THE RELATIONSHIP BETWEEN RISK BASED INTERNAL AUDIT AND
FINANCIAL PERFORMANCE OF COMMERCIAL STATE CORPORATIONS
IN KENYA

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REG. NO. D63/79146/2012

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS OF THE DEGREE OF MASTER OF SCIENCE IN FINANCE,
SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

OCTOBER 2014
DECLARATION

This Research Project is my original work and has not been presented in any other University.

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ACKNOWLEDGEMENTS

The completion of this project was not easy. It was not created by the author alone, but relied on the cooperative assistance of many unseen hands. First and foremost I owe special thanks to God Almighty for seeing me through. I sincerely acknowledge my supervisor Mr. Herick Ondigo, Lecturer University of Nairobi and Chairman of the Department of Finance in the School of Business for his enabling support and guidance, his never ending patience, good eye and sharp mind and to my moderator Mr. Cyrus Iraya, Lecturer University of Nairobi for his availability and guidance during moderation and also during proposal presentation.

I would also like to acknowledge the encouragement from all my colleagues and my MSc. classmates, friends and relatives whose remarkable devotion, dedication and insights throughout the project work was incredible.

I am also grateful to many others who contributed in one way or another to the fulfilment of this work, I express heart full gratitude
DEDICATION

This research study is dedicated to my parents Mr. & Mrs. Marete and brothers for their moral support throughout the entire MSc. program and especially during this research project.
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ABSTRACT

Risk based internal auditing influences a firm’s use of its internal audit function to enhance risk management and control as well as governance which in turn influences accountability and enhances accuracy of financial statements thereby influencing financial performance in financial institutions.

To understand the relationship between risk based internal audit and financial performance, the study examined whether use of risk based internal audit practices such as risk management, internal audit planning, internal audit capacity and internal audit standards affected financial performance of commercial State Corporations in Kenya. The study adopted descriptive survey research with a view to obtaining information that describes existing phenomena. The target population for the proposed study was the 53 commercial State Corporations operating in Kenya and a census survey of all the 53 commercial State Corporations was undertaken. Primary data was collected using questionnaires that were self-administered after which the researcher used quantitative techniques to analyse the data. After receiving questionnaires from the respondents, the collected data was examined and checked for completeness and comprehensibility. Inferential statistical regression and correlation was done to establish the impact of risk based internal audit on financial performance of commercial State Corporations. The study concluded that there existed a positive relationship risk management, internal audit planning, internal audit capacity and internal audit standards on financial performance and therefore recommends that management in Commercial state corporations should embrace risk based internal auditing practices.

From the findings, the study recommends that managers in commercial state corporations in Kenya should adopt risk based internal audit practices such as risk management, internal audit planning, internal audit capacity and internal audit standards in order to enhance financial performance of their organisations.
CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Uncertain economic conditions and growing business risks that result from market complexity, corporate governance failures, fraud and financial scandals, the credit crunch and slow global economic recovery have put organizations into challenging and difficult situations to achieve their objectives (Mikes & Kaplan, 2013). Consequently, successful management of business risks is crucial to the achievement of corporate objectives and sustainment of superior financial performance. As a result, these conditions have led to a bigger focus on risk based internal auditing and the role and responsibility of different constituents of the corporate governance mechanism. In navigating this uncertain situation, the effectiveness of the risk based audit function (RBA) and risk management function (RMF) has continued to receive huge attention by majority of stakeholders, particularly regulators, rating agencies, shareholders and corporate managers in an effort to achieve higher returns (Sarens & De Beelde, 2005).

Recent years have seen heightened concern and focus on risk based internal auditing fuelled by a series of business scandals and failures where investors, company personnel and other stakeholders suffered tremendous loss. The Sarbanes-Oxley Act in the US, the Basel II Capital Accord and the revised Combined Code (2003) in the UK are all examples of governance reforms with the intention of minimizing the risk of future major corporate failures through tighter regulation of internal control systems. Risk based audit is viewed as a corner stone of good corporate governance and therefore results in financial performance (Carcello et al., 2005).

McCord (2002) posited that risk based internal auditing could improve the precision of financial statement information by issuing qualified opinions on firms with unreliable financial statements. The risk based internal audit approach, which focuses on both recorded and unrecorded risk, improves financial statement assurance and the financial statement reporting process. Risk based audit focuses on business risk and the processes for controlling these risks. The higher the risk area, the more audit time and
more precise client controls are required. Besides focusing on the level of risk, the risk-based method helps to evaluate and build value into the financial reporting process and the clients company. In order to do this, the auditor must have an up to date insight of the clients business and activities (Beekes & Brown, 2006). This knowledge is gained through the way the client operates their business, management, internal and external environments. The impact of risk based internal audit has been found to mitigate the occurrence of risks through enhancement of quality financial reporting, minimizing losses and eventually improving a corporation’s financial performance (Lorenzo, 2001).

There is a generally accepted relationship between risk and financial return i.e. the higher the risk the higher the expected financial return. The measures of a Corporation’s performance comprise both risks and returns (Beekes & Brown, 2006). The increasing competition in the national and international markets, the changeover towards monetary unions and the new technological innovations herald major changes in public sector environment, and challenge all organisations to make timely preparations in order to fit into the new competitive financial environment. Comprehensive risk based internal auditing influences effective financial reporting activities and influencing profit and loss sharing in the source of funds especially investment account holders.

Risk based internal auditing is an important tool through which Commercial State Corporations in Kenya strengthen their operational management (GOK, 2013). Furthermore, risk control system is a significant part of the modern governance system, and also an important way that Commercial State Corporations can emphasize management and enhance financial returns.

### 1.1.1 Risk Based Internal Audit

Risk based internal auditing derives largely from models that assume that inherent risk (risk of a material misstatement in the financial statements arising due to error or omission as a result of factors other than failure of controls) and control risk (risk of a material misstatement in the financial statements arising due to absence or failure in
the operation of relevant controls) are distinct concepts and that inherent risk arises from attributes of the audit environment that are completely independent of attributes that determine the level of control risk. Operationalizing the distinction between inherent risk (IR) and control risk (CR) has however, proved difficult. There appears to be little consensus regarding attributes that may identify IR and there is little published evidence regarding how IR is considered by practitioners. Also, it is not yet clear neither does it make good logical sense to try to separate IR and CR in the manner demanded by standard setters (DeZoort et al, 2002).

Risk based internal audit (RBIA) is a term derived from the Institute of International Audit (IIA) Research Foundation based in the USA (IIA, 2004). In 1999, the Board of Directors of IIA voted to approve a new definition of internal auditing and a new Professional Practice Framework (PPF). Ideally, RBIA is a paradigm shift from the traditional approach of pre-auditing or transactional audit to systems audit and finally to RBIA (Marks, 2001). In pre-audit, management abdicated their responsibilities to internal auditors; there were no Audit Reports and no review of the system by Management. On the other hand, systems audit was a passive and reactive, control based audit with no involvement of Management in audit planning. Therefore, for internal audit to be effective and efficient, RBIA was introduced (IIA, 2004).

Risk based internal audit approach is the method followed by an auditor while determining the audit procedures to be performed - based on risk; or the indication that there is a greater likelihood that transactions or classes of transactions, accounts or balances, and/or disclosures could be misstated - to enable the auditor to achieve the audit objective. The evaluation and consideration of the risk-based internal audit approach is a normal consequence of striving for improvement and the development of the services that the auditing profession provides. In developing the risk-based internal audit approach, there are certain complexities surrounding the audit that should be considered. The major complexities in performing the audit are: firstly, the expectation gap; secondly, the uncertainties surrounding the responsibilities of the auditor; thirdly, the provision of reasonable assurance; and fourthly, the practical implementation of the standards (Gibson, 2003).
Risk assessment is useful in classification of the different risks according to the amount of damage they could possibly cause (Goodwin, 2003). This classification enables the management to separate risks that are threatening the existence of the corporation from those which can cause slight damages. Assessing the risk of material misstatement at the financial statement level as well as at the planning stage, adds to and clarifies the direction on performing a combined assessment of inherent, and control risk, leaving the ability for the auditor to assess other risk factors in an audit (McCord, 2002). Sherer, Turley and Cooper (1998) suggested that in order to improve the risk-based approach, ways must be identified in which auditors' judgement of inherent risk and control risk can become more accurate and consistent. Houghton and Fogarty (1991). Mautz (1961) found four factors (turnover of controllers, financing pressure, the complexity of overhead in inventory and the quality of personnel) responsible for inventory calculation) to be significant in influencing judgments of IR.

Risk Management is an explicit tool for businesses, public sector organizations and regulators to identify evaluate and manage both risk and opportunity (Wade, 2002). Risk management in risks based internal audit includes identifying and assessing inherent risks and then responding to them (The Orange Book, 2004). According to IIA, Role of Auditing in Public Sector Governance (2006) auditors must assess the adequacy of corporate governance and the control environment; the effectiveness of processes to identify, assess, and manage risks; the assurance provided by control policies, procedures, and activities; the completeness and accuracy of information and communication systems and practices; and the effectiveness of management’s monitoring and evaluation activities. Internal auditing risk management orientation has given the audit function increased credibility across the enterprise and greater acceptance by management (Winograd, Gerson & Berlin, 2000). Through Risk based internal audit, sound risk management strategies which are forward looking and help to improve business decisions can be achieved (Fatemi & Glaum, 2000). It is not just about avoiding or minimizing losses, but about dealing positively with opportunities. It is a powerful tool for public sector managers. Good risk management is based on a well-planned, logical, comprehensive and documented strategy. This strategy
provides general policy guidance, and plans and procedures that can be used as part of the organization’s everyday work to manage risk (OECD, 2005).

Internal Audit requires several risk management practices including; determining processes and their objectives, identifying risks that hinder the processes with management, tests and controls to mitigate the risks, reporting where risks are not sufficiently mitigated by controls and assuring management that risks are mitigated to an acceptable level. This has been made easy with adoption of RBIA in the public sector (Millichamp, 2002). The objective of RBIA is to provide independent assurance to the Board that there is a sound risk management framework within the organization, and risks that may affect the organisation’s business objectives and strategies have been identified, managed and reduced to a level that is acceptable to the Board (IIA, 2003). One indication of a risk management framework is the existence of a separate committee or group, comprised of directors and managers (Goodwin-Stewart & Kent 2006) to develop risk management development policy.

Annual Risk Based Planning is a vital internal audit activity and it includes preparing a strategic plan as well as annual plans and programs for individual risk based audit assignments. Enterprise risks are increasing exponentially while the ability to manage these risks is not keeping pace (Wade, 2002). Increasingly, companies are looking to risk assessment as a way to identify and assess risks either across the organization as a whole or within specific aspects of the business. For internal audit departments, risk assessment is a key element in the development of the annual risk-based internal audit plan. The identification, prioritization and sourcing of key organizational risks is critical to ensuring that internal audit resources are allocated to the areas that matter most. Planning is generally considered a vital internal audit activity and it includes preparing a strategic plan, annual plans and programs for individual risk based audit assignments (O'Regan, 2002). The operational standard of the Internal Audit, dealing with the planning aspects of the internal audit, requires the preparation of a strategic plan usually a five-year plan, a periodic (annual) plan and plans for individual audit assignments (Karapetrovic, 1999).
For risk based internal audit (RBIA) to improve financial performance in the public sector, Auditors must embrace International Auditing Standards that guide the internal audits and ethics of work while maintaining professional auditing standards.

Internal Auditing Capacity is the ability to establish and maintain effective internal accounting controls to provide reasonable assurance that assets are safeguarded and that transactions are properly authorized and recorded. To accomplish this, many companies established internal audit functions, increased internal audit staffing, and strengthened internal audit independence. Beasley et al. (2000) found that these investments in internal auditing have been effective, as companies with internal audit staff are less prone to financial fraud than companies without internal auditors. Also, Coram et al. (2008) found that organizations with internal audit staff are more likely than those without internal auditors to detect and self-report occurrences of fraud. The number and magnitude of errors requiring adjustment by the external auditors have been found to be substantially lower for entities that had an internal audit department compared to those that did not have an internal audit department (Wallace & Kreutzfeldt, 1991). Internal audit quality, which is determined by the internal audit department's capability to provide useful findings and recommendations, is central to audit effectiveness. According to Ziegenfus (2000), audit quality is a function of the level of staff expertise, the scope of services provided and the extent to which audits are properly planned, executed and communicated. The IIA's standard, 1210 on proficiency of the auditor require internal auditors to possess knowledge, skills and other competencies needed to perform their responsibilities (IIA, 1999). The audit activity needs professional staffs that collectively have the necessary qualifications and competence to conduct the full range of audits required by its mandate.

1.1.2 Financial Performance

Financial performance may be simply defined as a subjective measure of how well a firm can use assets from its primary mode of business to 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. Financial performance is a measure of a financial institution’s policies and operations in monetary terms (Al-Mazrooei, 2007). These results are reflected in the firm's return on investment, return on assets, value added, etc.

According to Mishkin (2007), the financial industry, like other industries is in business to earn profits by selling its products. To maximize the profits, financial institutions develop new products to satisfy their own needs as well as those of their customers; in other words, innovation is driven by the desire to get rich. This view of the innovation process leads to the following simple analysis: A change in the financial environment will stimulate a search by financial institutions for innovations that are likely to be profitable.

Starting in the 1960s, firms operating financial markets were confronted with drastic changes in the economic environment: inflation and interest rates climbed sharply and became harder to predict (a situation that changed demand conditions in financial markets), while the rapid advance in computer technology changed supply conditions. In addition, financial regulations became more and more burdensome causing many financial institutions to realise that many of the old ways of doing business were no longer profitable; the financial services and products they had been offering to the public were no longer selling (McNamee & Selim, 1999). Many financial intermediaries found that they were no longer able to acquire funds with their traditional financial instruments, and without these funds they would soon be out of business. To survive in the new economic environment, firms have to research and develop new products and services that would meet customer needs and prove profitable, a process referred to as financial engineering. The financial innovation that occurs suggests that there are three basic types of financial innovation: responses to changes in demand conditions, responses to changes in supply conditions, and avoidance of regulations (Ball & Shivakumar 2004).
1.1.3 Effects of Risk Based Internal Audit on Financial Performance

Risk based internal auditing influences a firm’s use of its internal audit function from risk management, control and governance perspectives which in turn influences accountability and enhances accuracy of financial statements thereby influencing financial performance in financial institutions (CBK, 2010). The presence of real options based flexibilities should enhance effective risk management practices that diminish earnings volatility and thereby reduce the costs associated with potential financial distress (Andersen, 2008). Risk based internal audit can be extended to include a real options perspective where firms are able to develop opportunities and claims on the future that can be evaluated based on assumptions about underlying risk factors (Leiblein, 2003). Stulz (1984) carried out a study on the rationale of risk based internal audit to organizations and found that there existed a rationale for RBIA for lenders and financial institutions in the business of lending thus influencing bank financial performance. Transparency, disclosure and trust, which constitute the integral part of risk management, can provide pressure for improved financial performance. Financial performance, present and prospective is a benchmark for investment (Santomero, 1995).

There are various benefits of RBIA including the simplicity of the concept, unification of operations, ability of organizations to see the benefits of the audit work, requests for resources by IA are justified, work is more challenging and interesting to all staff, there is more efficiency and more focus on high risks (Phil Griffiths, 2006). RBIA strengthens public governance by providing for accountability and protecting the core values of government. This is achieved by assessing whether managers and officials conduct the public’s business transparently, fairly, honestly, and in accordance with laws and regulations (Klapper & Love, 2003).

The emergence of new organizational risks has influenced state corporations to formulate risk management strategies and to elevate the status of internal auditing to carry out risk based auditing within the Corporations. As a result, risk-based internal auditing has emerged as a significant tool to enhance risk management and
improvement of financial performance of commercial State Corporations. Achieving high level financial performance requires effectiveness of appropriate risk based audit practices hence efficient internal audit roles. Risk based audit practices such as risk assessment, risk management, annual risk based planning, internal auditing standards and internal auditing staffing are adopted in the commercial state corporations to influence transparency accountability and good governance with an aim of achieving high financial returns.

1.1.4 Commercial State Corporations in Kenya

A commercial State Corporation is an entity howsoever incorporated, that is solely or majority owned by the Government or its agents for commercial purposes i.e. (i). its operations are governed by a competitive profit driven market and/or (ii) its operations can be performed commercially but serves a strategic socio-economic purpose.

The State Corporations Act is an Act of Parliament that makes provision for the establishment of State Corporations and for their control and regulation. The State Corporations Act Chapter 446 enacted in 1986, for the first time created a regulatory framework for the management of State Corporations in Kenya. Its main goal was that of controlling and regulating State Corporations. Consequently, it created an institutional framework with many actors, a reality that tends to undermine the effectiveness and efficiency of State Corporations. The Act created roles for the Presidency, Parent Ministry, the Treasury, Board of Directors, State Corporations Advisory Committee, and the Inspectorate of State Corporations, State Corporations Appeal Tribunal amongst others. Some of these roles have over the years proved detrimental as they have become obstructive to efficient operations of State Corporations. At the same time, the problems, which the Act was meant to address, have persisted. Notably, there has been problems with; definition, ownership, establishment, mergers and dissolution, staffing, rewards and incentives, and governance and oversight (The Presidential Taskforce on Parastatal Reforms, 2013).
Most of the State Corporations, are guided by individual enabling legislation and legal notices in their operations. Thus, currently each State Corporation (SC) operates within the legal instrument under which it is established, and provisions of the State Corporations Act, Chapter 446 of the Laws of Kenya. The situation is however different for SCs operating under the Companies Act Chapter 486, the Banking Act Chapter 488 and Insurance Act Chapter 487. SCs operating under the Companies Act, Insurance Act and Banking Act are required to comply with requirements therein as well as those of the State Corporations Act. Those that are listed on the Nairobi Securities Exchange are also required to comply with Capital Markets Act Chapter 485A and Capital Markets Authority Regulations (The Presidential Taskforce on Parastatal Reforms, 2013).

The Kenya Government forms State Corporations to meet both commercial and social goals. They exist for various reasons including to correct market failure, to exploit social and political objectives, provide education, health, redistribute income or develop marginal areas. The internal audit function is now much more part of the organization and less introspective. It involves the organization more in the audit process and produces recommendations which contribute to its objectives. At the same time it has to be careful not to lose its independence and objectivity, as a result of getting closer to the operations (Colleen Warring, 2002).

1.2 Research Problem

For many years, auditing was confined to assisting organizations to safeguard assets and check established control procedures with the main focus being monitoring and control. Internal auditors on the other hand are tolerated, and have not been deemed essential in organizational control (Spira & Page, 2003). The emergence of new business risks has compelled many organizations to formulate strategies and to elevate the status of internal auditing (Szpirglas, 2006). Thus, risk based internal auditing has emerged as an important contributor to effective risk management. However, in public organizations, effects of risk based internal auditing on achieving financial control and return remain elusive (Ferguson & Moroney, 2008). By detecting financial losses in public management operations, internal audit provides a basis for correcting cost deficiencies that are not
controlled which lead to huge losses of public funds (Eden and Moriah 1996). As internal auditing grows in importance within the wider environment of governance and control, issues as to how effectively it performs this role have become of greater prominence than before. Public organizations are facing the risk of fraud in management of public funds. Rezaee (2004) revealed that financial statement fraud had cost market participation more than USD 500 Billion during recent years, with serious litigation consequences.

The risk based internal audit function in the Kenyan public sector faces a perception and, to some extent, a credibility problem as a value unit of the organization indicating that internal audit in public organisations has not adequately executed its roles as expected in financial management due to increase in the number of public financial losses. For instance, there is the 2005 Anglo-Leasing Scandal, the National Hospital Insurance Fund (NHIF) and the Judiciary Scandals, which are all indicators of ineffectiveness in public internal auditing. Consequently, it is important that a study be carried out to assess the challenges affecting internal audit performance in financial management in the public sector. Risk based internal auditing incorporates risk management and has been implemented by commercial State Corporations with a view to achievement of effective financial control and return. Despite use of risk based internal auditing in commercial State Corporations, there has been scanty studies that have sought to establish the relationship between risk based internal auditing and financial performance in commercial State Corporations in Kenya.

Local studies on impact of risk based internal audit on financial performance are scanty with a few focusing on the role of auditing and governance in Government. For instance, Maiteka (2010) undertook a study of the influence of Risk Based Audit on corporate governance in the public sector in Kenya focusing on selected Ministries and found that risk based internal auditing assessed risks facing Government Ministries on time and concentrated on high risk areas in order to increase transparency and accountability, hence enhancing good governance. Kibet (2008) carried out a survey on the role of internal audit in promoting good corporate governance in state owned enterprises and found that it enhanced effectiveness and
promoted corporate governance for state owned Enterprises. Kibara (2007) similarly carried out a survey of internal auditors risk management practices in the banking industry in Kenya and found that seven banks out of twenty one (33 %) had not established a separate risk management department. Despite adoption of risk based internal audit in State Corporations, details on effects of risk based internal audit on financial performance of the public sector in Kenya are still scanty. This study therefore seeks to fill the existing research gap by determining relationship between risk based internal audit and financial performance in the public sector focusing on commercial State Corporations. The study seeks to answer the question; what is the relationship between risk based internal audit and financial performance of commercial State Corporations in Kenya?

1.3 Objective of the Study

To establish the effect of risk based internal audit on the financial performance of commercial State Corporations in Kenya.

1.4 Value of the Study

The study is considered valuable because on its completion, it will offer insights into the relevance of risk based internal audit in enhancing corporate governance and as a result, improving financial performance in public organisations. In particular

Directors and Management will appreciate the importance of risk based internal audit practices and assist them in rating their level of compliance against those of their competitors, and in determining whether risk based internal audit practices actually improve financial performance of Commercial State Corporations in Kenya.

Shareholders will get to know the various mechanisms through which they can exercise their control. Potential investors will also benefit as they will be able to determine which Commercial State Corporations are properly governed hence make more informed investment decisions.
Government officers will gain insight on critical role of risk based internal audit in financial performance of Commercial State Corporations. The policy maker will know how well to incorporate risk based internal audit in Public Organisations.

Academicians will be furnished with relevant information regarding the relationship between risks based internal audit and financial performance of Commercial State Corporations. The study will contribute to the general body of knowledge and form a basis for further research.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter summarizes the information from other researchers who have carried out research in the same field of study. Emphasis has been put on the relationship between risk based internal audit and financial performance in the public sector focusing on Commercial State Corporations. The areas covered here are; theoretical review, empirical review and summary of literature review.

2.2 Theoretical Review

The study will be guided by theories discussed under this section which include risk-based internal audit theory, agency theory and transaction cost theory.

2.2.1 Risk-Based Internal Audit Theory

Risk-based audit theory was proposed by Alexander (1991). He posited that a client’s specific experience increases an auditor’s ability to assess future client risks accurately. However, prior research in psychology suggests that individuals tend to overweight experience when faced with current risk cues that conflict with experience. Risk audit theory argues that an auditor’s evaluation during the audit becomes more effective with client-specific experience (Bell et al. 1997; Bell et al. 2005; Bell & Solomon, 2002). According to this theory, the responsibility of identifying and managing risks belongs to management, while one of the key roles of internal audit is to provide assurance that those risks have been properly managed (Alexander, 1991). Professional internal audit activity can best achieve its mission as a cornerstone of governance by positioning its work in the context of the Organisation’s own risk management framework. This involves looking at the way managers identify, assess, respond to and report risks, as well as how well managers monitor how responses to risks are working.
2.2.2 Agency Theory

A significant body of work has been undertaken in this area within the context of the principal-agent framework. The work of Jensen and Mecklin (1976) in particular as well as that of Fama and Jensen (1983) are important. Agency theory identifies the agency relationship where one party, the principal, delegates work to another party, the agent. The agency relationship can have a number of disadvantages relating to the opportunism or self interest of the agent: For example, the agent may not act in the best interests of the principal, or the agent may act only partially in the best interests of the principal. There can be a number of dimensions to this including for example, the agent misusing their power for pecuniary or other advantage, or the agent not taking appropriate risks in pursuance of the principal’s interests because he (the agent) views those risks as not being appropriate while on the other hand the principal may have different attitudes to risks. There is also the problem of information asymmetry whereby the principal and the agent have access to different levels of information; in practice this means that the principal is at a disadvantage because the agent has more information.

In the context of financial institutions and issues of corporate control, agency theory views corporate governance mechanisms especially the Board of Directors, as being an essential monitoring device to try to ensure that any problems that may be brought about by the principal-agent relationship, are minimized. The costs resulting from managers misusing their position, as well as the costs of monitoring and disciplining them to try to prevent abuse have been called ‘agency costs’.

2.2.3 Transaction Cost Theory

Transaction cost economics (TCE) was expounded in the work of Williamson (1975, 1984) and is often viewed as being closely related to Agency Theory. Transaction Cost Economics views the firm as a governance structure whereas the Agency Theory views the firm as a nexus of Contracts. Essentially, the latter means that there is a connected group or series of Contracts amongst the various players, arising because it
is seemingly impossible to have a contract that perfectly aligns the interests of principal and agents in a corporate control situation.

Coase (1937) examines the rationale of a firm’s existence in the context of a framework of the effectiveness of internal as opposed to external contracting. He states “the operation of a market costs something and by forming an organization and allowing some authority (an entrepreneur) to direct the resources, certain marketing costs are saved. The entrepreneur has to carry out his function at less cost, taking into account the fact that he may get factors of production at a lower price than the market transactions which he supersedes. Williamson (1984) builds on the earlier work of Coase, and provides a justification for the growth of larger firms and conglomerates, which essentially provide their own internal capital market. He states that the costs of any misaligned actions may be reduced by judicious choice of governance structure rather than merely realigning incentives and pricing them out.

2.3 Determinants of Financial Performance in Commercial State Corporations

There are internal and external factors which influence the financial performance of specific organisations. These include capital size, size of liabilities, size and composition of credit portfolio, interest rate policy, labour productivity, state of information technology, risk level, management quality, size of organisation, ownership and the like. The key drivers of financial performance are discussed below.

2.3.1 Risk Based Internal Audit

The paradigm of the new public management highlighting the taking of evidence based decisions and result-driven management presupposes the evaluation of performance based on the assessment of risk. The limited resources of the institutions in charge of the supervision and evaluation of activities are used in a most efficient manner when they are focused upon the most important and risky areas. The analysis of the developments in the audit methodology shows some essential changes in the areas related to the transition from the audit methodology based on the risk of
financial statements to the methodology based on business process risk. The new type methodology is based on the approach that any developments or factors that increase business risk at the same time increase the audit risk. This approach may be viewed as a new paradigm that caused the appearance of new audit methodologies.

The comparison of the principal aspects of the approach towards risk shows that the new paradigm focused upon the assessment and management of business risks enables the auditor not only to better understand the audit risk, but also to identify other potential risks or the areas in the organisation business cycle that need to be improved, as well as to better understand the organisation’s business risks and their impact upon financial statements.

This risk assessment model may facilitate the identification of significant areas to be audited. While gathering and analysing the information, different questions are raised and the answers to such questions make it possible to identify the general risk factors in relation to the subject and object of the audit. This in turn minimises or results in mitigation of risks faced by an Organisation based on the Organisation’s risk appetite and therefore promotes better financial performance.

2.3.2 Firm Size

Underlying theoretical basis for arguing that a firm’s size is related to profitability can be found in the traditional neoclassical view of the firm and the concept known as economies of scale. Economies of scale may occur for various reasons such as financial (a large firm can get a better interest rate and also a better discount rate due to a large quantity that it buys); organizational reason (specialization and division of labour); technical reason (division of high fixed costs across large number of units) etc. In line with this concept, a positive relationship between firm size and profitability is expected. Opposite to this, is a conceptual framework that advocates a negative relationship between firm size and profitability is noted in the alternative theories of the firm, which suggest that large firms come under the control of managers pursuing self-interested goals and therefore profit maximization as the
firm’s objective function may be replaced by managerial utility maximization function. Studies on the effect of firm size on firm profitability have generated mixed results ranging from those supporting a positive relationship among these variables to those opposing it. Additionally, under the same sample of the firms, this relationship may be positive over some firm size ranges and negative for others.

A positive relationship between firm size and profitability was found by Vijayakumar and Tamizhselvan (2010). In their study, which was based on a simple semi-logarithmic specification of the model, the authors used different measures of size (sales and total assets) and profitability (profit margin and profit on total assets) while applying model on a sample of 15 companies operating in South India. Papadognas (2007) conducted analysis on a sample of 3035 Greek manufacturing firms for the period 1995-1999. After dividing firms into four size classes he applied regression analysis which revealed that for all size classes, firms’ profitability is positively influenced by firm size. Using a sample of 1020 Indian firms, Majumdar (1997) investigated the impact that firm size has on profitability and productivity of a firm. While controlling for other variables that can influence firm performance, he found evidence that larger firms are less productive but more profitable.

Lee (2009) examined the role that firm size plays in profitability. He used fixed effect dynamic panel data model and performed analysis on a sample of more than 7000 US publicly-held firms. Results showed that absolute firm size plays an important role in explaining profitability. However, this relationship was nonlinear meaning that gains in profitability reduced for larger firms. Amato and Burson (2007) tested size-profit relationship for firms operating in the financial services sector. The authors examined both linear and cubic form of the relationship. With the linear specification in firm size, the authors revealed negative influence of firm size on its profitability. However, this influence wasn’t statistically significant. On the other hand, the authors found evidence of a cubic relationship between ROA and firm size. Using financial and economic data, Ammar et al. (2003) examined the nature of the size-profitability relationship on a sample of electrical contractors for 1985-1996 period. Using a first-order autoregressive model built into the error term, the authors found a significant
difference in terms of profitability between small, medium and large firms. Namely, they revealed that profitability drops as firms grow larger than $50 million in sales. On a sample of a US manufacturing firms, Amato and Wilder (1985) tested size-profitability relationship in linear as well as quadratic form. However, the results of their analysis showed that there is no relationship between firm size and profit rate.

2.3.3 Financial Leverage

According to previous studies, financial leverage affects cost of capital, ultimately influencing firms’ profitability and stock prices (Higgins, 1977; Miller, 1977; Myers, 1984; Sheel, 1994). Also, several researchers have studied firms’ debt use and suggested the determinants of financial leverage by reporting that firm’s debt-equity decision is generally based on a trade-off between interest tax shields and the costs of financial stress (Kim, 1997; Sheel, 1994; Sunder & Myers, 1999; Titman & Wessles, 1988; Upneja & Dalbor, 2001). According to the trade-off theory of capital structure, the optimal debt level balances the benefits of debt against the costs of debt (Gu, 1993). The tax benefits of debt dominate up to a certain debt ratio, resulting in higher return on equity, but the benefit would be less than the cost after the level of debt ratio. In other words, the more a company uses debt, the less income tax the company pays, but the greater its financial risk. Elgonemy (2002) mentioned that investors must consider four basic elements in debt-financing: business risk, the need for financial flexibility, the degree of ownerships’ risk aversion, and tax considerations. Based on the trade-off theory for capital structure, firms can take advantage of debt to make a better return on equity.

2.3.4 Capital Adequacy

Capital adequacy establishes the maximum level of leverage that an organisation is allowed to reach on its operations (Jansson, 1997). It is measured by the ratio of risk-weighted assets relative to regulatory equity, which has been internationally recommended to be equal to 12.5 times, or commonly known as a capital adequacy ratio of 8% (Rungsomboon, & Okuda, 2004). According to Dang (2011), the
adequacy of capital is judged on the basis of capital adequacy ratio (CAR). Capital adequacy ratio shows the internal strength of the organisation to withstand losses during crisis. Capital adequacy ratio is directly proportional to the resilience of the organisation. It also has a direct effect on the profitability of the organisation by determining its expansion to risky but profitable ventures or areas (Sangmi & Nazir, 2010). Empirical studies done by Alexiou and Sofoklis (2009) showed a positive impact of capital on an organisation’s profitability.

2.3.5 Asset Quality

An Organisation’s assets are another firm specific variable that affects the profitability of an organisation. The Organisation’s assets include among others current assets, credit portfolio, fixed assets, and other investments. Often, a growing asset (size) is related to the age of the Organisation (Shekhar & Lekshmy, 2007). The quality of assets is a very important criterion that determines the ability of an Organisation to earn consistently. It basically determines the profitability of the Organisation. It also explains the sustainability and growth in earnings in the future. The visible signs of inefficient output include acquisition, brokerage problems, company governance, and foreign holding factors (Vong & Hoi, 2009).

2.3.6 Management Efficiency

Management efficiency ratio measures the efficiency and effectiveness of management. Managerial efficiency’, which simply refers to the ability of an Organisation to maximize profits or minimize costs under given circumstances. This expression attributes efficiency to managers (Said & Mohd, 2011). Paradoxically, there seems to be almost no empirical studies on the relevance of managers to managerial efficiency. Management is the most important ingredient that ensures the sound functioning of an Organisation.
2.3.7 Liquidity Management

Liquidity management refers to the planning and control necessary to ensure that the Organization maintains enough liquid assets either as an obligation to the customers of the organization so as to meet some obligations incidental to survival of the business or as a measure of adherence to the monetary policies of the Central Bank (Sangmi & Nazir, 2010).

2.4 Empirical Review

This section addresses the empirical review of the study. Both international empirical studies and local empirical studies have been reviewed.

2.4.1 International Evidence

Liewellyn (1998) carried out study on risk management practices as a lever for Value Creation in credit unions in Slovenia, To study differences and impacts of different risk management practices in Slovenia he carried out a survey on a sample containing data on 137 credit unions, firms predominantly operating in manufacturing (49 percent), merchandise (10 percent), real estate (19 percent), and transportation (8 percent). The study used time trigger and regressions using some constructed risk measure and financial characteristics (financial ratio analysis) to test financial performance of the firms. Compared to other financial research, risk management behaviour of firms is far less studied. The reason for this might be due to peculiarities in accounting practices of firms on the one hand, and availability of appropriate financial data on the other. As a result, risk management papers deal with only selected areas of risk management. For almost all performance ratios Breusch-Pagan test does not reveal the problem of heteroskedasticity. The exemption is GPM for which homoskedicity-consistent standard error term is used. In addition to aggregate risk management variable (RISK), strategic, project, financial, and operational risk (RISK_S, RISK_P, RISK_F, and RISK_O respectively) are separately tested. Performance, efficiency, productivity, capital structure and liquidity ratios were
calculated for the year 2003 using the AJPES database for 2003 and 2002 at significant level $P<0.05$. Firms with highest risk management techniques pay significantly more attention to both degrees of leverage.

Chen (2003) investigated the relationship between corporate governance and risk-taking behaviour in Taiwanese Banking Industry. The sample consisted of all of the 39 domestic banks, and of the 39 surveyed by mail, 24 completed responses were returned for a response rate of 61.54%. Of the 24 survey responses, 13 (54.1%) of the credit unions report that more than 60% of their internal audit activities are risk oriented. It was found that 8 of 24 (33.3%) respondents indicated that they use a relatively high level of RBIA, about 61%-80%, while 6 (25%) of the domestic banks reported that about 21%-40% of their internal audit work was risk-based (Sarens and de Beelde, 2006).

Linbo (2004) examined efficiency versus risk in large domestic USA banks and found that profit efficiency is sensitive to credit risk and insolvency risk but not to liquidity risk or to the mix of loan products.

Heath and Norman (2004) found that when senior managers were given multiple objectives to achieve, it may become almost impossible to measure their success in improving the firm’s performance.

HoHahm (2004) conducted an empirical study on interest rate and exchange rate exposures of institutions in pre-crisis Korea and found that Korean Commercial Banks and Merchant Banking Corporations had been significantly exposed to both interest rate and exchange rate risks, and that the subsequent profitability of SACCO Institutions was significantly associated with the degree of pre-crisis exposure. The results also indicated that the Korean case highlights the importance of upgrading financial supervision and credit risk management practices as a precondition for successful financial liberalization.
Several studies suggest that firms with more independent directors perform worse than those with relatively fewer independent directors. For example, Agrawal and Knoeber (1996) reported a negative correlation between the proportion of outside directors and Tobin's Q index (which is a measure of growth prospects of assets, defined by the future profitability of the asset in relation to its replacement cost).

This is consistent with evidence established by Bhagat and Black (1997) who found that a high proportion of independent directors is strongly correlated with slower past growth across a number of accounting variables, but not so with future performance.

Bedard and Johnstone (2004) examined auditors' assessments of planning and pricing decisions related to earnings manipulation risk and corporate governance risk, and showed that auditors plans increased effort and billing rates for clients with earnings manipulation risk and that the positive relation between earnings manipulation risk and both effort and billing rates are greater for clients that have heightened corporate governance risk.

Cohen et al. (2007) examined the effect of the role of the board of directors in monitoring Management (agency role) and/or the role of the Board in helping to formulate corporate strategies (resource dependence role) on the auditors' planning judgments, and showed that auditors respond to the role of the Board when making judgments with respect to control risk assessments and the planned scope of audit tests. The way management and control are organized affects the Company's performance and it’s long run competitiveness. It determines the conditions for access to capital markets and the degree of investors’ confidence.

Yung (2008) conducted a study on risk based internal auditing in Taiwanese banking industry. The study explored factors associated with Taiwanese Banks’ demand for RBIA from perspectives of risk management, internal control, corporate governance and internal auditors’ technical competence. Using data from a survey of domestic banks together with information from corporate annual reports. The survey was designed to gather information on the current use of RBIA in the banking industry.
The questionnaire was developed based on the Standards for the Professional Practice of Internal Auditing (IIA 2004a) and the Implementation Rules for Bank Internal Audit and Internal Control Systems (FSC 2007), and included four parts: part one asked about current status of the bank’s risk management; part two requested for the definition of RBIA activity in audit charter and technical competence of internal auditors; part three investigates the performance of RBIA in related to audit planning, nature of work and communication; and part four inquired about basic information of the Banks. The sample consisted of all of the 39 domestic Banks, and of the 39 surveys mailed, 29 completed responses were returned for a response rate of 74.4%. The findings of this study indicated a significant negative correlation exists between the level of RBIA employed by a bank and the board size. Results from the present study suggested that a firm’s risk management framework is highly associated with the role of internal auditing in the firm. However, the study has not established the extent to which RBIA affected financial performance.

2.4.2 Local Evidence

Kibara (2007) conducted a survey of internal auditors risk management practices in the banking industry in Kenya. The study sought to establish banks internal auditors' perception of their distinct role in the bank wide ERM process, and whether there was any conflict between internal audit and risk management departments being established to take over the ERM process. Bank internal auditors risk assessment practices in Kenya were also probed. To achieve the objectives set, a survey involving all heads of internal audit departments in the banking industry in Kenya was conducted. Data analysis was done, and out of the 27 banks sampled, 14 returned responses with response rate of 52%, it was concluded that the outcome of the study fairly represented the banking industry internal auditors' practices and perception of risk management. It also emerged that only 14% of the internal auditors could clearly list the distinct role of IAD and those of Risk Management Department. For institutions with both departments, a conflict was already brewing between IAD and RMD in 29% of the institutions. The conflict centred mainly on lack of clarity on the distinct roles to be played by those two departments in the whole ERM process. The
study found that, most banks in Kenya were in process of drafting the ERM process and strategies.

Kibet (2008) concluded that the internal audit function played a role in corporate governance. The limitations of the study were time constraints, restriction to state owned corporations and having to make prior arrangement in order to meet the heads of IADs. Recommendations of further study were effectiveness and contribution of internal audit in promoting corporate governance for companies listed in the NSE. Additionally, a study on the influence of internal audit and audit committee on financial reporting quality was recommended.

Mutua (2012) carried out a study to determine the impact of risk based audit on financial performance of Commercial Banks in Kenya. The study adopted Correlation research design and targeted 44 respondents who were finance officers, internal auditors, credit officers, relationship officers/managers and accountants at Commercial Banks in Kenya. The study administered questionnaires which included structured and unstructured questions and descriptive statistics such as mean, standard deviation and frequency distribution were used to analyse the data. The findings, indicated that risk based auditing through risk assessment, risk management, annual risk based planning, internal auditing standards and internal auditing staffing should be enhanced. This would enable the firm to be able to detect risks on time and concentrate on high risk areas leading to increased transparency and accountability, hence enhancing financial performance.

Wambui (2013) conducted a study to determine the impact of risk management techniques on financial performance of regulated SACCO Institutions. The study adopted correlation research design in which quantitative data was collected and analysed in order to describe the specific phenomenon in its current trends, current events and linkages between different factors at the current time. The study population consisted of all 154 SACCO registered under SASRA in Kenya. The SASRA regulated SACCOs were selected through simple random sampling method. The study used both primary and secondary data. Inferential statistics was used to
establish the relationship between risk management practices and the financial performance of SACCOs. The impact of risk management practices on financial performance of SASRA regulated SACCOs was found to be statistically significant with \( P < 0.05 \) at 0.003, 0.001, 0.002 and 0.004 respectively. The study established that risk management techniques had a positive impact on financial performance of regulated credit unions in Kenya.

2.5 Summary of the Literature Review

This study seeks to establish the relationship between risk based internal audit and financial performance of commercial State Corporations in Kenya. To understand the relationship between risk based internal audit and financial performance, the study will examine whether use of risk based audit practices such as risk management, risk assessment, annual risk planning and audit staffing affects financial performance of the commercial State Corporations in Kenya. Risk based internal audit is seen as the process and structure used to direct and manage the business affairs of the commercial State Corporations in Kenya towards giving the public a true statement of the Organisation’s financial position. The study therefore seeks to investigate the relationship between risk based internal audit and financial performance of commercial State Corporations in Kenya.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents procedures that helped to achieve research objectives. Specifically the following subsections are included; research design, target population, data collection instruments, data collection procedures and finally data analysis.

3.2 Research Design

Research design refers to the way the study is organised/developed i.e. the method used to carry out the research (Mugenda & Mugenda, 2003). The study adopted descriptive survey research. A descriptive survey research seeks to obtain information that describes existing phenomena by asking individuals about their perceptions, attitude, behaviour or values (Mugenda & Mugenda, 2003). Descriptive research portrays an accurate profile of persons, events, or situations. This design describes the characteristic of the population or phenomenon. The design is deemed to portray clear pictures of the relationship between risk based internal audit and financial performance of commercial State Corporations.

3.3 Population

The target population in statistics is the specific population about which information is desired. According to Ngechu (2004), a population is a well defined set of people, services, elements, events, group of things or households that are being investigated. The target population for the proposed study was the 53 commercial State Corporations operating in Kenya. The study carried out a census survey of all the 53 commercial State Corporations. A schedule of these commercial State Corporations is presented in Appendix II.
3.4 Data Collection

The study collected both primary and secondary data. Primary data was collected using questionnaires that were self-administered. The questionnaire contained close ended questions. Structured questions were used in order to conserve time and money as well as to facilitate an easier analysis as they are in immediate usable form. The questionnaires were administered using drop and pick method. Questionnaires were used because they allowed the respondents who were auditors and financial officers to give their responses in a free environment. A sample questionnaire is attached in Appendix I.

3.4.1 Data Validity and Reliability

Validity indicates the degree to which the instrument measures the constructs under investigation (Mugenda & Mugenda, 2003). There are three types of validity tests which include content, criterion and related construct validity. The study used content validity because it measures the degree to which the sample of the items represents the content that the test is designed to measure.

Piloting was carried out to test the validity and reliability of the instruments. The pilot study involved the researcher taking some questionnaires to a few respondents (picked randomly) in commercial State Corporations. After these questionnaires had been filled, the researcher reviewed the responses with a view of identifying questions that needed editing and those that were ambiguous. The final questionnaire was then printed and used to collect data for analysis.

3.5 Data Analysis

The researcher used quantitative techniques in analysing the data. After receiving questionnaires from the respondents, the responses were edited, classified, coded and tabulated to facilitate quantitative analysis using Statistical Package for Social Science (SPSS version 21). Tables and charts were used for presentation of the analysis
output. The collected data was examined and checked for completeness and comprehensibility. The data was then summarized, coded and tabulated. Inferential statistical regression and correlation was done to establish the impact of risk based internal audit on financial performance of commercial State Corporations. Risk based internal audit practice was quantified from Likert questions and correlation analysis was used to establish the strength of the relationship between risk based internal audit and the financial performance in commercial State Corporations in Kenya.

To test the relationship between risk based internal audit practices and financial performance of commercial State Corporations in Kenya, the Tobin model - a regression technique suited to analyse limited (censored) dependent variables (Spekle´ et al. 2007) - was used in data analysis. The return on assets (ROA) percentage was used to indicate the financial performance measure of the commercial State Corporations.

3.5.1 Analytical Model

The model treats financial performance of commercial State Corporations as the dependent variable while the independent variables will be the risk based internal audit practices which include risk management, annual risk based planning, internal auditing standards and internal audit capacity. The degree of RBIA practices was measured by computing indices based on the responses derived from Likert-Scaled questions. In addition, financial leverage (debt ratio used as a proxy) and firm size (measured by the natural logarithm of assets) were used as control variables.

The relationship equation was presented in the linear equation below.

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \epsilon \]

Where

- \( Y \) - Profitability of the commercial State Corporation as measured by ROA
- \( B_0 \) - Constant term
B₁ - β₆ - Beta Coefficients

X₁ - Risk Management as measured from likert scaled questions presented under section three of the Questionnaire
X₂ - Annual Risk Based Internal Audit Planning as measured from likert scaled questions presented under section four of the Questionnaire
X₃ - Internal Audit Capacity as measured from likert scaled questions presented under section five of the Questionnaire
X₄ - Internal Auditing Standards as measured from likert scaled questions presented under section six of the Questionnaire
X₅ - Financial Leverage as measured by Debt Ratio
X₆ - Firm Size as measured by the natural logarithm of total assets
ε - Standard Errors

Data on Earnings after tax, Assets & Liabilities was sourced from financial statements of the commercial State Corporations while likert scaled questions provided information on risk based internal audit practices adopted by the corporations i.e. Risk Management, Annual Risk Based Planning, Internal Auditing Standards and Internal Audit Capacity

Return on Assets is an indicator of how profitable a business enterprise is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a Company's annual earnings by its total assets, ROA was displayed as a percentage. Using ROA as a comparative measure was best to compare it against a Company's previous ROA numbers or the ROA of a similar Company. This indicated how RBIA practices lead to profitability of the commercial State Corporations in Kenya.

3.5.2 Test of Significance

The Pearson Correlation Matrix and Variance Inflation Factor (VIF) was used to test the multi collinearity assumption, while an analysis of residuals and the plots of the
regression residuals against predicted values was conducted to test for independence of error terms and heteroskedasticity.
CHAPTER FOUR
DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents and discusses analysis and findings of the study as set out in the research methodology. The objective of the study is to establish the effect of risk based internal audit on the financial performance of commercial State Corporations in Kenya. The study targeted 53 respondents where all the respondents responded filled-in and returned the questionnaires making a response rate of 100%. This is considered an excellent response rate and was achieved through persistent follow-up by the researcher. Mugenda and Mugenda (2003) indicated that a response rate of 50% or 60% or 70% was sufficient for a study.

4.2 Descriptive Statistics

This section presents the respondents answers to the likert scaled questions used in this study. The results are presented in tables and charts as suitable.

4.2.1 Age of the Organisation

The study sought to find out the number of years that the respondent’s organisation had been in operation with a view of assessing the extent to which the respondent’s responses were based on experience or events occurring within the organisation. Their responses are presented below in a bar chart format.
From above, it can be seen that 40% of the respondents have been in operation for 1-10 years, 36% have been running for 11 – 20 years while 24% have been in existence for more than 20 years. This indicates that the respondents were in a good position of offer valid information on the extent to which selected risk based internal audit practices are applicable to their organisations based on experience.

### 4.2.2 Risk Management

The study sought to establish the extent to which the respondent’s organisation had embraced risk management in its operations. Since risk management is considered a key risk based internal audit practice, it was important for the researcher to make an assessment of the extent to which risk management practices/factors were applicable to the respondent’s organisation. Table 4.1 below indicates the extent to which risk management factors were applicable to the respondent’s organisations.
Table 4.1: Extent to which the given factors are applicable to the organisation

<table>
<thead>
<tr>
<th>Risk Management</th>
<th>Moderate extent</th>
<th>Great extent</th>
<th>Very great extent</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclosures about technology risk and risk management</td>
<td>12</td>
<td>19</td>
<td>22</td>
<td>4.54</td>
<td>0.64</td>
</tr>
<tr>
<td>Internal process risk and risk management</td>
<td>14</td>
<td>13</td>
<td>23</td>
<td>4.91</td>
<td>0.87</td>
</tr>
<tr>
<td>Change management risk and risk management</td>
<td>13</td>
<td>17</td>
<td>23</td>
<td>4.60</td>
<td>0.60</td>
</tr>
<tr>
<td>Risk assessment is undertaken</td>
<td>3</td>
<td>23</td>
<td>27</td>
<td>4.74</td>
<td>0.63</td>
</tr>
<tr>
<td>Risk management is embraced</td>
<td>5</td>
<td>20</td>
<td>28</td>
<td>4.63</td>
<td>0.59</td>
</tr>
<tr>
<td>There is consideration of risk assessment in the detection of errors</td>
<td>10</td>
<td>15</td>
<td>28</td>
<td>4.46</td>
<td>0.45</td>
</tr>
<tr>
<td>Risk identification is carried out</td>
<td>4</td>
<td>18</td>
<td>31</td>
<td>4.11</td>
<td>0.39</td>
</tr>
<tr>
<td>Risk monitoring is carried out to identify errors in financial reporting</td>
<td>12</td>
<td>15</td>
<td>26</td>
<td>4.56</td>
<td>0.67</td>
</tr>
</tbody>
</table>

Source: Research Findings

From the findings, majority of the respondent’s organisations carry out internal process risk management, undertake risk assessment, embrace risk management and change management to a very great extent as indicated by a mean of 4.91, 4.74, 4.63 and 4.60 with standard deviation of 0.87, 0.63, 0.59 and 0.60 respectively. Most of the respondents also indicated that to a very great extent, risk monitoring was carried out to identify errors in financial reporting and there were disclosures about technology risk and risk management as indicated by a mean of 4.56 and 4.54 with standard deviation of 0.67 and 0.64. The respondents further indicated that to a very great extent, there was consideration of risk assessment in the detection of errors and risk identification was carried out as indicated by a mean of 4.46 and 4.11 with standard deviation of 0.45 and 0.39. The study found that auditors recognition of work environment in risk assessment, auditor's involvement of management in risk evaluation process and auditors identification of changes that have influence on
financial performance affected risk assessments in commercial State Corporations. From the findings, the study established that effective controls and quality of personnel in internal audit were very significant in influencing judgments of risk at the commercial State Corporations. This concurred with Al-Tamimi, (2002) who found that many risks will be very significant to the organization and the discussion of their controls will involve more senior managers and directors than might be involved in traditional finance orientated audits.

4.2.3 Internal Audit Planning

The study sought to establish the extent to which the respondent’s organisation carried out internal audit planning. Internal audit planning is key for successful risk based internal audit hence it was important for the researcher to establish the extent to which internal audit planning practices/factors were applicable to the respondent’s organisation.

The respondents were requested to indicate the extent to which the above statements associated with internal audit planning were applicable to their organisations and their responses are presented in table 4.2 below.
Table 4.2: Extent to which the given internal audit planning are applicable to Organisation

<table>
<thead>
<tr>
<th>Annual Risk Based Audit Planning</th>
<th>Moderate significance</th>
<th>Great significance</th>
<th>Very great significance</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk based audit reporting time is defined</td>
<td>4</td>
<td>26</td>
<td>23</td>
<td>4.63</td>
<td>0.66</td>
</tr>
<tr>
<td>Risk based audit planning is practiced to enhance transparency and accountability</td>
<td>9</td>
<td>30</td>
<td>14</td>
<td>4.32</td>
<td>0.39</td>
</tr>
<tr>
<td>There are annual plans and programs for individual risk based audit assignments</td>
<td>0</td>
<td>25</td>
<td>28</td>
<td>4.72</td>
<td>0.69</td>
</tr>
<tr>
<td>Risk based audit annual plans are discussed with the management</td>
<td>13</td>
<td>20</td>
<td>20</td>
<td>4.67</td>
<td>0.59</td>
</tr>
<tr>
<td>There is timely action on audit queries</td>
<td>1</td>
<td>24</td>
<td>28</td>
<td>4.90</td>
<td>0.95</td>
</tr>
<tr>
<td>Audit recommendations are implementation by the Management</td>
<td>4</td>
<td>15</td>
<td>34</td>
<td>4.65</td>
<td>0.54</td>
</tr>
</tbody>
</table>

Source: Research Findings

From the findings, majority of the respondents indicated that to a very great extent, timely action on audit queries taken, annual planning and programming for individual risk based audit assignments was practiced and risk based audit annual plans were discussed with the management as indicated by a mean of 4.90, 4.72 and 4.67 with a standard deviation of 0.95, 0.69 and 0.59 respectively. Similarly, Most of the respondents indicated that management implemented audit recommendations and that risk based audit reporting time was defined to a very great extent as indicated by a mean of 4.65 and 4.63 with a standard deviation of 0.54 and 0.66 respectively. On the other hand, most of the respondents indicated that to a great extent, risk based audit planning was practiced to enhance transparency and accountability as indicated by a mean of 4.32 and standard deviation of 0.39. This is in line with Sanda, Milkailu and Garba, (2005) findings who found that annual risk planning enables accomplishment of a large number of audits in a given period by improving efficiency.
4.2.4 Internal Audit Capacity

The study sought to establish the internal audit capacity of the respondent’s organisation. Internal audit capacity is key for successful risk based internal audit hence it was important for the researcher to establish whether the respondents organisation maintained a competent and well trained internal audit team and consequently, the respondents were requested to indicate the extent to which the given indicators of internal audit capacity were applicable to the respondent’s organisation. The responses received are presented in table 4.3 below.

Table 4.3: Extent to which the internal audit capacity factors are applicable to the organisation

<table>
<thead>
<tr>
<th>Internal Audit Capacity</th>
<th>Moderate extent</th>
<th>Great extent</th>
<th>Very great extent</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate technical and professional skills of the Organisation’s Auditors</td>
<td>0</td>
<td>28</td>
<td>25</td>
<td>4.71</td>
<td>0.67</td>
</tr>
<tr>
<td>There are enough internal auditors in the organization</td>
<td>13</td>
<td>20</td>
<td>20</td>
<td>4.00</td>
<td>0.15</td>
</tr>
<tr>
<td>Organisation’s Auditors are ready to embrace change</td>
<td>16</td>
<td>16</td>
<td>21</td>
<td>4.54</td>
<td>0.56</td>
</tr>
<tr>
<td>The internal auditors are trained on risk based internal auditing</td>
<td>1</td>
<td>24</td>
<td>28</td>
<td>4.29</td>
<td>0.44</td>
</tr>
<tr>
<td>The Auditor(s) poses proper understanding of the Organisation’s risk</td>
<td>7</td>
<td>21</td>
<td>25</td>
<td>4.84</td>
<td>0.79</td>
</tr>
<tr>
<td>There are quality Audit Reports</td>
<td>6</td>
<td>18</td>
<td>29</td>
<td>4.77</td>
<td>0.61</td>
</tr>
<tr>
<td>There is quality criteria to measure internal auditors performance</td>
<td>4</td>
<td>25</td>
<td>24</td>
<td>4.11</td>
<td>0.34</td>
</tr>
</tbody>
</table>

Source: Research Findings

The findings show that to a very great extent, majority of auditors in the respondents organisations poses proper understanding of the organisation’s risk, there are quality audit reports, auditors possessed adequate technical and professional skills and organisation’s auditors were ready to embrace change as indicated by a mean of 4.84, 4.77, 4.71 and 4.54 with standard deviations of 0.79, 0.61, 0.67 and 0.56 respectively.
In addition, most of the respondents indicated to a very great extent, there were enough internal auditors in their organisations, the auditors were competent and trained on risk based internal auditing and that there was quality criteria to measure internal auditors performance as indicated by a mean of 4.00, 4.29 and 4.11 with standard deviations of 0.15, 0.44 and 0.34 respectively.

**4.2.5 Internal Audit Standards**

The study sought to establish the internal audit standards being achieved by the respondent’s organisation. High internal audit standards are key for successful risk based internal audit hence it was important for the researcher to establish whether the respondents organisation maintained a high internal audit standards hence respondents were requested to indicate the extent to which the given indicators of internal audit standards were applicable to the respondent’s organisation. The responses received are presented in table 4.4 below.
Table 4.4: Extent to which the internal audit standards are applicable to organisation

<table>
<thead>
<tr>
<th>Internal Audit Standards</th>
<th>Moderate extent</th>
<th>Great extent</th>
<th>Very great extent</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is an active and independent Audit Committee</td>
<td>7</td>
<td>19</td>
<td>27</td>
<td>4.69</td>
<td>0.65</td>
</tr>
<tr>
<td>Internal auditors observe professional ethics &amp; standards</td>
<td>9</td>
<td>12</td>
<td>32</td>
<td>4.51</td>
<td>0.40</td>
</tr>
<tr>
<td>Transparency in audit reporting is adhered to</td>
<td>2</td>
<td>21</td>
<td>30</td>
<td>4.77</td>
<td>0.64</td>
</tr>
<tr>
<td>Use of International Auditing standards (IAS) to guide the internal audits ethics</td>
<td>6</td>
<td>13</td>
<td>34</td>
<td>4.32</td>
<td>0.34</td>
</tr>
<tr>
<td>There are Independent Directors</td>
<td>9</td>
<td>17</td>
<td>27</td>
<td>4.50</td>
<td>0.44</td>
</tr>
<tr>
<td>Management has ownership interest</td>
<td>3</td>
<td>11</td>
<td>39</td>
<td>4.79</td>
<td>0.89</td>
</tr>
<tr>
<td>There is compliance with accepted audit standards</td>
<td>7</td>
<td>19</td>
<td>27</td>
<td>4.57</td>
<td>0.89</td>
</tr>
<tr>
<td>Audit planning is undertaken</td>
<td>4</td>
<td>21</td>
<td>28</td>
<td>4.09</td>
<td>0.31</td>
</tr>
<tr>
<td>Internal audit staff are effective</td>
<td>4</td>
<td>13</td>
<td>36</td>
<td>4.00</td>
<td>0.29</td>
</tr>
<tr>
<td>Disclosures about financial risk and risk management</td>
<td>10</td>
<td>15</td>
<td>28</td>
<td>4.88</td>
<td>0.78</td>
</tr>
<tr>
<td>Disclosures about compliance risk and risk management</td>
<td>4</td>
<td>18</td>
<td>31</td>
<td>4.80</td>
<td>0.76</td>
</tr>
</tbody>
</table>

Source: Research Findings

The findings showed that to a very great extent, majority of the respondents made disclosures about financial risk and risk management as well as compliance risk and risk management. Further, management had ownership interest, transparency in audit reporting was adhered to and that there was an active and independent audit committee as indicated by a mean of 4.88, 4.80, 4.79, 4.77 and 4.69 with standard deviations of 0.78, 0.76, 0.89, 0.64 and 0.65 respectively. In addition, it was reported that to a very great extent, professional ethics & standards were observed and that there were independent directors as indicated by a mean of 4.51 and 4.50 with standard deviations of 0.40 and 0.44 respectively. Most of the respondents indicated that audit planning was undertaken and internal audit staff were effective in their work to a very great extent as indicated by a mean of 4.09 and 4.00 with standard
deviations of 0.31 and 0.29 respectively. Majority of the respondents also indicated that International Auditing Standards were employed by auditors in guiding internal audit ethics and that auditors complied with accepted audit standards while undertaking their work to a very great extent as shown by a mean of 4.32 and 4.57 and standard deviations of 0.34 and 0.41 respectively. This implies that internal auditing standards inhibit occurrence of frauds, promote consistency, facilitate education, provide a means to judge performance and influence auditor behaviour. The study findings concurred with Anand and Khanna (2000) who found that the aim of risk assessment auditing standards was to improve the quality and effectiveness of audits by substantially changing audit practice.

4.3 Inferential Statistics

Inferential analysis was undertaken by use of SPSS software with a view to establishing regression coefficients as well as assessing the relationship between financial performance and risk based internal audit in commercial state corporations. The findings of the regression analysis as well as analysis of variance are presented in tables 4.5, 4.6 and 4.7 below.

<table>
<thead>
<tr>
<th>Table 4.5: Regression Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficients</td>
</tr>
<tr>
<td>Intercept</td>
</tr>
<tr>
<td>Risk Management</td>
</tr>
<tr>
<td>Annual Risk Based Audit Planning</td>
</tr>
<tr>
<td>Internal Audit Capacity</td>
</tr>
<tr>
<td>Internal Auditing Standards</td>
</tr>
<tr>
<td>Financial Leverage</td>
</tr>
<tr>
<td>Firm Size</td>
</tr>
</tbody>
</table>

Source: Research Findings
a. Predictors: (Constant), Risk Management, Annual Risk Based Audit Planning, Internal Audit Capacity and Internal Auditing Standards, Financial Leverage and Firm Size

b. Dependent Variable: Return on Assets

\[ Y = 5.90634 + 4.821026X_1 + 3.62350X_2 + 2.32576X_3 + 3.44600X_4 + 1.3959X_5 + 1.42543X_6 + \epsilon \]

Where

- \( Y \) - Profitability of the commercial State Corporation as measured by ROA
- \( B_0 \) - Constant Term
- \( \beta_0 - \beta_6 \) - Beta Coefficients
- \( X_1 \) - Risk Management as measured from section three of the Questionnaire
- \( X_2 \) - Annual Risk Based Internal Audit Planning as measured from section four of the Questionnaire
- \( X_3 \) - Internal Audit Capacity as measured from section five of the Questionnaire
- \( X_4 \) - Internal Auditing Standards as measured from section six of the Questionnaire
- \( X_5 \) - Financial Leverage as measured from Debt Ratio
- \( X_6 \) - Firm Size as measured by the natural logarithm of total assets
- \( \epsilon \) - Standard Errors

From the above results, a positive relationship between risk management and profitability of commercial State Corporations was established with a unit increase in risk management leading to a significant increase in profitability as reflected by \( r = 4.821026, P = 0.021 < 0.05 \). The study also established a positive relationship between profitability of the commercial State Corporations and annual risk based internal audit planning, internal audit capacity and internal audit standards with \( r = 3.62350, P = 0.0015 < 0.05 \), \( r = 2.32576, P = 0.0011 < 0.05 \), \( r = 3.44600, P = 0.0032 < 0.05 \) respectively. In addition, the study also established a positive relationship between profitability of commercial State Corporations and financial leverage with \( r = 1.3959 \).
P =0.0043<0.05 as well as between profitability and firm size with r= 1.42543, P =0.00025<0.05.

Table 4.6: Analysis of Variance

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>Significance F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>14</td>
<td>50.631</td>
<td>10.1264</td>
<td>11.8272</td>
<td>0.015509</td>
</tr>
<tr>
<td>Residual</td>
<td>39</td>
<td>169.3755</td>
<td>12.2411</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>231.0075</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Findings

From the above analysis of variance, a significant goodness of fit between variables was confirmed by F=11.8272, P=0.015509 < 0.05.

Table 4.7: Regression Statistics

<table>
<thead>
<tr>
<th>Regression Statistics</th>
<th>Significance F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>.887011(a)</td>
</tr>
<tr>
<td>R Square</td>
<td>.7868</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>.7645</td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.4797</td>
</tr>
<tr>
<td>Observations</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>0.001</td>
</tr>
</tbody>
</table>

Source: Research Findings

From the above regression analysis, the study found that there existed a significant correlation between the observed and predicted values of dependent variables with an R² of 0.7868 between risk based internal audit practices and profitability of commercial State Corporations. A significant positive variation between risk based internal audit practices and profitability was also established with an Adjusted R² of 0.7645, P=0.001 < 0.05.
4.4 Interpretation of the Findings

From the regression model, it was found that profitability of commercial State Corporations would be at 5.90634 holding risk management, annual risk based internal audit planning, internal audit capacity and internal auditing standards constant. It also came to the fore that a unit increase in either of the four key risk based internal audit factors/practices would positively impact on profitability of the commercial State Corporations. Results from the study suggest that a firm’s risk management framework is highly associated with the role of internal auditing in the firm. The findings concur with Millichamp, (2002) who found that the risks to be covered in audits will exist in all parts of the organization and audits will therefore involve managers in departments never visited before. From the findings, the study established that implementation of risk based internal audit improved profitability in commercial State Corporations.

The study also found that an increase in financial leverage and firm size would positively impact on profitability of the commercial State Corporations albeit to a lesser extent as would risk based internal audit. This concurred with Yung (2008) who conducted a study on risk based internal auditing in Taiwanese banking industry.
CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The purpose of this chapter is to give the summary, conclusions and recommendations based on the study findings. Presented herein is a summary of findings conclusions and recommendations of the study based on the objectives of the study which was to investigate the relationship between risk-based internal audit and financial performance of commercial State Corporations in Kenya.

5.2 Summary

To understand the relationship between risk based internal audit and financial performance of commercial State Corporations, the study examined whether use of risk based audit factors/practices such as risk management, annual risk based internal audit planning, internal audit capacity and internal audit standards affected financial performance of commercial State Corporations in Kenya. The study adopted descriptive survey research with a view to obtaining information that describes existing phenomena. The target population for the proposed study was the 53 commercial State Corporations operating in Kenya and a census survey of all the 53 commercial State Corporations was undertaken. Primary data was collected using questionnaires that were self-administered after which the researcher used quantitative techniques in analysing the data. After receiving questionnaires from the respondents, the collected data was examined and checked for completeness and comprehensibility and thereafter coded for analysis. Inferential statistical regression and correlation were done to establish the impact of risk based internal audit on financial performance of commercial State Corporations. The study concluded that there existed a positive relationship between profitability of commercial State Corporations and risk management, annual risk based internal audit planning, internal audit capacity and internal audit standards.
5.3 Conclusion

The study established a positive relationship between risk based internal auditing and financial performance of commercial state corporations. Whereas risk based internal auditing is not the only determinant of financial performance, it has been determined that it plays a major role in improving profitability. Risk based internal auditing when enhanced enables the organisation to detect risks on time and concentrate on high risk areas leading to increased transparency and accountability, hence enhancing financial performance.

5.4 Recommendations for Policy

From the findings and conclusions that study recommends that risk based internal audit should be enhanced so as to improve financial performance in commercial state corporations in Kenya. In order to achieve this, it is recommended that management of commercial State Corporations in Kenya should emphasize on internal auditors understanding the risk based internal audit approach and in particular embrace risk assessment in the detection of errors, understand their work environment in risk assessment, involve management in the risk evaluation process and identification of changes in order to effectively control risks, improve the quality of personnel in internal audit, adhere to internal auditing standards, undertake proper and efficient annual planning, having independent directors and an audit committee, responding to risk based internal audit reports in time thereby increasing transparency and accountability to achieve efficiency, accuracy, completeness, timeliness, convenience and clarity in financial reporting which in turn will increase profitability of Commercial State Corporations.

5.4 Limitations of the Study

The main limitation of study was inability to include more organizations. The study only sampled commercial State Corporations. The study would have covered more
institutions across all sectors so as to provide a more broad based analysis. However, resource constraints caused this limitation.

The study also faced time constraints particularly where the respondents delayed in filling the questionnaire as well as the need to travel to the respondents organisations to collect the filled questionnaires. This was however mitigated by persistent follow-ups with the respondents.

The respondents were also found to be uncooperative probably because of the sensitivity of the information required for the study. The researcher however explained to the respondents that the information they provided was to be treated in a confidential manner and was only for academic purposes.

5.5 Suggestions for Further Research

The researcher recommends that a further research be undertaken to determine the relationship between risk-based internal audit and profitability of business organizations.

In addition, further studies should be undertaken to establish the relationship between risk-based audit practices and corporate governance in the public sector such as State Corporations in Kenya.

Further research should also be undertaken to establish the challenges of implementing risk based internal audit in the public sector.
REFERENCES


HoHahm (2004) Interest Rate and Exchange Rate Exposures of Institutions in Pre-Crisis Korea


Mikes, A. & Kaplan, R. S., (2013). *Towards a Contingency Theory of Enterprise Risk Management* (Management Accounting Section (MAS)


Yung (2008) Risk Based Internal Auditing in Taiwanesse Banking Industry

APPENDICES

APPENDIX I

QUESTIONNAIRE

This questionnaire is prepared for the purpose of collecting data for a Research Project in partial fulfilment of the requirement for an award of Master of Science in Finance degree and therefore all information will be handled confidentially.

1. What is the name of your Organisation? …………………………………………………

2. Kindly indicate the years your Organisation has been in operation.
   i. 1-10 yrs [ ]
   ii. 11-20 yrs [ ]
   iii. 21-30 yrs [ ]
   iv. 31 and Above [ ]

3. Please indicate in the table below, the extent to which the following factors are applicable to your Organisation.

   Use a scale of 1 to 5 where: 1 = No extent at all; 2 = Little extent; 3 = Moderate extent; 4 = Great extent; 5 = Very great extent

<table>
<thead>
<tr>
<th>Risk Management</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclosures about technology risk and risk management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal process risk and risk management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change management risk and risk management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk assessment is undertaken</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk management is embraced</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is consideration of risk assessment in the detection of errors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk identification is carried out</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk monitoring is carried out to identify errors in financial reporting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

53
4. Please indicate in the table below, the extent to which the following Internal audit Planning are applicable to your Organisation. Use a scale of 1 to 5 where: 1 = No significance at all; 2 = Little significance; 3 = Moderate significance; 4 = Great significance; 5 = Very great significance

<table>
<thead>
<tr>
<th>Annual Risk Based Internal Audit Planning</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk based audit reporting time is defined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk based audit planning is practiced to enhance transparency and accountability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There are annual plans and programs for individual risk based audit assignments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk based audit annual plans are discussed with the management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is timely action on audit queries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audit recommendations are implemented by the Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Please indicate in the table below, the extent to which the following internal audit capacity are applicable to your Organisation. Use a scale of 1 to 5 where: 1 = No extent at all; 2 = Little extent; 3 = Moderate extent; 4 = Great extent; 5 = Very great extent

<table>
<thead>
<tr>
<th>Internal Audit Capacity</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate technical and professional skills/competence of the Organisation’s Auditors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There are enough internal auditors in the organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisation’s Auditors are ready to embrace change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The internal auditors are trained on risk based internal auditing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Auditor(s) poses proper understanding of the Organisation’s risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There are quality Audit Reports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is quality criteria to measure internal auditors performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. Please indicate in the table below, the extent to which the following internal audit standards are applicable to your Organisation.

Use a scale of 1 to 5 where: 1 = No extent at all; 2 = Little extent; 3 = Moderate extent; 4 = Great extent; 5 = Very great extent

<table>
<thead>
<tr>
<th><strong>Internal Audit Standards</strong></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is an active and independent Audit Committee</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal auditors observe professional ethics &amp; standards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transparency in audit reporting is adhered to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of International Auditing standards (IAS) to guide the internal audits ethics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There are Independent Directors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management has ownership interest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is compliance with accepted audit standards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audit planning is undertaken</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal audit staff are effective</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disclosures about financial risk and risk management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disclosures about compliance risk and risk management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX II
LIST OF COMMERCIAL STATE CORPORATIONS IN KENYA AS AT OCTOBER 2013

1. Agro-Chemical and Food Company
2. Chemilil Sugar Company Ltd
3. Consolidated Bank of Kenya
4. Development Bank of Kenya Ltd
5. Geothermal Development Company (GDC)
6. Golf Hotel Kakamega
7. Jomo Kenyatta Foundation
8. Jomo Kenyatta University Enterprises Ltd
9. Kabarnet Hotel Limited
10. Kenya Airports Authority (KAA)
11. Kenya Animal Genetics Resource Centre
12. Kenya Broadcasting Corporation
13. Kenya Electricity Generating Company (KENGEN)
14. Kenya Electricity Transmission Company (KETRACO)
15. Kenya Literature Bureau (KLB)
18. Kenya National Shipping Line
19. Kenya National Trading Corporation (KNTC)
20. Kenya Pipeline Company (KPC)
21. Kenya Ports Authority (KPA)
22. Kenya Post Office Savings Bank
23. Kenya Power and Lighting Company (KPLC)
24. Kenya Railways Corporation (KRC)
25. Kenya Reinsurance Corporation Ltd
26. Kenya Safari Lodges and Hotels Ltd (Mombasa Beach Hotel, Ngulia Lodge, Voi Lodge)
27. Kenya Seed Company (KSC)
28. Kenya Veterinary Vaccine Production Institute
29. Kenya Wine Agencies Ltd (KWAL)
30. Kenyatta International Convention Centre
31. KWA Holdings
32. Mt Elgon Lodge
33. Muhoroni Sugar Company Ltd
34. National Cereals & Produce Board (NCPB)
35. National Housing Corporation
36. National Oil Corporation of Kenya
37. National Water Conservation and Pipeline Corporation
38. New Kenya Co-operative Creameries
39. Numerical Machining Complex
40. Nyayo Tea Zones Development Corporation
41. Nzoia Sugar Company Ltd
42. Postal Corporation of Kenya
43. Research Development Unit Company Ltd
44. Rivatex (East Africa) Ltd
45. School Equipment Production Unit
46. Simlaw Seeds Kenya
47. Simlaw Seeds Tanzania
48. Simlaw Seeds Uganda
49. South Nyanza Sugar Company Limited
50. Sunset Hotel Kisumu
51. University of Nairobi Enterprises Ltd
52. University of Nairobi Press (UONP)
53. Yatta Vineyards Ltd