of the regression coefficients impossible or unreliable (Robert, 1967). Multicollinearity may not be problematic. However, severe Multicollinearity is a problem because it can increase the variance of the coefficient estimates and make the estimates very sensitive to minor changes in the model. The result is that the coefficient estimates are unstable and difficult to interpret.

Multicollinearity was conducted to test the presence of the relationship between values of the independent variables based on the repeated patterns in the regression analysis process. Variance inflation factors (VIF) measured the level of the collinearity between the variables. When the VIFs values are greater than 10, collinearity is problematic. However, if VIFs values are less than 10, collinearity is not problematic and therefore there is no significant collinearity in the data set that can hinder regression analysis.

3.11.2 Heteroscedasticity

One of the key assumptions of regression is that the variance of the errors is constant across observations. If the errors have constant variance, the errors are called homoscedastic. Typically, residuals are plotted to assess this assumption. In statistics, a collection of random variables is

Heteroscedasticity. Standard estimation methods are inefficient when the errors are Heteroscedasticity or have non-constant variance (Goldberger & Arthur, 1964). In this study, the Breusch–Pagan test was used to test for Heteroscedasticity in the linear regression model. It was applied to test whether the estimated variance of the residuals from a regression are dependent on the values of the independent variables.

Heteroscedasticity is a violation of one of the requirements of ordinary least squares (OLS) in which the error variance is not constant (Gujarati, 2007). The consequences of Heteroscedasticity are that the estimated coefficients are unbiased and inefficient. The variances are either too small or too large, leading to Type I error where the Null hypothesis is rejected when it is true or Type II error where one fails to reject a false Null hypothesis. Heteroscedasticity is mainly prevalent in cross-sectional data set such as the one used in this study.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

The chapter presents the study results which were obtained from the analysis of the collected data. The analysis of data included the use of both primary and secondary data. Both descriptive and inferential statistics were used in the study and the results are presented in Tables and figures where appropriate providing ease of interpretation.

4.2 Descriptive Analysis

Descriptive statistics are statistics that quantitatively describe or summarize features of a collection of information. Descriptive statistics provide simple summaries about the sample and about the observations that have been made. Such summaries may be either quantitative, i.e. summary statistics, or visual, i.e. simple-to-understand graphs. These summaries may either form the basis of the initial description of the data as part of a more extensive statistical analysis, or they may be sufficient in and of themselves for a particular investigation.

4.2.1 Response Rate

High survey response rates help to ensure that survey results are representative of the target population. A survey must have a good response rate in order to produce accurate, useful results. (Sheehan, K. 2001). Figure 4.1 below represents response rates of the targeted population.

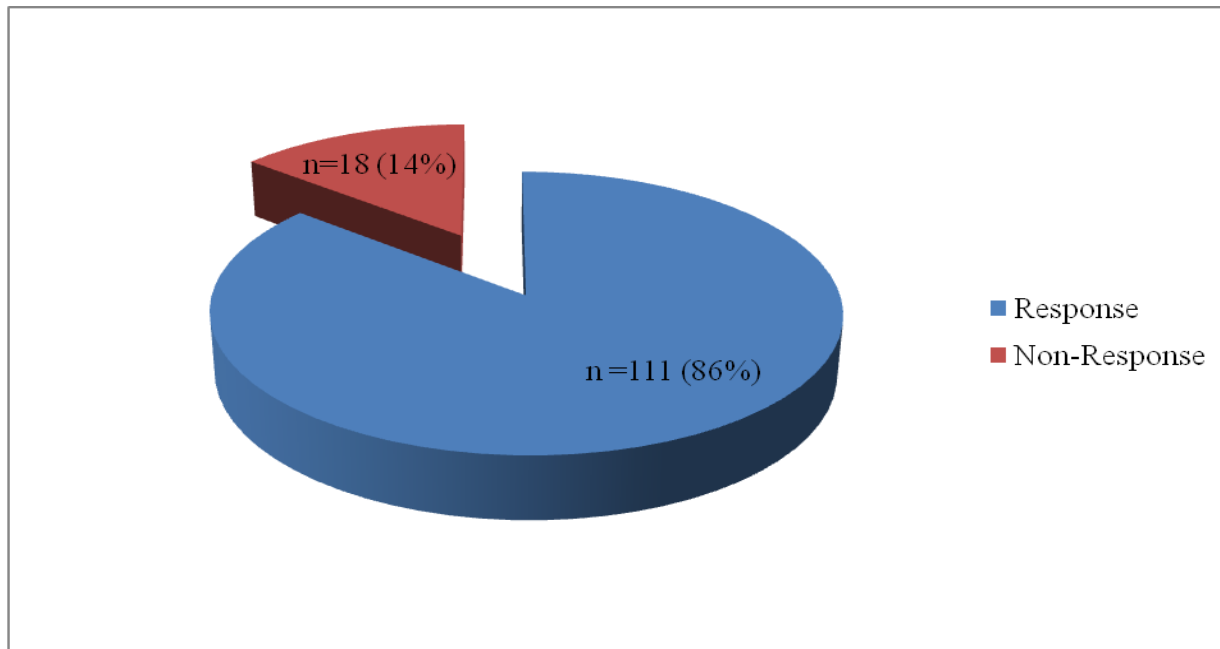


Figure 4.1 Response Rate

(Researcher, 2015)

According to the findings in figure 4.1, the study realized a response rate of 86%. This is as out of the targeted 129 respondents, 111 participated and gave valid responses whereas 18 of the targeted responses did not give response to the study. Thus, the study obtained a good response as recommended by Mugenda and Mugenda (2003) that a response rate of 50% is good as a representative of the sample and that above 70% is excellent.

4.2.2 Education level of the respondents

Respondents who hold different levels of education have different responses. More often than not there are clear differences in opinion between respondents with a different educational level. Gilovich, Thomas; Keltner, Dacher; Nisbett, Richard E. (2006). Figure 4.2 below represents the nature of education of respondents.

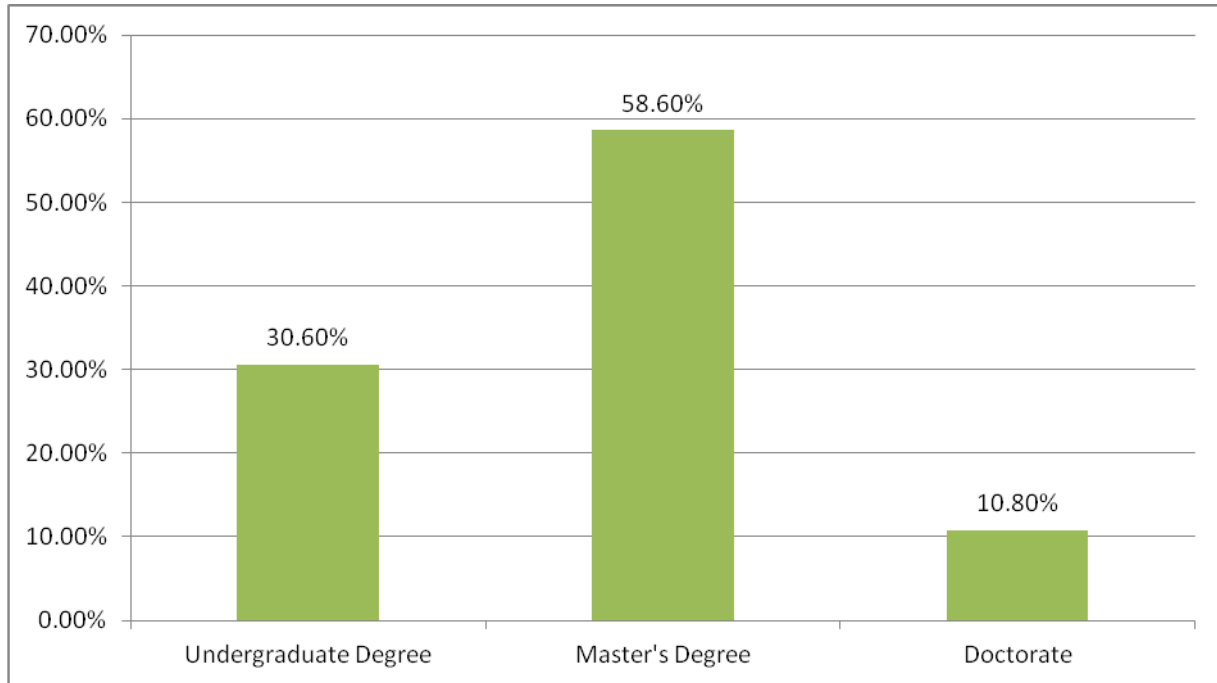


Figure 4.2 Level of Education Achieved

(Researcher, 2015)

Figure 4.2 gives the respondents' level of education. According to the findings, majority of the respondents (58.6%) were holders of masters degree. 30.6% were the bank staffs who were holders of university undergraduate degrees and 10.8% were the staffs who were PhD holders.

4.2.3 Years worked in the bank

It is perceived that the more years worked in the commercial bank, the more staff understand internal control systems. Figure 4.3 below clearly shows the number of years the respondents have worked in the bank. Percentages for each year category are as well clearly indicated for proper comparison of different years with the level of respondents.

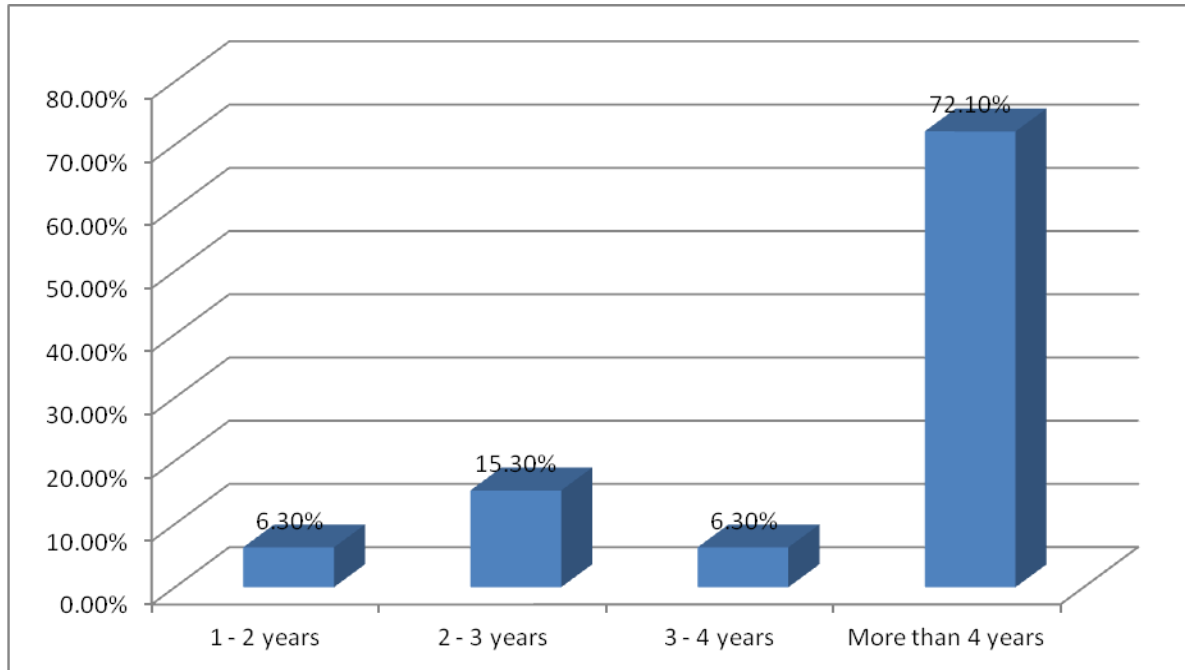


Figure 4.3 Years Worked in the Bank

(Researcher, 2015)

From figure 4.3 above, majority of the respondents (72.1%) had been working in their respective banks for a period of more than 4 years. 15.3% had worked for a period of between 2 – 3 years and 6.3% of the respondents had worked for a period of between 1 – 2 years as well as those who had worked for a period of between 3 – 4 years.

4.3 Performance of Commercial Banks (ROA)

This section presents the study results on the performance of the commercial banks. The performance is measured through the ROA where data for each bank was collected for the five years considered in the study. Data was then compiled and analyzed in SPSS and the mean performance statistics for each year are as presented in Table 4.1;

Table 4.1 Return on Assets (ROA)

	Mean	Standard Deviation	Maximum	Minimum
2011	.03	.02	.07	-.06
2012	.03	.04	.10	-.14
2013	.04	.07	.44	-.08
2014	.03	.03	.07	-.07
2015	.02	.03	.07	-.05

(Researcher, 2015)

According to the findings as presented in table 4.1, commercial banks' performance that was measured in ROA was high in the year 2013. This has a performance of 4% whereas the poor performance was recorded in the year 2015 with a performance of 2%. The performance in 2011, 2012 and 2014 was on average 0.03 (3%). The level of variance differed significantly across the years with the minimum variance recorded at 0.02 for 2011 whereas the maximum variance was recorded at 0.07 for the year 2013. This shows that the performance in different time periods was affected by different factors making the fluctuations recorded in the data. The level of performance at the year 2015 was the poorest across the years studied which was attributed to the unrests in the financial sector during the year where three banks were placed under receivership.

4.4 Internal Controls

4.4.1 Internal Controls system review

In standard practice, review of internal controls is important to identify any gaps in the internal control systems. Frequent review of internal control systems enhances the capacity of commercial banks to manage risks. Figure 4.4 below represents the results of internal control systems review.

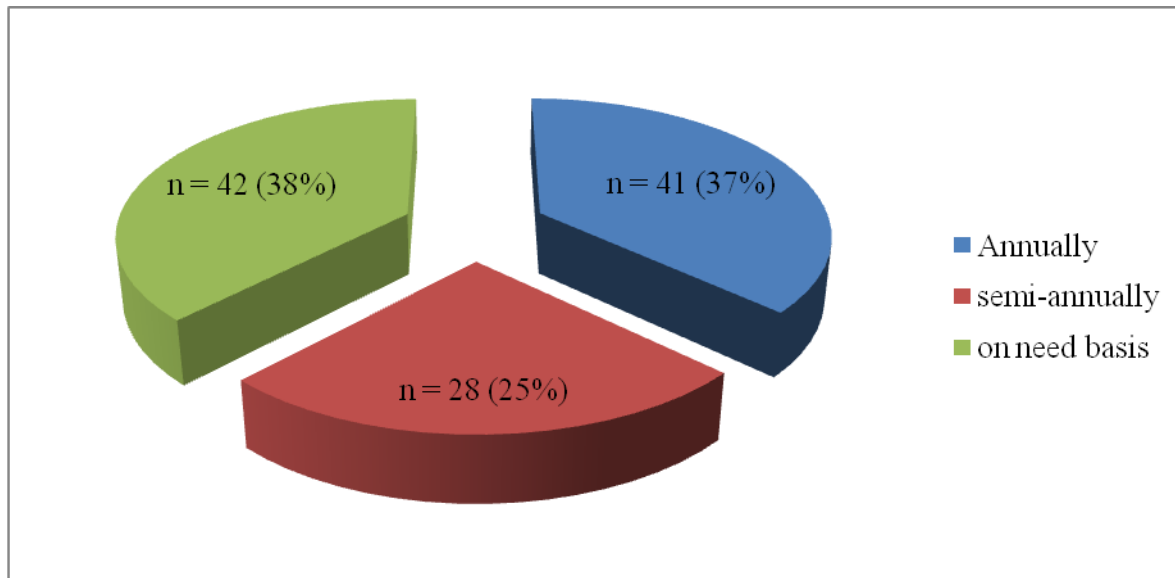


Figure 4.4 Frequency of Internal control systems Review in Commercial Banks

(Researcher, 2015)

From figure 4.4 above, most of the banks (38%) reviewed their internal control systems on need basis. This shows that, banks would consider reviewing their internal control systems only when affected by security threats or with a serious concern of their operations. 37% of the respondents reported that their banks reviewed their internal control systems annually whereas 25% of the banks reviewed their internal control systems semi-annually. This means that there is adhoc approach to internal control management in most of the commercial banks rather than a systematic approach.

4.4.2 Internal Controls system functioning

Analysis of internal control systems indicate that there is a concern about the functioning of the system. Figure 4.5 below indicate the results of Internal control system functioning.

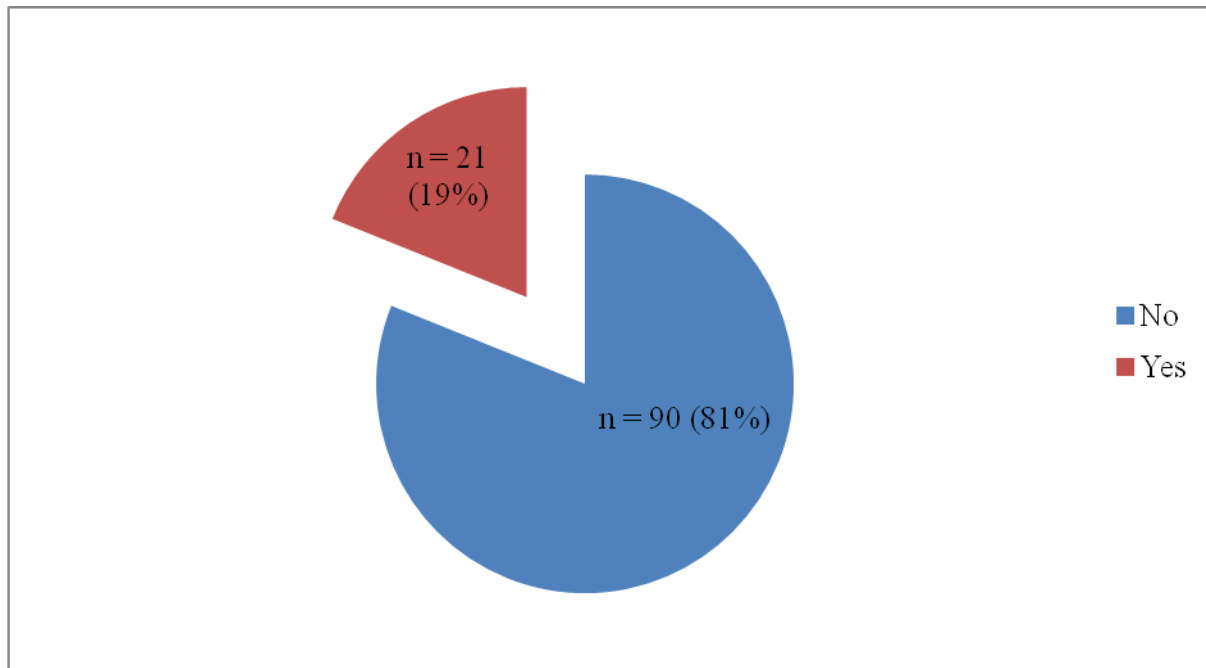


Figure 4.5 Internal Control Systems Functioning

(Researcher, 2015)

According to the findings in figure 4.5, majority of the respondents (81%) reported that, the presence of internal controls did not affect the banks’ operations significantly as these did not meet the functioning requirement. Only 19% of the respondents reported that the banks had internal controls that were in proper functioning state thus accomplishing the purposes that were acquired for.

4.4.3 Effectiveness of Internal Controls systems in relation to Revenue Generation

Mawanda (2008), states that “there is a general perception that institution and enforcement of proper internal control systems will always lead to improved revenue generation “Effective internal control systems in banks is therefore of importance as far as revenue generation is concerned. Figure 4.6 below indicate the results of effectiveness of internal controls in relation to revenue generation.

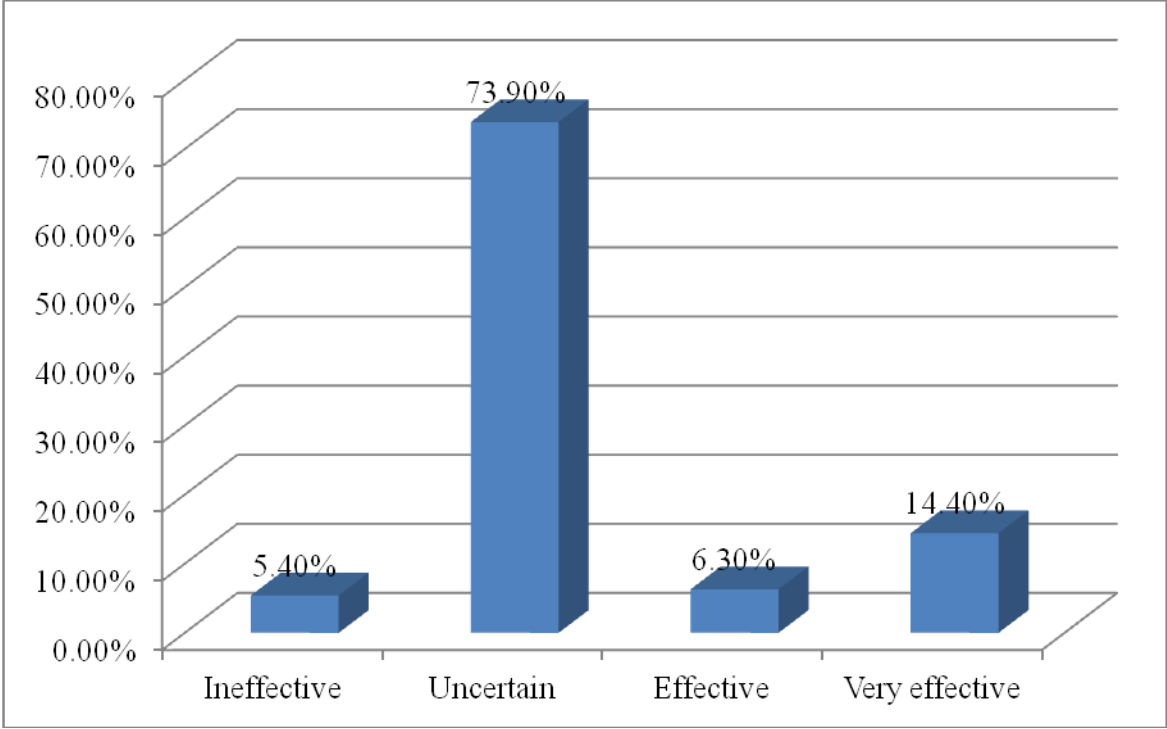


Figure 4.6 Effectiveness of internal control systems in relation to revenue generation

(Researcher, 2015)

According to the findings as presented in figure 4.6, majority of the respondents (73.9%) ranked their banks’ internal control system as uncertain in relation to revenue generation. 5.4% of the respondents ranked their banks’ internal control system as ineffective, 6.3% as effective and 14.4% as being very effective in relation to revenue generation hence the internal controls do not support revenue generation function.

4.4.4 Control environment

Seeking to establish the effect of the control environment on performance of the banks, the study sought the views of management staff on the extent to which the given aspects of control environment influenced performance as indicated by their level of agreement. A likert scale data was collected rating the extent of agreement in a scale of 1 to 5 where 1 is the least extent whereas 5 is the maximum extent indicator. The results from the collected responses were

analyzed based on means and their standard deviations to show the variability of the individual responses from the overall mean of the responses per each aspect. The mean results are therefore given on a scale interval where a mean value of up to 1 is an indication of a strong extent of disagreement; 1.1 – 2.0 is disagree; 2.1 – 3.0 is a moderate extent of agreement, 3.1 – 4.0 agree and a mean value of 4.1 and above is an indication of a strong extent of agreement. Findings on the control environment are as presented in table 4.2;

Table 4.2 Control Environment

	Mean	Std. Deviation
Fraud detection, and fraudulent activities are inherently unpredictable difficult to detect and they affect the performance of the bank	3.6757	1.25888
Measures that can enhance the efficacy of auditors are important for effective fraud detection	4.3604	.99811
There is honest and fair dealings with all stakeholders for the benefit of the organization	3.3874	.97394
Management is committed to the ethical values in the operation of the system	4.0360	.99934
Standards for audits and audit-related services influence the performance of commercial banks	3.9369	1.19300
internal audit evaluate and contribute to the improvement of risk management, control and governance using a systematic and disciplined approach in the banking	4.2613	.83896

(Researcher, 2015)

From table 4.2 above, the respondents agreed (mean = 3.676; std. dev. = 1.26) indicating that fraud detection, and fraudulent activities are inherently unpredictable difficult to detect and they

affect the performance of the bank. The respondents strongly agreed that the measures that can enhance the efficacy of auditors are important for effective fraud detection as shown by a mean of 4.3604 with a standard deviation of 0.99811. Findings also show that, the respondents agreed (mean = 3.3874; std. dev. = 0.974) indicating that there is honest and fair dealings with all stakeholders for the benefit of the studied organizations. These findings are in agreement with Ewa and Udoayang (2012) who indicated that strong internal controls discouraged fraudulent activity through the appropriate checks put in place.

From table 4.2, the respondents strongly agreed (mean = 4.036; std. dev. = 0.999) indicating that the management of the studied banks are committed to the ethical values in the operation of their system. The standards for audits and audit-related services influence the performance of commercial banks as reported by the respondents who agreed to this fact which obtained a mean of 3.9369 and a standard deviation of 1.193. The above findings were in line with Mwachiro (2013) who indicated that internal controls function but with challenges but there have great influence on the performance of organizations through minimizing revenue loss and fraudulent transactions.

Findings as well showed that the internal audit evaluate and contribute to the improvement of risk management, control and governance using a systematic and disciplined approach in the banking. This is according to the responses given which obtained a mean of 4.2613 with a standard deviation of 0.83896 showing that the respondents had a strong extent of agreement to this aspect. The findings are in tandem with Wee Goh (2009) who indicated that well composed audit boards were able to support better corporate governance practices within institutions which is key to better management.

4.4.5 Risk assessment

The findings under this section are also based on the means and standard deviation for the data that was collected through the likert scale measuring the level of agreement of the respondents with respect to the given aspects of risk assessment. The results on risk assessment are as presented in Table 4.3 below;

Table 4.3 Risk Assessment in the Commercial Banks

	Mean	Std. Deviation
Management has defined appropriate objectives for the bank.	4.3333	.59289
Management identifies risks that affect achievement of the bank objectives	3.9730	.85769
Management has a criteria for identification of which fraud-related risks to the organization are most critical	4.3423	.99540
Management has put in place mechanisms for mitigation of critical risks that may lead to banks' loss	3.9009	.87339
Management has a criteria for ascertainment of which fraud-related risks to the organization are most critical	4.2703	.76213
There is frequent escalation and reporting of bank's departmental risks to the management to assist in solving early enough before it develops to loss	3.9730	.92892
All instructions received from bank clients are thoroughly scrutinized before execution to prevent processing fraudulent transactions	4.5405	.69784

(Researcher, 2015)

As shown in the table 4.3, the respondents strongly agreed that the management of the banks have defined appropriate objectives for the banks. This is according to the mean obtained of

4.3333 with a standard deviation of 0.59289 showing that the respondents had a strong extent of agreement and there was no much deviation of the responses from the mean value. The respondents also agreed that the banks management identifies risks that affect achievement of the banks objectives as shown by a mean of 3.973 for agree and a standard deviation of 0.85769. Further, the respondents agreed to a strong extent that the banks' management have criteria for identification of which fraud-related risks to the banks are most critical. This is shown by a mean of 4.3423 with a standard deviation of 0.99540 for a strong extent of agreement. The findings above resonate with the conclusions drawn by Magara (2013) that indicated that without an effective internal control systems, institutions would fail to achieve their goals due to ineffective risk assessment. The findings were further in agreement with the observations of Ondieki (2013) who indicated that the objectives of internal control audit should be aligned to the management goals as well as the objectives of the firm.

Findings from the table 4.3 as well illustrate that the banks' management have put in place mechanisms for mitigation of critical risks that may lead to the banks' losses (mean = 3.9009; std. dev.= 0.87339). Also, the banks' management have criteria for ascertainment of which fraud-related risks to the organization are most critical as shown by a mean of 4.2703 for strongly agree and a standard deviation of 0.76213 showing a relatively small deviation from the mean. In the commercial banks, the study establishes that there are frequent escalation and reporting of banks' departmental risks to the management to assist in solving early enough before it develops to losses. This was shown by a mean of 3.9730 indicating that the respondents agreed and a standard deviation of 0.92892. Further, findings show that all instructions received from the banks' clients are thoroughly scrutinized before execution to prevent processing fraudulent transactions. This had the respondents strongly agreeing with a mean of 4.5405 and a standard

deviation of 0.69784. The above findings are in agreement with the study by Olatunji (2009) which concluded that standard internal control system that is strong can help the bank to stand against the wiles of fraud and promote better operations.

4.4.6 Information and communication System

Table 4.4 presents the study results on the effect of information and communication system on the performance of the commercial banks. The results are as well based on the means and standard deviation for the likert scale data collected. Thus the mean scale presented under section 4.7 applies in this section also.

Table 4.4 Information and communication System

	Mean	Std. Deviation
Management has identified individuals who are responsible for coordinating the various activities within the bank to ensure appropriate communication on internal controls	4.2703	.63168
All employees understand the concept and importance of internal controls, including the division of responsibility	3.5676	.94985
Effective communication helps to evaluate how well guidelines and policies of the bank are working and being implemented.	4.2342	.73799
The reporting system on organizational structures spells out all the responsibilities of each section/unit in the bank.	4.0721	.90163

(Researcher, 2015)

As shown in the table 4.4, the respondents strongly agreed that the banks' management have identified individuals who are responsible for coordinating the various activities within the banks to ensure appropriate communication on internal controls. This had a mean of 4.2703 with a standard

deviation of 0.63168. The bank employees in the studied commercial banks understand the concept and importance of internal controls, including the division of responsibility. This is as indicated by a mean of 3.5676 with a standard deviation of 0.94985. The above findings are in line with Wainaina (2011) conclusion that there is need for proper authorization controls and documentation which can be supported by well-founded internal control systems. The findings are further in agreement with Kakucha (2009) who indicated that deficiencies in the internal control system can only culminate if the personnel lack the capabilities and knowledge to ensure proper flow of information; hence there is need for specialized personnel to be assigned to developing and maintaining the control systems.

Findings in table 4.4 also indicate that the banks' effective communication helps to evaluate how well guidelines and policies of the banks are working and being implemented. This fact was supported by a mean of 4.2342 indicating that the respondents strongly agreed and a standard deviation of 0.73799 which shows that the responses given did not vary much from the obtained mean. The banks' reporting systems on organizational structures spells out all the responsibilities of each section/unit in the banks as the respondents strongly agreed to this with a mean of 4.0721 and a standard deviation of 0.90163. The above findings fail to build on the key findings of the study by Beasley et al. (2000) which indicated that the reporting function of the internal audit can be affected by aspects such as the composition, independence and size which may lead to poor reporting systems.

4.4.7 Control activities

The section presents the study results on the control activities that the commercial banks employed as measures of internal controls and their effect on the banks' financial performance. The results are on means and standard deviation presenting the level of agreement of the respondents on the given activities of internal controls. These are as presented in table 4.5;

Table 4.5 Control Activities

	Mean	Std. Deviation
Appropriate measures are taken to correct misfeasance in operation of our Accounting & Finance Management System.	3.5673	1.10396
Bank system access is only allowed to authorized personnel.	4.4054	.70554
Accounting records in the bank are limited to employees with designated responsibility for such records.	4.0450	.74330
Reconciliation of the banks' accounts done on a daily basis to ensure no outstanding items that may result to bank's loss.	3.6667	1.33712
All bank processes have effective control measures (maker, checker, verifier)	3.4865	1.15888
Management closely monitors implementation of internal control systems in the bank.	3.8108	1.01367
Frequent reviews of operating performance done both to staff (appraisals) and the bank systems.	3.8020	.90576
Management provides feedback to the junior officers about the operation of the system	3.4752	1.21321

(Researcher, 2015)

Findings as presented in table 4.5 shows that the banks ensured that the appropriate measures are taken to correct misfeasance in operation of the Accounting and Finance Management System. This is as indicated by the level of agreement of the respondents where this obtained a mean of 3.5673 and a standard deviation of 1.10396 indicating that the respondents agreed to this fact. Findings also show that the banks system access is only allowed to authorized personnel only (mean = 4.4054; std. dev. = 0.70554). The findings also show that the accounting records in the banks are limited to employees with designated responsibility for such records (mean = 4.0450; std. dev. = 0.74330). The findings above resonate with the work of Barra (2010) who concluded that segregation of duties within the bank was a least-cost method towards deterring fraud in the system. The reconciliations of the banks' accounts are done on a daily basis to ensure no outstanding items that may result to bank's loss (mean = 3.6667; std. dev. = 1.33712).

From the table 4.5 also, all the banks' processes have effective control measures (maker, checker, verifier). This is as indicated by the mean of 3.4865 with a standard deviation of 1.15888 indicating that the respondents agreed. The respondents as well agreed that the management closely monitors implementation of internal control systems in the banks as illustrated by a mean of 3.8108 and a standard deviation of 1.01367. Further, findings illustrate that frequent reviews of operating performance are done both to staff (appraisals) and the banks systems. The respondents agreed to this which had a mean of 3.8020 and a standard deviation of 0.90576. The banks' management provides feedback to their junior officers about the operation of the system. This had a mean of 3.4752 and a standard deviation of 1.21321 indicating that the respondents agreed. The findings indicated above support the conclusions drawn by Amudo and Inanga (2009) that there is need for effective control systems to be developed and constant evaluation of the system is key to effectiveness of the institution.

4.4.8 Monitoring

The study results on the monitoring controls employed by the commercial banks are as presented in Table 4.6. The findings are on means and standard deviation showing the extent of the respondents' agreement on the monitoring aspects given.

Table 4.6 Monitoring Strategies

	Mean	Std. Deviation
There are independent process checks and evaluations of controls activities on ongoing basis.	3.4201	.94202
Internal reviews of implementation of internal controls in units are conducted periodically.	4.3210	.81300
The bank staff make daily reconciliations on accounts in the bank	4.2162	.67534
Management has assigned responsibilities for the timely review of audit reports and resolution of any non-compliance items noted in those audit reports	3.2751	.98791
Management control method is adequate to investigate unusual activities in the bank.	3.8675	.77652

(Researcher, 2015)

According to the findings in table 4.6, there are independent process checks and evaluations of controls activities on ongoing basis in the banks. The respondents agreed to this with a mean of 3.4201 and a standard deviation of 0.94202. The banks' internal reviews of implementation of internal controls in units are conducted periodically. The respondents had a strong extent of agreement to this aspect (mean = 4.3210; std. dev. = 0.81300). Further, findings show that the banks staffs make daily reconciliations on accounts where the respondents strongly agreed as

indicated by a mean of 4.2162 and a standard deviation of 0.67534. The findings are in agreement with the proposition by Jones (2008) that increased personnel accountability in recognition of their roles led to less fraud cases and losses. Hence regular reconciliations on accounting records can be a key component to eradicating fraud.

From the table 4.6 also, the respondents agreed (mean = 3.2751; std. dev. = 0.98791) indicating that the banks' management have assigned responsibilities for the timely review of audit reports and resolution of any non-compliance items noted in those audit reports. The respondents as well agreed that the banks' management control methods are adequate to investigate unusual activities in the banks. This obtained a mean of 3.8675 with a standard deviation of 0.77652 showing that the respondents agreed.

4.5 CBK prudential regulation

Table 4.7 CBK Prudential Regulation

	Mean	Std. Deviation
The set regulations are strictly adhered to.	3.6396	1.34700
Fraudulent activities are kept at minimal due to the regulations.	3.1261	1.12910
Stern measures are taken by CBK towards violation of any regulations.	3.9550	.99442
Adherence to set regulations positively contributes to financial performance of the organization.	4.4505	.49980

(Researcher, 2015)

Findings in table 4.7 illustrate that the set regulations in the banks are strictly adhered to by all employees. The respondents agreed to this aspect which obtained a mean of 3.6396 and a

standard deviation of 1.34700. The fraudulent activities in the banks are kept at minimal due to the regulations as the respondents reported (mean = 3.1261; std. dev. = 1.12910). Findings also show that stern measures are taken by CBK towards violation of any regulations (mean = 3.9550; std. dev. = 0.99442). Further, the respondents strongly agreed indicating that adherence to set regulations positively contributes to financial performance of the banks as shown by a mean of 4.4505 and a standard deviation of 0.49980 indicating no significant variance of the responses from the calculated mean.

4.6Regression results

In this study, regression analysis was carried to show the relationship between the dependent and the independent variables. The dependent variable was the financial performance of the commercial banks as measured by ROA obtained from the commercial banks' supervision reports for the respective years whereas the independent variables were the control environment, risk assessment, information and communication systems, control activities and the monitoring. The model also included testing the moderating effect of CBK prudential regulations on the relationship between internal controls and financial performance of the banks. The regression test was conducted through hierarchical regression analysis with two stages where the first model presents the coefficients for the independent variable and the second model presents the coefficients for both the independent variables and the moderating variable. The test of the relationship was tested at the 5% level of significance.

Findings under this section present the results on the relationship test between the dependent and independent variables. Regression test was carried out to show the extent of influence of the internal controls on financial performance of the commercial banks. The significance of the regression model was tested at the 5 % level of significance through F –statistics which shows

the level of reliability of the so developed models in presenting the relationship between internal controls and financial performance.

Results under regression analysis give the regression model summary which shows the extent of variability of growth due to the influence of the predictor variables (internal controls) as given by the coefficient of determination, the ANOVA table which shows the significance of the regression model as well as the regression coefficients

4.6.1 Multicollinearity Test

The results in table 4.8 give the variance inflation factors (VIF) for each variable using traditional criteria employed in the study that. The results imply that the level of collinearity that exist in the analysis is not problematic in any way as the VIFs values are not greater than 10.

Table 4.8 Multicollinearity Test Using Variance Inflation Factors

Variables	Collinearity Statistics		
	Sig.	Tolerance	VIF
control environment	0.020	0.976	1.022
risk assessment	0.015	0.998	1.005
information and communication systems	0.003	0.943	1.015
control activities	0.004	0.971	1.008
Monitoring	0.001	0.994	1.002
CBK prudential Regulation	0.021	0.926	1.013

(Researcher, 2015)

The diagnostics test as given by VIFs and correlations in this case indicate no major collinearity problems in the data alongside other diagnostic tests hence revealing no such severity. The

collinearity results shows that the independent variables (control environment = 1.022, risk assessment = 1.005, information and communication systems = 1.015, control activities = 1.008, and monitoring = 1.002) and the moderating variable (CBK prudential Regulation = 1.013) all have VIF values less than 10 indicating no collinearity problems in the data sets. With this evidence from the collinearity results presented in the table indicates that collinearity has not caused problems for the simple effect of Transfer in the data sets and that the existence of low level collinearity cannot make the result statistically different in any way. Therefore there is no significant collinearity in the data set that can hinder regression analysis as provided in the methodology.

4.6.2 Heteroscedasticity Test

Table 4.9 Heteroscedasticity Test Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	22.852	5	4.5704	2.345	.012
Residual	72.120	37	1.9492		

(Researcher, 2015)

a. Dependent Variable: Financial performance

b. Predictors: (Constant), control environment, risk assessment, information and communication systems, control activities, monitoring

According to the findings in the table, Heteroscedasticity does not exist since the test regression results has a p value smaller than 0.05 testing at 5 % significance one tailed test. The p-value calculated is 0.012 ($p < 0.05$).

Table 4.10 Coefficient of Determination results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.643 ^a	.615	.606	.84065

(Researcher, 2015)

a. Predictors: (Constant), monitoring, control activities, information and communication systems, risk assessment, control environment

Table 4.10 presents the regression model summary for the relationship between banks' performance (ROA) and the predictor variables (monitoring, control activities, information and communication systems, risk assessment, control environment). The table presents the summary coefficients indicating the extent of influence of the predictor variables on the performance.

According to the findings, the R-coefficient is 0.643 which shows that the predictor variables have a moderate positive association with the performance of the commercial banks. The coefficient of determination (R-Square) shows that the predictor variables used in the study can be relied on to explains 61.5% (0.615) of the variability in the banks' performance. Thus, based on the findings, it is clear that holding other factors constant, the monitoring, control activities, information and communication systems, risk assessment, and banks' control environment contribute to 61.5% growth in the banks' performance.

Table 4.11 Analysis of Variance and F-Test Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.100	5	1.02	1.217	.013 ^b
	Residual	29.326	35	.838		
	Total	34.426	40			

(Researcher, 2015)

a. Dependent Variable: ROA

b. Predictors: (Constant), monitoring, control activities, information and communication systems, risk assessment, control environment

From table 4.11, the significance value in testing the reliability of the model for the relationship between financial performance and internal controls was obtained as 0.013 which is less than 0.05 the critical value at 95 % significance level. Therefore the model is statistically significant in predicting the relationship between financial performance and internal controls in the commercial banks. The F value calculated is 1.217 indicating a significant model for the relationship as given by the regression coefficients. This shows that the overall model was statistically significant and reliable in explaining the influence of the predictor variables to the financial performance of commercial banks.

Table 4.12 Regression Coefficients

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	3.212	.588		5.463	.000
control environment	.416*	.069	.017	6.029	.020
risk assessment	.635*	.162	.158	3.919	.031
1 information and communication systems	.475*	.108	.158	4.398	.022
control activities	.923*	.272	.023	3.393	.019
monitoring	.615*	.087	.097	7.068	.024

(Researcher, 2015)

* Significant at 0.05 level

a. Dependent Variable: ROA

According to the findings as presented in Table 4.12, all the independent variable showed a positive coefficient indicating a positive effect on the performance. The regression coefficients show a significant relationship as indicated by the p-values where all the significant values are less than 0.05 indicating a significant relationship between the dependent and independent variables. Based on the coefficients, the regression model, $ROA_i = \alpha + \beta_1 CE_i + \beta_2 RA_i + \beta_3 ICS_i + \beta_4 CA_i + \beta_5 Mon_i + \varepsilon$ therefore becomes;

$ROA_1 = 3.212 + 0.416 CE_i + 0.635 RA_i + 0.475 ICS_i + 0.923 CA_i + 0.615 Mon_i$ This clearly shows a significant positive relationship between the predictor variables and the performance of commercial banks.

The first objective of establishing the effect of control environment on the financial performance of commercial banks in Kenya, control environment has a positive and significant relationship with the banks' performance according to table 4.12 above (B=0.416, P-Value=0.020). This was

also in line with the findings of a study conducted by Mwachiro (2013) whose investigation showed that weak internal controls and especially poor ethical values in the organization have encouraged collusion to fraud, loss of revenue and embezzlement of collected revenue.

The second objective of determining effect of risk assessment on financial performance of commercial banks in Kenya, according to table 4.12 above, risk assessment indicated a positive and significant effect on the banks' performance ($B=0.635$, $P\text{-Value}=0.031$). This gives evidence of a significant relationship between risk assessment and the performance of commercial banks. Ondieki (2013) in his study also supported this relationship where according to their findings, internal control audits provide assurance that controls are working, but they do not necessarily detect fraud or corruption. The study however showed that risk assessment in the act of internal audit in the commercial banks significantly affects the level of the financial performance of commercial banks.

The third objective of assessing the effect of information and communication on financial performance of commercial banks in Kenya, table 4.12 above also showed that, information and communication systems have a positive and significant effect on the organizational performance ($B=0.475$, $P\text{-Value}=0.022$). According to Kakucha (2009), there are deficiencies in the systems of internal controls, with the degree of deficiencies varying from enterprise to another where the deficiencies are majorly as a result of poor communication systems used. The study established that there is a significant statistical relationship between resources held by an enterprise and its internal control weaknesses which affect the level of organizational performance.

The fourth objective of establishing the effect of control activities on the financial performance of commercial banks in Kenya, the above table 4.12 showed a positive and significant relationship between control activities and the financial performance of the commercial banks

($B=0.923$, $P\text{-Value}=0.019$). These findings were in support of the findings of a study conducted by Barra (2010) whose study found out that presence of the control activities and separation of duties increases the cost of committing fraud among the staffs and therefore the banks' operations are assured of security. Thus, according to the study, since the benefit from committing fraud has to outweigh the cost in an environment of segregated duties for an employee to commit fraud, employees find it not achieving in such scenario and therefore the increased operations efficiency and the performance in turn.

The fifth objective of assessing the effect of monitoring on financial performance of commercial banks in Kenya, as per table 4.12 above, monitoring strategies had a positive and significant effect on financial performance of the commercial banks ($B=0.615$, $P\text{-Value}=0.024$). The findings indicated a P-Value of 0.024 showing that there is a significant relationship between monitoring and financial performance of the commercial banks. A beta of 0.615 indicated a positive relationship. In his study, Muio (2012) established that monitoring had the highest influence on the financial performance of private hospitals in Kenya as compared to control environment, information and communication, risk assessment and control activities respectively. The findings therefore are in support of this study through the fact that there is a significant positive relationship between monitoring strategies and the financial performance of the commercial banks.

4.6.4 Moderating Effect of Prudential Regulation on Internal Controls and Financial Performance

Table 4.13 below presents the results on the relationship with the influence of the moderating variable;

Table 4.13 Coefficient of Determination results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
2	.694 ^b	.643	.623	.83946

(Researcher, 2015)

b. Predictors: (Constant), monitoring, control activities, information and communication systems, risk assessment, control environment, CBK prudential regulation. Results in table 4.13 presents the regression model summary showing the moderating effect of the CBK prudential regulation on the relationship between independent variables and the financial performance of the commercial banks. The model was obtained after the data was subjected to hierarchical regression test through which the initial test gave the results for the relationship between the dependent and independent variables as presented in Table 4.10. From the results, the change in R^2 shows a positive change where the percentage of the variability accounted for by the predictor variables went up from 61.5 percent to 64.3 percent. This shows that, the moderating variable contributed to 2.8 percent growth in the variance controlled by the internal controls in the banks' financial performance.

Based on the coefficients, with the influence of the moderating variable, the predictor variables (monitoring, control activities, information and communication systems, risk assessment, control environment) explain 64.3% of the variation in the banks' financial performance. This is as represented by the R - square coefficient of 0.643. This therefore reveals that other factors not studied in this research contribute to 35.7% of the variability in the financial performance of the banks.

Findings in table 4.13 also illustrate that, the study results are 62.3 percent reliable as indicated by the adjusted R Square coefficient. This shows that, the study results are reliable in explaining the moderating effect of the CBK prudential regulation on the relationship between internal controls and financial performance of the commercial banks. Table 4.14 Analysis of Variance and F-Test Results

Table 4.14 Analysis of Variance and F-Test Results

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	6.172	6	1.03	1.239	.012 ^c
	Residual	28.254	34	.831		
	Total	34.426	40			

(Researcher, 2015)

a. Dependent Variable: ROA

c. Predictors: (Constant), monitoring, control activities, information and communication systems, risk assessment, control environment, CBK prudential regulation

From table 4.14, the significance value in testing the reliability of the model for the relationship between financial performance and internal controls with the moderating effect of the CBK prudential regulation was obtained as 0.012 which is less than 0.05 the critical value at 95 % significance level. This value was slightly lower than the coefficient for the relationship between the dependent and independent variables without the influence of the moderating variable indicating a significant moderating effect of the CBK prudential regulation on the relationship. Therefore the model is statistically significant in predicting the moderating effect of the CBK

prudential regulation on the relationship between financial performance and internal controls in the commercial banks. The F value calculated is 1.239 indicating a significant model for the relationship. This shows that the overall model was statistically significant and reliable in explaining the moderating effect of the relationship between the predictor variables and the financial performance of commercial banks. Thus, there is a significant change into the extent to which the independent variables influences financial performance due to the effect of the CBK prudential regulation.

Table 4.15 Regression Coefficients of Moderated Relationship of CBK Prudential Regulations.

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	3.420	.682		5.015	.000
control environment	.421	.064	.020	6.578	.015
risk assessment	.663	.156	.167	4.250	.023
2 information and communication systems	.505	.112	.158	4.508	.011
control activities	.941	.268	.007	3.510	.017
monitoring	.671	.187	.108	3.588	.020
CBK prudential	.263	.011	.092	2.367	.021

(Researcher, 2015)

a. Dependent Variable: ROA

The estimates of the regression coefficients, t-statistics and the p-values for the relationship between internal controls and financial performance are presented in table 4.15. These coefficients answer the regression model relating the dependent and the independent variables. In testing the relationship, control environment, risk assessment, information and communication

systems, control activities, monitoring, and the CBK prudential regulations were used to run the multiple regression against the financial performance of the commercial banks as the dependent variable.

Based on these, the regression model; $ROA_i = \alpha + \beta_1 CE_i + \beta_2 RA_i + \beta_3 ICS_i + \beta_4 CA_i + \beta_5 Mon_i + \beta_6 PG_i + \varepsilon$ therefore becomes;

$$ROA_i = 3.420 + 0.421 CE_i + 0.663 RA_i + 0.505 ICS_i + 0.941 CA_i + 0.671 Mon_i + 0.263 PG_i$$

According to the results as presented in the model, the internal controls had a significant influence on financial performance. The coefficients also showed a positive relationship between all the variables and financial performance. This is according to the significance values and the coefficients obtained against each variable. The coefficients show a positive effect of the moderating variable to the effect of the internal controls. This is evident from the beta coefficients in the initial model results which are less significant as compared to the final results for the second model.

According to the findings in table 4.15, control environment had a positive relationship with financial performance. From the model, the beta coefficient for the control environment is 0.421. There is a Significant relationship as shown by a P-Value of 0.015 Thus, there is a positive and significant relationship between control environment and performance of the commercial banks ($\beta_1 = 0.421, t = 6.578, p > 0.015$).

With regard to the relationship between risk assessment and financial performance of the commercial banks, the model illustrated that risk assessment is positively related to the financial performance. This also showed a significant influence on financial performance with the coefficient ($\beta_1 = 0.663, t = 4.250, p > 0.023$) indicating a positive effect on performance.

The model also illustrates that information and communication systems have a positive relationship with financial performance. According The findings therefore illustrate that there is a positive and significant relationship between information and communication systems and the level of the banks' performance ($\beta_1 = 0.505$, $t = 4.508$, $p > 0.011$).

According to the findings in table 4.15 as well, there is a positive relationship between control activities and the financial performance of the commercial banks. This is indicated by the regression coefficient of 0.941 showing a positive relationship. This also showed a significant relationship between the variables as shown by a p-value of 0.017. Based on the findings therefore, there is a significant positive relationship between control activities and financial performance of commercial banks ($\beta_1 = 0.941$, $t = 3.510$, $p > 0.017$).

The findings in table 4.15 also showed that monitoring is positively related to financial performance of the commercial banks. The relationship between monitoring and financial performance as indicated in the model is positive and significant. The study findings showed a positive and significant relationship between monitoring strategies and financial performance of the commercial banks in Kenya ($\beta_1 = 0.671$, $t = 3.588$, $p > 0.020$).

According to the findings in table 4.15, there is a positive significant moderating effect on the relationship between internal controls and financial performance as indicated by the coefficients ($\beta_1 = 0.263$, $t = 2.367$, $p > 0.021$). Thus, there is a significant influence of the CBK prudential regulations on the financial performance of the commercial banks.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study findings, the conclusions that were made from the findings and the recommendations given for policy improvement. The recommendations issued are significant in dealing with the frauds in the banking sector towards the improvement in the commercial banks' financial performance.

5.2 Summary of the Findings

The study was undertaken with the aim of assessing the effect of internal control on the financial performance of commercial banks in Kenya. The study was guided by five objectives; to establish the influence of control environment on the financial performance of commercial banks, to determine the extent to which risk assessment on financial performance of commercial banks, to assess the effect of information and communication and the financial performance of commercial banks, to establish the effect of control activities on the financial performance of commercial banks and to assess the extent to which monitoring influences the financial performance of commercial banks. The study also sought to examine the moderating effect of CBK prudential regulation on the relationship between internal controls and financial performance of commercial banks.

The study found out that most of the commercial banks reviewed their internal control systems on need basis. The study findings also showed despite there being the internal controls adopted by the commercial banks, these did not affect the banks' operations significantly as these did not meet the functioning requirement. According to the findings, commercial bank staffs who

participated in the study ranked their banks' internal control system as uncertain in relation to revenue generation

The results of the multiple regression model showed that there is a positive relationship between internal control and financial performance of commercial banks in Kenya. Holding all the other factors constant, financial performance is measured by the efficiency and effective implementation of internal controls. The study established that internal controls affect financial performance of commercial banks in Kenya to a great extent.

Testing the moderating effect of the CBK prudential regulations, the study found out that the CBK prudential regulations has a significant influence to the relationship between internal controls and financial performance of the commercial banks in Kenya. This illustrated that the effectiveness of the CBK in playing the regulatory role affects the banks' financial performance to a great extent. From the findings presented in the previous chapter it was evident that 64.3 percent changes in performance were attributed to the joint influence of all the predictor variables. Findings also showed that the moderating variable contributed to 2.8 percent growth in the variance controlled by the internal controls in the banks' financial performance.

5.3 Conclusions

The study therefore based on the findings obtained in chapter four above concluded that Control environment within the commercial banks is positively and significantly related to the financial performance of the commercial banks. The ability of the banks to maintain a conducive environment for the internal control systems to be applied determines the ability of the commercial banks to meet the customer needs and execute duties efficiently thus leading to improved performance of the organization.

Risk assessment strategies adopted in commercial banks also affects the level of the commercial banks' performance. Banks with effective measured of risk assessment in their operations are in better performance chances as these are able to detect risks in their operations that might contribute to their losses and therefore will put in place measures to deal with these risks. With minimal risks in operation, a bank is guaranteed with increased financial performance.

There is a positive and significant relationship between information and communication and the financial performance of commercial banks in Kenya. The level of information accessibility to the employees as well as the effectiveness of the banks' communication system contributes greatly to the ability of the banks to grow financially. The study gives evidence that the commercial banks' confidential information is a key asset to the banks as access to unauthorized personnel may ruin the bank and contribute to the threats of losses.

The Management of every commercial bank has the core responsibility for designing, implementing and monitoring their internal controls system. With appropriate control activities against frauds and other threats to the banks' operations, banks are in better performance position. Internal controls provide complete and accurate records are kept of transactions involving the bank and the customers are secured.

The presence of monitoring system for the banks' operation is critical for the banks' success in their service delivery. Internal controls need to be adequately monitored in order to assess the quality and the effectiveness of the system's performance over time. The banks have policies that facilitate adherence to the provisions of their budget and ensuring that controls are in place to exclude incurring expenditure in excess of budgeted funds.

5.4 Recommendations

With reference to the study findings and conclusions provided, the following recommendations were given for policy improvement; control environment has a positive significant relationship with financial performance. The banking institutions should therefore ensure suitable control environment for security of the operation activities. The management specifically senior risk manager and senior operations manager of the commercial banks should therefore put in place effective and efficient security network to reduce frequent theft, threat to the bank operations and property. There is need therefore for the banks to ensure suitable environment where internal controls are supported for improved performance of commercial banks.

Risk assessment has a positive significant relationship with financial performance. It is therefore important for commercial banks to implement proper risk assessment to guide their operations. Internal controls are key to the operations of the Commercial banks. To ensure effective controls, the banks' management specifically the senior audit manager should facilitate conduction of regular checks on the ability of the strategies in place for internal controls in regards to efficient risk assessment. Therefore, the commercial banks should regularly check on their operations and the policies to deal with threats to examine whether these meets all the banks' requirements to safeguard the banks from losses.

Information and communication has a positive significant relationship with financial performance. For commercial banks to realize continued growth and improved performance, their information and communication systems efficiency is essential. The study recommends that there is need for proper checks and balances in all financial transactions in the banks where the banks' management specifically senior risk manager should organize regular training for the staff on risk assessment and control mechanism towards effective security to the banks' operations.

Control activity has a positive significant relationship with financial performance. There is need for the commercial banks to implement efficient control activities to guide their operations. The banks' management specifically the senior human resource manager should examine the level of employee integrity in allocating them responsibilities especially where employees are to deal with confidential information involving the banks' vital documents. Therefore, employee integrity to hold the sensitive positions in the banks should be checked to ensure that the positions are held by personnel who would save the bank from internal threats in their operations.

Monitoring has a positive significant relationship with financial performance. The banks' monitoring strategies should be geared towards effective operations and achievement of the organizational goals. There is need therefore for the commercial banks' management specifically the senior risk manager to ensure that there are policies in place guiding the banks' dealing with threats to the banks' operations.

CBK prudential regulations have a significant influence on the relationship between internal controls and financial performance. The CBK should ensure that the policies in place are strictly adhered to by the commercial banks to safeguard their operations. Also, the CBK should provide more training to the commercial banks' management on the effective monitoring strategies and policies that they should apply to ensure increased profitability of the banks.

5.5 Suggestions for Further Study

Due to the innovative nature of the banking sector, a similar study should be conducted after a period of ten years in order to investigate whether there are any areas of commonalities or unique

factors. This is because the level of technology in banking sector is very dynamic and keeps on changing.

It would be interesting to conduct a study on the effect of internal controls on financial performance of Investment Banks in Kenya; this will give a broader view on how internal controls affect not only the commercial banks but also investment banks in Kenya. It will assist management of both commercial and investment banks towards betterment of the banking sector as a whole.

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APPENDICES

APPENDIX I: INTRODUCTION LETTER

The Respondent,

Dear Sir/Madam,

Re: Request for Research Data

I'm a Postgraduate student pursuing a Master's of Science Finance (MSC) degree at Kenyatta University. My research project topic is "Effect of Internal Controls on Financial Performance of Commercial Banks in Kenya".

You have been selected to form part of those to provide the necessary data needed for this study. You are therefore kindly requested to assist by granting an opportunity for the filling in of the attached questionnaire at your convenience when contacted for an appointment.

The information you provide will be treated in strict confidence and is purely for academic purpose. In no way will your name appear in the final research report. Your assistance and cooperation will be highly appreciated.

Student

Diana M.Muthusi

Reg. No.: D58/CTY/PT/25878/13

APPENDIX II: QUESTIONNAIRE

Dear Sir/Madam

You are invited to participate in the above mentioned research project. The survey should only take 10 – 15 minutes to complete. To ensure confidentiality of all responses, you are not obliged to provide your name. The information you give in response to this survey will be purely used for academic purpose.

1. Respondent's Highest Educational Qualification

- i) Certificate/Diploma []
- ii) Undergraduate degree []
- iii) Master's degree []
- iv) Doctorate []
- v) PhD []

2. Time spent in the bank

- i) Less than 6 months []
- ii) 6 months-1 year []
- iii) 1-2 years []
- iv) 2-3 years []
- v) 3-4 years []
- vi) More than 4 years []

3. How frequent does your bank review its internal control systems?

- i) After 5 years []
- ii) Annually []
- iii) Half-yearly []
- iv) When need arises []

4. In your opinion, does your bank's system of internal controls sufficiently and effectively contribute to revenue generation? How does your role support it?

5. Are the systems of internal controls referred to in 4 above functioning as they are intended to?

- a) Yes ()
- b) No ()

Explain

6. How would you generally rate the internal control system in your organization in relation to revenue generation?

- a) Very ineffective ()
- b) Ineffective ()
- c) Uncertain ()
- d) Effective ()
- e) Very effective ()

7. Please rank the following statements in each area of internal control system on Likert scale ranging from strongly disagree to strongly agree where: 1 = strongly disagree; 2 = disagree; 3 = not sure; 4= agree; and 5= strongly agree.

Internal Control	1	2	3	4	5
Control Environment					
Rank Control Environment statements on Likert scale ranging from strongly disagree to strongly agree where 1 = strongly disagree; 2 = disagree; 3 = not sure; 4= agree; and 5= strongly agree.					
i) Fraud detection, and fraudulent activities are inherently unpredictable difficult to detect and they affect the performance of the bank					
ii) Measures that can enhance the efficacy of auditors are important for effective fraud detection					
iii) There is honest and fair dealings with all stakeholders for the benefit of the organization					
iv) Management is committed to the ethical values in the operation of the banking system					
v) Standards for audits and audit-related services influence the performance of commercial banks					
vi) internal audit evaluate and contribute to the improvement of risk management, control and governance using a systematic and disciplined approach in the banking					

In your opinion, how can we improve the Control Environment in commercial banks?

Risk Assessment

Rank Risk Assessment statements on Likert scale ranging from strongly disagree to strongly agree where 1 = strongly disagree; 2 = disagree; 3 = not sure; 4= agree; and 5= strongly agree.

	1	2	3	4	5
i) Management has defined appropriate objectives for the bank.					
ii) Management identifies risks that affect achievement of the bank objectives.					
iii) Management has a criteria for identification of which risks to the bank are most critical.					
iv) Management has put in place mechanisms for mitigation of critical risks that may lead to bank's loss.					
v) Management has a criteria for ascertainment of which risks to the bank are most critical.					
vi) There is frequent escalation and reporting of bank's departmental risks to the management to assist in solving early					

enough before it develops to loss.					
vii) All instructions received from bank clients are thoroughly scrutinized (e.g. signature verification) before execution to prevent processing fraudulent transactions.					
How can we reduce exposure to risks in commercial banks?					
Information and Communications System					
Rank Information and Communication system statements on Likert scale ranging from strongly disagree to strongly agree where 1 = strongly disagree; 2 = disagree; 3 = not sure; 4= agree; and 5= strongly agree.					
	1	2	3	4	5
i) Management has identified individuals who are responsible for coordinating the various activities within the bank to ensure appropriate communication on internal controls.					
ii) All employees understand the concept and importance of internal controls, including the division of responsibility					
iii) Effective communication helps to evaluate how well guidelines and policies of the bank are working and being implemented.					
iv) The reporting system on banking structures spells out all the					

responsibilities of each section/unit of the bank.					
Is there effective internal control communication and proper flow of information down, across, and up within all the sections of the organization?					
Control Activities					
Rank Control Activities statements on Likert scale ranging from strongly disagree to strongly agree where 1 = strongly disagree; 2 = disagree; 3 = not sure; 4= agree; and 5= strongly agree.					
	1	2	3	4	5
i) Appropriate measures are taken to correct misfeasance in operation of our Accounting & Finance Management System.					
ii) Bank system access is only allowed to authorized personnel.					
iii) Accounting records in the bank are limited to employees with designated responsibility for such records.					
iv) Reconciliation of the banks' accounts done on a daily basis to ensure no outstanding items that may result to bank's loss.					
v) All bank processes have effective control measures (maker,checker,verifier)					
vi) Management closely monitors implementation of internal control systems in the bank.					

vii) Frequent reviews of operating performance done both to staff (appraisals) and the bank systems.					
viii) Management provides feedback to the junior officers about the operation of the system					
Are control activities in your bank effective and strongly adhered to? How best can we improve them?					
Monitoring					
Rank Monitoring statements on Likert scale ranging from strongly disagree to strongly agree where 1 = strongly disagree; 2 = disagree; 3 = not sure; 4= agree; and 5= strongly agree.					
	1	2	3	4	5
i) There are independent process checks and evaluations of controls activities on ongoing basis.					
ii) Internal reviews of implementation of internal controls in units are conducted periodically.					
iii) The bank staff make daily reconciliations on accounts in the bank					
iv) Management has assigned responsibilities for the timely review of audit reports and resolution of any non-compliance items noted in those audit reports					

v) Management control method is adequate to investigate unusual activities in the bank.					
Are there proper mechanisms put in place to monitor the quality of internal control structure in commercial banks over time?					
CBK Prudential Regulation					
These statements are on CBK Prudential Regulation, rank them on Likert scale ranging from strongly disagree to strongly agree where 1 = strongly disagree; 2 = disagree; 3 = not sure; 4= agree; and 5= strongly agree.					
	1	2	3	4	5
i) The set regulations are strictly adhered to.					
ii) Fraudulent activities are kept at minimal due to the regulations.					
iii) Stern measures are taken by CBK towards violation of any regulations.					
iv) Adherence to set regulations positively contributes to financial performance of the organization.					
Are CBK prudential regulations enough to curb all commercial banks' irregularities?					

Thanking you for your participation.

Appendix I: List of Commercial Banks in Kenya

1. ABC Bank (Kenya)
2. African Development Bank
3. Afrika Investment Bank
4. Bank of Africa
5. Bank of Baroda – Kenya
6. Bank of India
7. Barclays Bank of Kenya.
8. CFC Stanbic Bank
9. Chase Bank (Kenya)
10. Citibank NA Kenya
11. Commercial Bank of Africa
12. Consolidated Bank of Kenya
13. Co-operative Bank of Kenya
14. Credit Bank
15. Diamond Trust Bank
16. Dubai Bank Kenya
17. Ecobank
18. Equatorial Commercial Bank
19. Equity Bank
20. Family Bank
21. Fidelity Commercial Bank Limited
22. Fina Bank (Guaranty Trust Bank)
23. First Community Bank
24. Giro Commercial Bank
25. Guardian Bank
26. Gulf African Bank
27. Habib Bank AG Zurich
28. HFCK
29. I & M Bank
30. Imperial Bank
31. Imperial Bank Kenya
32. Jamii Bora Bank
33. Kenya Commercial Bank – KCB
34. K-Rep Bank (Sidian Bank)
35. National Bank of Kenya
36. NIC Bank
37. Oriental Commercial Bank Ltd.
38. Paramount Universal Bank
39. Post Office Savings Bank – Kenya
40. Prime Bank (Kenya)
41. Standard Chartered Bank – Kenya
42. Trans-National Bank Kenya
43. United Bank for Africa

