THE RELATIONSHIP BETWEEN INTERNAL CONTROLS AND REVENUE COLLECTION FOR COMMERCIAL STATE CORPORATIONS IN KENYA

BY

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

NOVEMBER, 2017

DECLARATION

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

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

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ACKNOWLEDGEMENT

My special gratitude goes to the almighty God for granting me the gift of life, good health, strength and resources throughout the demanding course.

Special thanks go to my supervisor Mr. Mohammed Mwachiti and moderator Dr. Duncan Elly for their support, guidance, advice, constructive criticism and continuous evaluation through the entire project.

Special appreciation goes to my class members and friends who through their remarkable contributions and encouragement saw the achievement of this study

Great appreciation to my employer for the opportunity and resources during the period of this course.

Finally, I would also like to appreciate other writers and fellow MSc students whose earlier work was instrumental in my research.

DEDICATION

This project is dedicated to my loving husband Ignatius for his immeasurable support, understanding, encouragement and belief in me and my ability throughout the course. To my sons Crispin and Calvin for the time I spent away from their studying.

To my dear mum for her will and unlimited words of encouragement.

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LIST OF ABREVIATIONS AND ACRONYMS

ADB	African Development Bank
CBK	Central Bank of Kenya
COSO	Committee of Sponsoring Organizations
GST	General Sales Tax
ICS	Internal Control Systems
ILOC	Internal Locus of Control
KRA	Kenya Revenue Authority
NGO	Non-Governmental Organization
CSC	Commercial State Corporations
SEC	Securities Exchange Commission
SME	Small and Medium Enterprises
SOC	State Owned Corporations
SPSS	Statistical Package for Social Sciences
UNES	University of Nairobi Enterprise and Services Limited
VAT	Value Added Tax

ABSTRACT

The study sought to review the association between internal controls and revenue collection for commercial state corporations in Kenya. The independent variables for the study were control activities, risk assessment, information and communication and monitoring. A cross sectional res control environment, research design was utilized in the study. Primary data was collected using questionnaires and analyzed using SPSS software version 21. From the results of correlation analysis, there is a positive and statistically significant correlation between control environment and revenue collection for commercial state corporations in Kenya. The study also found out that there is a positive and significant correlation between risk assessment and revenue collection for commercial state corporations in Kenya. Control activities were also found to have a positive and significant association with revenue collection for commercial state corporations. Information and communication was noted to have a strong positive and significant link with revenue collection for commercial state corporations. Finally, Monitoring had a positive and significant association with revenue collection for commercial state corporations in Kenya.. Regression results showed that control environment indicated a positive and statistically significant relationship with revenue collection for commercial state corporations in Kenya, risk assessment had positive and statistically significant relationship with revenue collection for commercial state corporations, control activities had positive and statistically significant relationship with revenue collection for commercial state corporations while information and communication had positive and statistically significant relationship with revenue collection for commercial state corporations in Kenya. Finally, regression results showed that monitoring had positive and statistically significant relationship with revenue collection for commercial state corporations in Kenya. From the study findings, the study concludes that revenue collection for commercial state corporations in Kenya is significantly affected by control environment, control activities, risk assessment, information and communication and monitoring. This study recommends environment audit and segregation of duties to control fraud. The study further recommends more financing to conduct risk assessment and prevent the occurrence of risks. It is recommended that state corporation should adopt modern internal controls through the adoption of integrated Financial Resource Management. Finally, it is recommended that risk monitoring should be conducted periodically to assess potential frauds within the corporations.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Large and small organizations have established systems of controls for efficient and effective running of their businesses to achieve their goals. Internal control systems are becoming indispensable in both private and public sectors in modern world because of evolving complex methods of doing business involving technology, and increased size of business units (Amudo&Inanga, 2009). Reid and Ashelby (2002) identify two types of internal controls; those that are financial in nature and those that are not. Financial controls are activities that involve controlling company's cash receivables and payables, funding the operations and how the company manages cash inflows and outflows. On the other hand, non-financial management controls involve those activities that are non-financial in nature such as human resource management, fixed assets control, operations, and controls over laid down structures.

The adoption of a strong and effective internal control system in an entity is crucial for a safe and sound management of an entity. An entity is always vulnerable to many risks if it lacks adequate internal controls. The risks that may be caused by improper records of accounting transactions and making unauthorized transactions may significantly affect the entity's performance more especially in financial perspective (Dumitrascu & Savulescu 2012). An entity can benefit more if it has an effective internal control. With a proper internal control system, an entity can be in a position to comply with laws and regulations in a smooth way as compared to an entity that doesn't have a proper system of internal controls (Shanmugam, Haat& Ali, 2012).

1.1.1 Internal Controls

Internal Control System is an autonomous assessment within a business for purpose of review of controls and performance in an organization (Millichamp, 2000). These controls ensure devotion to organization strategies, protection of the assets and safe as far as possible the wholeness and accuracy of the records. Internal Control Structure is a systemic merger of procedures and functions within controls instituted by management whose goal is to improve the business function (Hamed, 2009). Hongming and Yanan

(2012) adds that Internal Control Structure look like the human nervous structure that is spread through the corporate carrying instructions as well as responses to and from the administration. It is openly connected to the administrative system and the overall guidelines of the corporate.

According to COSO Internal Control Integrated Framework (2012), five elements of internal controls are mentioned. They include controlling of environment, analysis of risk, control of activities, communication of information, and systematic review of these elements. Control environment influences the degree of success of the other four elements. Controlling the environment constitute employees behavior and morals, upholding professionalism, participation, organization structure, style of management, authorization and human personnel policies. Kakucha (2009) agrees that without solid control environment, the other components of internal controls become ineffective. Risk assessment analyses the factors that might hinder the attainment of company objectives. It comprise of information for identifying risks of material misstatement, risk analysis and evaluation, analyzing procedures performed on both financial data and non-financial data, observation and inspection methods and documentation of risks.

COSO report (2012) defines control activities as guidelines and methods that enable appropriate initiation of responses in case the organization is facing risks. The report highlights operational controls, financial information controls and compliance controls. Operational controls may comprise of separation of duties, proper duty specification on handling transactions, documentation and records, control over properties and supervising of performance. Information and communication ensures that information flows throughout the organization. The flow of information should be adequate, sufficiently detailed and explicit, accurate and up to date in an upward direction, as part of a routine management information system (Woolf, 1982). The exchange of information allows personnel carry out activities in a coordinated fashion. Monitoring, according to Bowrin (2004) can be ensured by periodically independently checking and observing customer complaints discontents and responses, periodical audits carried out by internal auditors. Monitoring is a vital activity in an organization which ensures the effectiveness of all other internal control components.

1.1.2 Revenue Collection

Revenue is the monetary event acquired due to an increment in the value asset values of the organization resulting from the production activities such as sale of products and services (Pandey, 1996). Schwieger and Rittenberg(2005) describe it as the enhancements of a firm's assets or and payment of its liabilities from the period of production or delivery, service delivery and the execution of other central activities of the firm. Governments, both of the developed and developing countries, require revenue to finance their expenditures. The government revenue consists of tax and non-tax revenues. Taxes are levied on persons either on their incomes or on consumption of taxable items- goods and/or services. Non-tax revenue consists of foreign aid, revenue from state-owned enterprises, fees on licenses and other services offered by the government, fines among other sources.

Firms seeking to attain successful collection operations are adopting modern technologies in the collection of data at lower costs per dollar collected which lead to a rise in revenues without necessarily employing more staff. The best practices and tools are being deployed in areas such as decision analytics, data gathering, self-service and call management and automated involuntary enforcement. The many data sources owned by majority of government entities can be used in the enhancement of data collection activities. This include information from checks previously received, employer data addresses from drivers' licenses and even utility bills and bank account numbers from electronic debit and refund transactions . A better understanding about the debtors can be achieved by the government through establishing a central warehouse for data from various organizations (both state and local governments) (London & Hamilton, 2013).

The Automation of the involuntary collection efforts is also important since the process of levying and garnishing debtors is cumbersome for organizations despite having these authorities on the debtors. The data concerning the bank accounts of the debtor can be accessed by the government collection organizations through prior payments to or from the debtor, previous tax returns, interest reporting from banks and other data sources and financial institution data matches. The information regarding employment is acquired through information sharing regarding an employee by an employer with other government agencies which is fundamental for the automation of involuntary activities (London & Hamilton, 2013).

1.1.3 Internal Controls and Revenue Collection

Theoretically, effective internal control system increases efficiency in revenue collection since it is part of the management process (planning, organizing, controlling and directing).The internal control processes guide organizational processes which drive the attainment of the pre-determined goals and reduce chances of failure. The internal control measures promote effectiveness and efficiency in the execution of activities, ensures that the organization complies with laws and regulations and reduces asset loss risks. Theoretically therefore, an Organization with effective system of internal control is expected to achieve its objective efficiently and effectively (Willis, 2000).

Internal controls improve the revenue generation of a company through provision of an unbiased appraisal on the quality of managerial performance in the execution of the assigned responsibilities better generation of revenue (Beeler, Myers & Murcus, 1999). According to Fadzil, White and White (2005), an effective internal control system has a direct relationship with the success of the organization in the attainment of its projected revenues. The effective internal control that aid revenue generation include; performing a regular review on the integrity and reliability of operating and financial information, an assessment of the' compliance of the employees with management policies, reviewing the controls employed to safeguard assets, applicable laws and regulations and policies, the organizations' effectiveness in the attainment of its organizational objectives and an evaluation of the efficiency .

The internal control system acts as a regulatory requirement for the organizations and help in the appropriate execution of management activities. Organizations also have to regularly educate, train, and sensitize the employees on the functioning of the internal control systems since the dependence and competence of its users determines its effectiveness. The above measures support the organization towards the attainment of its objectives as it removes the barriers that limit the functionality of the organization (Ittner, Larcker, &Randall, 2003).

1.1.4 Commercial state corporations in Kenya

The exact meaning of commercial state corporations is not definite (Wamalwa 2003). According to the State Corporation Act Cap 446 (1987),a parastatal is defined as a state corporation (SC) established by or under the Act of parliament to perform the functions specified in that order; and whose a bigger percentage of the shares are owned by the government. The corporations may be in form of a bank, a financial institution or any organization formed under the Act (Government of Kenya, 1987). The government of Kenya sessional paper number four (GoK -Sessional Paper no 4, 1991) stipulates that state owned corporations (Parastatals) are formed for many reasons including; promoting socioeconomic development, to enable more people to get involved in the economy, to bring equal economic development in all the regions of the country among others.

According to the GoK-Sessional Paper No. 10, (1965) SOCs were mainly formed to encourage more Kenyans in participating in the economy since most institutions were by then still owned by the white settler, a process that was called indigenization of the Kenyan economy. This therefore followed a series of formation of the SOCs whose number rose to 240 by 1995. As at 31st December, 2015, there are 54 commercial state corporations in the country after a series of restructuring them to place them in line with the countries developments. The importance of state owned corporations cannot be overestimated: in Kenya, commercial state owned corporations contribute fifteen percent of its revenue. The value of the state owned corporations is in their ability to offer affordable, accessible and standard goods and services in important sectors such as energy, health and transport. They require massive capital input private sectors cannot afford. State owned corporations if well managed can significantly improve the citizens' welfare as well as promote inclusive growth.

Theoretically, commercial state owned corporations are created for the citizens to benefit. In reality though, state owned corporations are only accountable to the government in power at the expense of the common citizens. The fundamental problem with Kenyan CSCs is in their poor internal control structures, mismanagement of funds, and lack of close monitoring from the relevant regulatory (Gok-Sessional Paper No. 4, 1991). This has led to overburdening of the Government, in the year 2016 alone, the government spent Ksh. 23.1 billion on Kenya Airways, Uchumi Supermarket and Mumias Sugar Company to help them in restructuring following a series of loss making by state owned corporations (CBK, 2016).

1.2 Research Problem

Slanislav (2006) highlighted that the main interest in internal controls is brought about by major losses incurred by many organizations. Incidences of weaknesses in internal control, unsatisfactory service delivery have negative effects in that they both weaken ability of the company to effectively collect revenue and encourages fraud, collusion, loss of cash (revenue),embezzlements, corruption, deliberate mistakes, assets conversion genuine , failure to demonstrate transparency and accountability in revenue collection and the other assets. It is therefore necessary to eliminate these barriers so as to enhance the attainment of the goals and mission of the company. The organization's management should thus understand the internal control procedures so as to attain effectiveness in service delivery and revenue collection (Efozie, 2010).

The public sector has been affected by massive corruption and fraud related issues over the past, as the corrupt individuals snatch public funds (Adari, 2007). And in most instances, such looted funds are never recovered despite the litigations the victims face. The Kenyan public organizations are under risks arising from internal controls weaknesses which often lead to financial losses for the organizations (Njoroge, 2003). Weak internal controls also provide fraud avenues in these organizations. The levels of revenue generation vary within organizations both in the public and private sector despite the many rules which compels the audit system to state that the goals of internal control system of the organization have been met with very little certainty as there is no absolute assurance (Wagacha & Ngugi, 2009).

From past studies, Efozie (2010) notes that weak internal controls yields theft of funds, decline of sales revenue, deliberate omissions in records, corruption, and loss of business property, collusion and unwillingness to be transparent and accountable for cash management. Oseifuah and Gyekye (2013)investigated internal controls effectiveness in South African SMEs and revealed internal control practices among SMEs in South Africa was very low, with only a few of them having adequate internal controls systems in place. Dineshkumar and Kogulacumar (2013) also studied an extent to which systems of internal control influence a firm's performance and revealed a strong relation between systems of internal control and firm's performance of Sri Lanka Telecom limited.

In Kenya, Ndungu (2013) studied the impact of internal controls on revenue generation in University Of Nairobi Enterprises and Services limited (UNES) and concluded that systems of internal control should be functioning as per the intended plans to help in enhancing efficiency and accurate data capturing. Muio (2012) did a study on the impact of internal control systems on the financial performance of private hospitals in Nairobi and noted that a significant association exists between internal control system and financial performance. Ngugi (2011) did a survey on the internal control systems among the public sector companies and listed private companies in Kenya and concluded that that public sector have weaker internal control systems as compared to the private sector. From the discussions above, it is evident that limited studies if any, have concentrated on the relationship of internal controls and revenue collection at the commercial state corporations in Kenya. This study's findings to fill this research gap by answering the question: What is the association between internal controls and revenue collection for commercial state corporations in Kenya?

1.3 Research objectives

The objective of the study was to review the association between internal controls and revenue collection for commercial state corporations in Kenya.

1.4 Value of the Study

This study's findings will be used by policy makers in the analysis of the impact of internal controls on the efficiency of revenue collection and the analysis of different measures that need to be taken by commercial state corporations so as to improve the efficiency in their collection. This findings will also be beneficial to the government of Kenya in formulating budgets and setting out collection targets for the various commercial state corporations.

The findings of the study will help management and staff to own up their contributions to sound internal controls in their operations in commercial state corporations as well as the board audit committees in ensuring that their commercial state corporations have sound internal controls and the impact of internal control structures to the revenue collection strategies.

The study's findings will be used by future researchers, students and scholars who may want to undertake studies in the similar or correlated field as reference. The study will also be beneficial to researchers and scholars in the identification of further research areas on other subject matters by highlighting related topics that need further studies and undertaking a review of the empirical literature to establish the study gaps.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the theoretical framework applied for the study and reviews previous studies done on internal controls and revenue collection. It contains the theoretical review, determinants of revenue collection, empirical review, conceptual framework and summarizes the literature review.

2.2Theoretical Framework

The theoretical framework refers to a structure of concepts that exists (tested) and is a ready-made map for a study. It is composed of principles, theories, research findings and generalizations which are related to the subject under investigation (Sirkin, 2011). The study was build on three theories: Institutional theory, Control theory and the agency theory.

2.2.1 Control Theory

The theory of control and experience suggests that an individual who goes against a system of controls will be excluded from the collusion process. Rotter (2001), asserts that the internal locus of control versus concept and the external locus of control understand that influence their day to day activities. People with ILOC believe that results are brought about by individual actions whereas those with external locus of control attribute events to the external environmental factors for instance chance or more powerful actions.

The perception of the ILOC concept from an entrepreneurs point of view in a dynamic business environment makes them think that those entrepreneurs with strong ILOC can manipulate the occurrence of events and that business success or failure is a consequence of their own actions .This makes the entrepreneurs exhibiting ELOC to examine the external environment to be the cause of either success or failure in the business (Rotter, 2001).

2.2.2 Institutional Theory

According to this theory by Fogarty (1996), all organizational functions are designed to function according to the social expectations so as to improve the welfare of the society. This means that the complex and not easily notable internal operations of the organization come second with regard to external legitimacy. An organization' external image could arguably be loosely coupled with the type of technology adopted and its operating processes.

This was developed by Fogarty (1996) concerning the contribution of institutional theory and argues that the projected and the actual performance of an organization are two different things thus the desired and the actual outcome always vary. The internal processes of an organization are not related to its external processes and the structures put aside for the external users do not contribute to output. The observation by Fogarty (1996) that outsider scrutiny can be avoided through the adoption of proper organizational structures. Easy adoption of new technological innovations increases the flexibility of organizations in the execution of its operational processes. Institutions must therefore be prepared to incur the high costs of technology in the internal audit department and ensure smooth running of the departments through offering smooth training to the employees.

2.2.3 Agency Theory

The agency theory asserts that several contracts exist between firms and the economic resource owners who are the principals and managers i.e. the agents who pay a cost for the use and control of resources (Jensen & Mecklig , 1976). This theory argues that the agents are equipped with more information than their principals and this state of information asymmetry greatly influences the ability of the principal to establish whether their agents are safeguarding their interests. This theory therefore views firms as necessary for the maintenance of contracts and minimization of the agents' opportunistic behavior (Jensen & Meckling, 1976). The theory suggests that so as to bring a balance between the interests of the principal and agent, there must be a comprehensively written contract to contain both their interests. The relationship between the agent and the principal is further strengthened by employment of an expert and systems by the principal to aid the monitoring of the agent (Jussi & Petri, 2004).

The theory further notes the inadequate information regarding interests, the defined duties of the agent and relationships results in adverse and moral hazards. The impact of adverse selection on the agent's output occurs in two forms; Lack of the required knowledge regarding what needs to be done as opposed to what the agent recruited you to do. The assumption of this theory is that the agents and principals adopt contracting as a form of wealth maximization. Thus the theory is suitable for the study since internal control is among the mechanisms applied in reduction of agency costs which influence the overall relationship performance and the principal's benefits. The acquisition of additional information by the principal enhances the internal control to the principal since he can gain better understanding about the agent i.e. the management which results in the reduction of information asymmetry and reduces risks attributed to investments (Jensen & Meckling, 1976).

2.3 Determinants of Revenue Collection

The developing countries are globally undertaking local government reforms and fiscal decentralization in a bid to improve the service delivery of the government, government accountability and economic efficiency. These efforts of fiscal decentralization begin with the local government doing a thorough review of spending and revenue responsibilities. Rationalization of these revenue and spending allocations and the establishment of an inter- governmental transfer program are among the critical steps in the creation of fiscal structures which enable the government to achieve their functions with regard to stabilization, distribution and resource allocation (Bahl & Linn, 1992).

Serious lack of revenue in most developing nations compels the intergovernmental fiscal analysis to begin with focusing on its revenue allocation. Governments always have to mobilize and improve the existing sources of local revenue apart from establishing a system of enhanced central-local revenue transfers. All countries are specifically concerned with property tax system which forms the main source of revenue for majority local governments across the world (Bahl& Linn, 1992).

Aamir, Qayyum, Nasir, Hussain, Khan and Butt (2011) identified restructuring of the tax system as an important determinant in an economy's revenue collection. Performing a restructure of the tax system at federal level is critical in the economic reform process. The Pakistan's economic sector is mainly composed of direct tax reforms at federal level. India has also adopted tax reforms in order to correct imbalances in fiscal imbalances. Increase in VAT globally is considered as the most vital advancement in the tax development regime. This type of tax is considered as more beneficial when compared to others since it eliminates cascading, difficult to evade and broad based. The most modified VAT form was the general sales tax (GST) which was used in the 1991 Pakistan tax reforms.

One determinant of revenue collection is the extremely low tax collection rates. There is little supporting evidence with regard to this since records on revenue collection performance possessed by the government are inconsistent and the particular reasons for poor performance in revenue collection among the local authorities vary. The common reasons however are factors such as lack of well outlined penalty measures for unduly delayed payment in most local authorities. The problems in tax collection can be brought about by staff inefficiency and the tax structure. Wide equity variations on property tax assessments also affect the collection of tax (Pandey, 2006).

Another key determinant of revenue collection is the tax reforms in a country. Osoro (1993) examined the impact of productive tax reforms in Tanzania and estimated the tax revenue elasticity and tax buoyancy the proportional adjustment method. The overall elasticity was 0.76 during this study period with1.06 buoyancy. It was therefore concluded from this study that tax reforms in Tanzania had have not succeeded in raising tax revenues. This tax failure was attributed to results were attributed to poor tax administration, unnecessary tax exemptions by the government and lack of the payment capacity. Most governments are globally addressing these problems through the adoption of reform measures. The most effective ones being strict enforcement, which include promptly identifying the delinquent payers, automatic tax liens on delinquent property and rapid legal procedures.

Another fundamental determinant of revenue in Africa is the gap between financial resources and spending needs due to inadequate financial systems. The expansion of the urban populations and more infrastructural services demand in widening this gap. The variation between revenue growth and increase in urban economic activity is termed as lack of income elasticity (Miriithi, 2004).

2.4 Empirical Review

There are numerous empirical studies both locally and internationally to support the association between internal controls and the process of revenue collection. Majority of the previous studies have however only focused on the control aspects related to overall performance of a firm, performance reporting, the existing internal controls and financial performance on financial institutions without looking at their influence on the revenue collection of a firm.

2.4.1 Global Studies

According to Abbott (2000), in his study on the control environment explored whether the audit independence and activities is related to frauds related to financial statements. A total of 156 firms were subjected to the Accounting and Auditing Enforcements Releases (AAERs) between the year 1980 and 1986. Abbott (2000) examined the presence of the variable audit committee presence used in previous studies with activities of audit committee and independence, as the previous studies indicated different results with regard to the relationship between the audit committee and chances of fraud occurrence. The outcome of the study indicates that the firms run by independent directors and with minimum level of activities have little frauds in their financial statements.

Barra (2010) used the analytical approach in his focus on the monitoring and control activities to examine the effects of penalties and other forms of internal controls on likelihood of the employees to engage in fraudulent activities. The managerial and non-managerial employees were used in data collection. The study’s outcome was that separation of duties and the presence of the control activities increases the fraud commitment cost. This means that the benefits derived from fraud commitment need to overcome the environmental cost of diverse duties which lead to commitment of fraud by an employee. It was also found that the segregation of duties is a deterrent of least-cost fraud for employees who are not involved in the management process but rather the managerial employees this means that least-cost fraud disincentives increases the penalty levels. These findings propose the need for coming up with effective preventive control measures (control activities) which relies on proper controls (monitoring).

Udoayang and Ewa (2012) conducted a study on the effect of internal control designs on the ability of the banks to examine the level of life style and staff fraud of staff and the detection of fraud in Nigeria. 13 Nigerian banks were used in data collection using a Four Point Likert Scale questionnaire and the data analysis done using ratios and percentages. The staff attitude towards fraud was found to be influenced by the Internal control design in that mechanism of strong internal control reduces staff fraud whereas weak ones create opportunity for staff commitment of fraud and expose the system to fraud. Majority of banks were however found not to consider their employees' lifestyle which could be helpful in the detection of any possible fraud schemes. Thus it can be concluded from the study that effective internal control system is ideal in streamlining the performance of the banking sector. Thus the recommendations of the study assert that Nigerian banks need to pay kind attention to the life style of their staff members and upgrade their internal control systems which lead to possible identification of frauds.

2.4.2 Local Studies

Kakucha (2009) examined the effectiveness of the internal controls levels for small businesses operating in Nairobi. The research adopted quantitative design and a sample of 30 small businesses at the NSSF listing between September 2007 and June 2009 was used for the study. The interview technique was used in the collection of Primary data from managers of the small enterprises using examination of documents and interviews. Several limitations were found in internal control systems with varying degrees of deficiencies. The missing internal control components in the majority of the surveyed businesses were: risk analysis and poor information flow. The study also established the ignorance of the sample population regarding the components of an internal control effective system. It was also noted from the study that a negative link exists between the enterprise size and the effectiveness of the internal control systems while negative association exists between enterprises owned resources and the weaknesses in the internal control system. Recommendation for the need to enlighten small business operations to attain effective and efficient internal control systems was drawn from the study.

Wainaina (2011) in his study on internal control function evaluation at the Kenya Polytechnic University College indicates that substituting its presence on the operational scene forces the management to depend on the techniques of internal control in the implementation of its decisions and regulation of all business activities. This argument makes the use of effective Internal Control Systems a vital aspect in managing the resources of a business. Thus, each organization designs its procedures to allocate, control and ensure resource utilization so as to achieve its goals. It was therefore concluded that ICS's play a vital role in the prevention and detection of fraud and protection of both physical and tangible resources of an organization.

Michino (2011) did a study on the effects of internal control on the operational efficiency of the NGOs based in Nairobi by sampling 50 NGOs. The questionnaire was used in data collection and consisted both closed and open ended questions. It was concluded that NGOs internal controls were greatly determined by the organizational structure in that the decision on the allocation of the donated resources is determined by the top management. The management of cash was found to be the second factor affecting the operations of and the NGOs with proper cash management systems were found as attractive to many sources of funds. NGOs with effective organizational structures exhibited well-structured policies and procedures on their functioning.

According to Mwachiro (2013), the role internal controls played are critical in ensuring effective revenue collection process. Both qualitative and quantitative approaches were used in the research process. Questionnaires were administered to 38 respondents in the collection of the primary data to be used in the study. The findings after data analysis indicated the five components of risk assessment, control activities, control environment, communication and information and monitoring are critical for proper functioning of the internal controls. It was also found that weak internal controls encourage fraud, collusion, and embezzlement of the revenue collected and loss of revenue. Thus, it was concluded from the study that significant effect exists between internal controls and revenue collection in KRA. Recommendations on the areas identified to have deficiencies should however be provided by the auditors.

2.5 Conceptual Framework

A conceptual framework is a research tool intended to assist a researcher in understanding of the situation under investigation. The independent variable is internal controls as represented by control environment, control activities, risk assessment, information and communication, and monitoring. Revenue collection will be the dependent variable for the study.

Independent variables **Dependent variable**

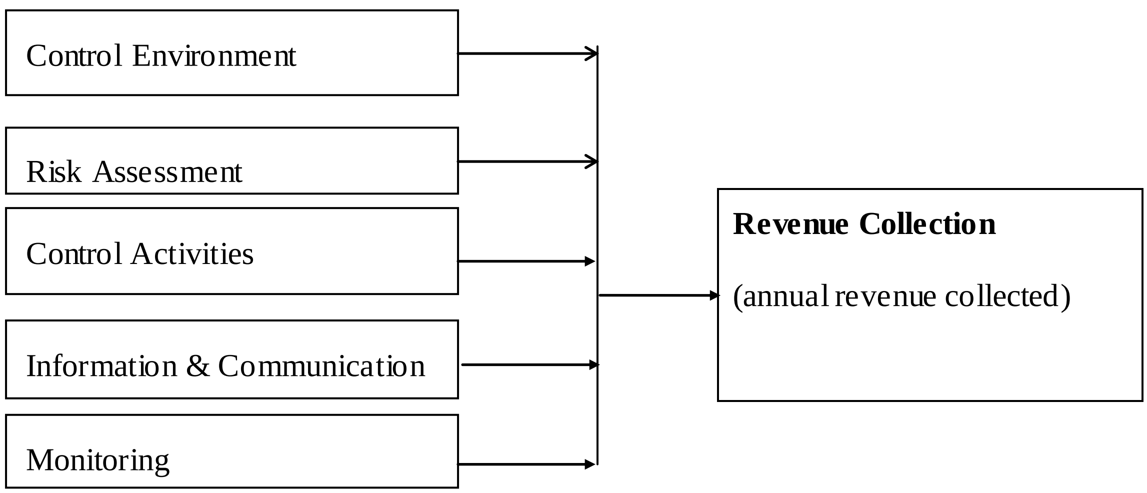


Figure2.1: Conceptual Model

2.6 Summary of the Literature Review

Various theoretical frameworks have attempted to explain the concept of internal controls. Three theories have been discussed in this theoretical review. The theories are namely: control theory, institutional theory and the agency theory. Some of the key determinants of revenue collection have also been discussed in this section. Several empirical studies have been conducted both internationally and locally on internal controls and revenue collection. The findings of these studies have also been discussed in this chapter.

The above literature review indicates that little research has been done in the establishment of the relationship between internal controls and revenue collection thus more studies need to be done. This study seeks to clearly demonstrate the association between internal control and revenue collection among commercial state corporations in Kenya after which the conclusions will be dispelled after obtaining empirical evidence from the research. Local studies done are not conclusive in their findings and it is this gap that the current study intended to fill.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes methods of research applied to objectively establish the association between internal controls and revenue collection among the Kenyan commercial state corporations. It also shows the research design, the study population, data collection criteria and data analysis technique.

3.2 Research Design

Khan (2008) defined research design as that method that is procedurally acquired by the researcher and that which enables the researcher to be able to answers questions accurately, validly, objectively, and economically. According to Wanyama & Olweny (2013), a research design aims at improving the ability of the research in conceptualizing an operational plan in order to be able to embark on the various techniques available and tasks that are required so as to complete the study while at the same time ensuring that that the procedures used are sufficient enough to acquire valid, objective and precise responses to the research questions.

The study adopted a descriptive cross-sectional design. A descriptive study involves a description of all the elements of the population. It allows estimates of a part of a population that has these characteristics. Identifying associations among various variables is possible, to establish whether the variables are independent or dependent. Cross-sectional study methods are done once and they represent summary at a given timeframe (Cooper & Schindler, 2008).

3.3 Population

This refers to all the components being examined from a complete collection elements such as people or events as described by a researcher (Burns & Burns, 2008). The population of the study comprised of the 54 commercial state corporations operating in Kenya as at 31/12/2015. The study used census technique to select sample for senior management, one questionnaire for each commercial state corporation. The commercial state corporations are as shown in Appendix II.

3.4 Data Collection

The study used both secondary and primary data. Secondary data were obtained from the financial statements and other annual published reports for the five year period (2012-2016). The primary data were collected by use of structured questionnaires using the Likert Scale. The targeted respondents in this study were senior level managers of the commercial state corporations. This is because they are involved in the management of the organizations and have a broad understanding of the affairs of their organizations.

The respondents from each organization were required to respond to the questionnaire. The questionnaire consisted of open-ended and close ended questions. Close-ended questions were utilized during the collection of structured responses to allow for the recommendations that are more tangible. The rating of various attributes was tested using the close ended questions which helped in the reduction of similar responses thus more varied responses were obtained. Additional information not captured in the close-ended questions was obtained by the use of open- ended questions. The research instrument was personally administered by the researcher so as to ensure that all the questionnaires are received by the respective respondents and keep a register to ensure that all was returned.

3.5 Diagnostic Tests

Mugenda and Mugenda (2003) argue that any serious and qualitative researcher must concern himself with both reliability and validity when conducting a given research, analyzing the study results and indeed evaluating the quality of his work. Validity is described as the degree to which a data instrument testswhat it is meant to measure in the research study. This research study used data obtainable from financial statements and other annual published reports for the five year period to enhance validity. Reliability refers to the stability, accuracy and precision of measurement; research tools should exhibit consistent and accurate results after conducting a number of trials. The quality of a research depends on the way the research is conducted and the process used consistently and in a reliable way.

3.6 Data Analysis

A data analysis method was used for that execution of an analysis that is comprehensive. The descriptive data was analyzed using Statistical SPSS. The quantitative data was analyzed using the multiple regression analysis since it entails multiple independent variables and one dependent variable. The quantitative data findings were presented in tables and figures.

Multiple Regressions analysis was used to analyze whether an association exists between one dependent variable more than one independent variables. Revenue collection was the dependent variable while the independent variables were: control activities, control environment, risk assessment, communication and monitoring and information. The multiple regression model used is as represented below:

$Y= \alpha+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+ \varepsilon$

Where;

Y= Revenue Collection

α = Constant Term; it is the Y value when all the predictor values are zero

β_1, β_2, β_3, β_4 and β_5 = Beta Coefficient of variable i which measures whether there is responsiveness of Y to change in i

3.6.1 Tests of Significance

To test the statistical significance, the correlation coefficient, F- test and the t – test was used at 95% confidence level. The correlation coefficient was used to determine the nature and strength of relationship, F statistic was utilized to establish a statistical significance of regression equation while the t statistic was used to test statistical significance of study coefficients.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF RESULTS

4.1 Introduction

This chapter presents the research findings based on the proposed methodology and procedures. The chapter is comprised of the following sub-sections: response rate, the employees' background information and the various factors to test the association between internal controls and revenue collection for commercial state corporations. The findings are presented in percentages, charts, frequency distribution, mean, standard deviation and inferential statistics.

For the study, 54 questionnaires were distributed to respondents and only 47 were returned, and the response rate was as follows;

Table 4.1

Table 4.1: Response Rate

Response	Frequency	Percent
Returned	47	87
Unreturned	7	13
Total	**54**	**100%**

(Source: Survey Data, 2017)

The results in Table 4.1 indicated an overall successful response rate of 87 %. For that reason, the rate of response documented by the study was found to be fit for analysis since it is supported by Mugenda and Mugenda (2010) that any response rate 70% and above is considered excellent for analysis and making conclusions.

4.2 Reliability Test Results

The reliability tool is the ability to produce stable and consistent measurements. Reliability of this instrument was calculated using the Cronbach Alpha which tests the internal consistency. This index is extensively used in the verification of the construct's reliability. The results are presented in Table 4.2.

Table 4.2: Reliability Test Results

Variable	**Respondents**	**α=Alpha**	**Comment**
Control environment	5	0.772	Reliable
Risk Assessment	5	0.739	Reliable
control activities	5	0.841	Reliable
Information and communication	5	0.706	Reliable
monitoring	5	0.814	Reliable
Revenue collection	5	0.924	Reliable

(Source: Survey Data, 2017)

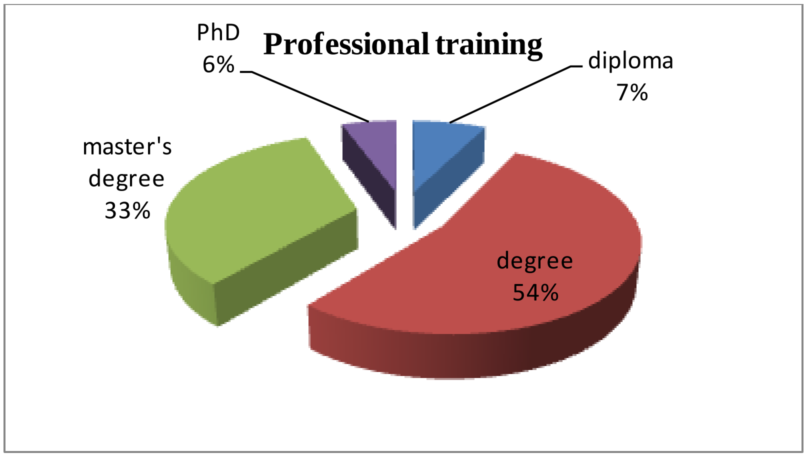
The findings on Table 4.2 indicated that control environment, risk assessment, control activities, Information and communication, monitoring and revenue collection of commercial state corporation had Cronbach alpha of 0.772, 0.739, 0.841, 0.706, 0.814 and 0.924 respectively. The study was deemed reliable since the values of the Cronbach's Alpha were above 0.7 (Kothari, 2004). This represented high extent of reliability and on thus it was concluded that value used in this study was reliable in analyzing the variables.

4.3 Demographic Characteristics

This section reports on information that describes the attributes of the respondents such as the education level and work experience.

4.3.1 Professional training of the respondents

Respondents were required to indicate their professional training. The results are presented in Figure 4.1. It was important to establish the educational level of respondents. This is because the management and commercial state corporation is directly linked to the educational level of its managers. Storey (1994) indicated that levels of education possessed by managers influence success of enterprises.



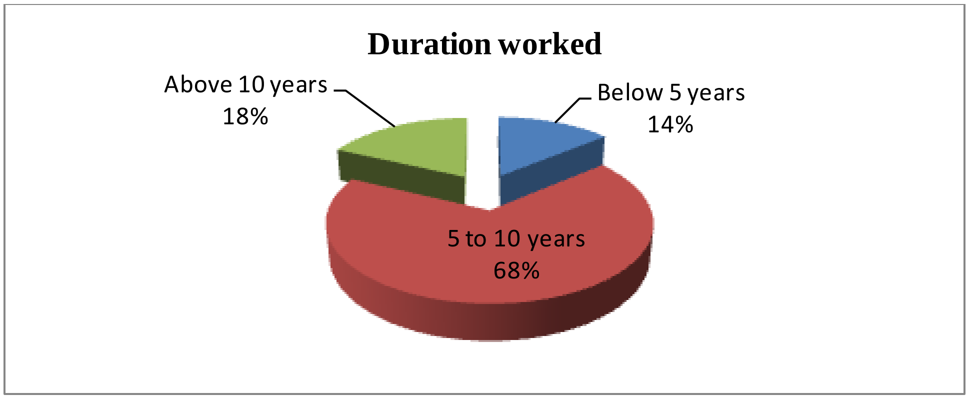
(Source: Author 2017)

Figure 4.1 Education level

Study findings indicated that majority (54%), of the respondents had first degree level of professional training, while 33% of the financial managers had master's level of professional training. Results further indicated that 6% of the managers of commercial state corporations had PhD level of professional training while 7% of the managers had diploma level of professional training. This implies that managers of commercial state corporations in Kenya possess required management skills. They are therefore able to manage and grow their corporation.

4.3.2 Period of service of the respondents

The respondents also indicated the span in which they have been managers in the corporations. The results are presented in Figure 4.2. It is valuable to have an adequate experience for successful management and performance of commercial state corporations. Managers that are more experienced possess more management skills and innovative skills necessary for the growth of an enterprise.



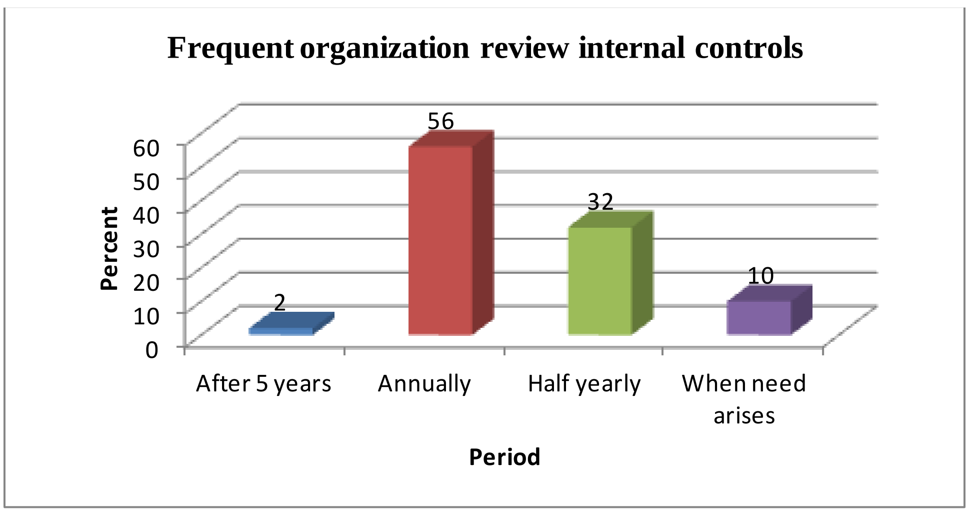
(Source: Author 2017)

Figure 4.2 Duration of service

Majority 68% of the managers indicated that they have been working in the commercial state corporation for the period of 5-10years, 18% for a period of above 10 years while 14% had been in managers for less than 5 years. This implies that the managers are experienced enough to run the commercial state corporations.

4.3.3 Frequent organization review internal controls

The managers were asked to indicate the frequency internal controls were reviewed in the corporation. The results are presented in Figure 4.4.



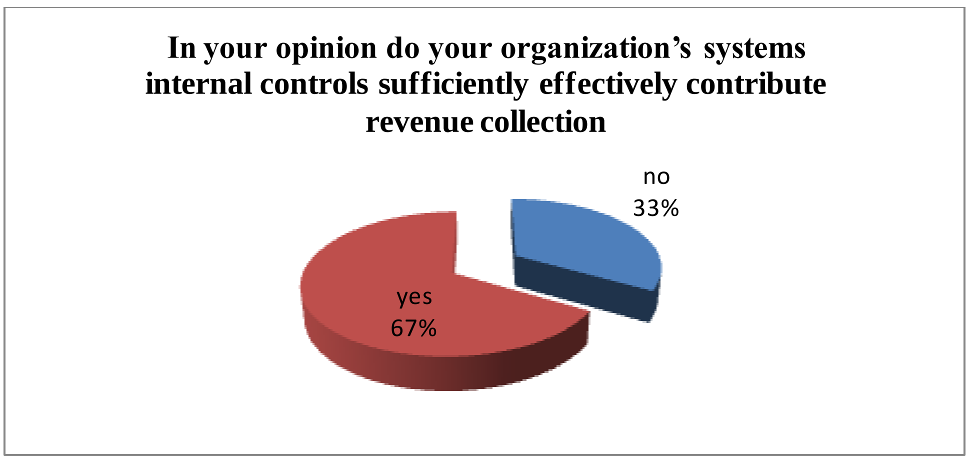
(Source: Author 2017)

Figure 4.4 Frequent organization review internal controls

Majority 56 % of the managers indicated that internal controls were reviewed on annual basis, 32% indicated half yearly, 10% when need arises while 2% were indicated that internal controls were reviewed after a period of 5 years. This implies that reviewing internal controls have been a challenge in the commercial state corporations.

4.3.4 Do organization's systems internal controls sufficiently effectively contribute revenue collection

The respondents were asked to indicate whether organization's systems internal controls sufficiently effectively contribute revenue collection. The results are presented in Figure 4.5.



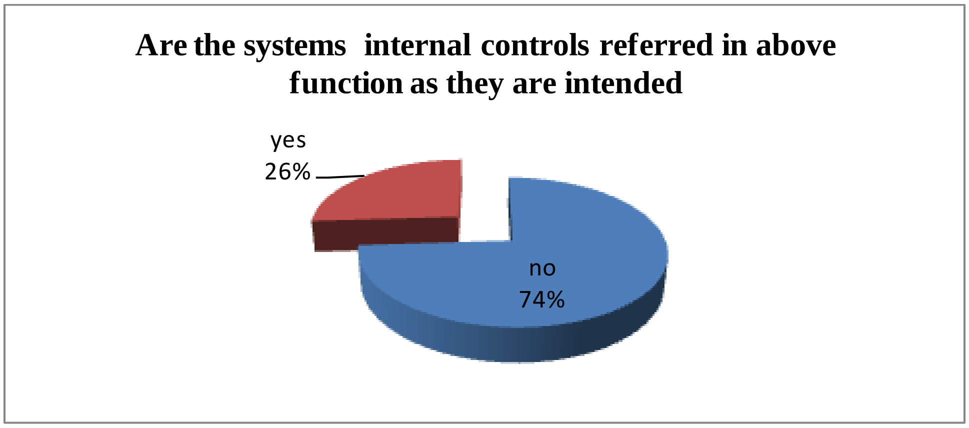
(Source: Author 2017)

Figure 4.5 Do organization's systems internal controls sufficiently effectively contribute revenue collection

Results in figure 4.5 shows that majority 67% of the managers indicated that organization's systems internal controls sufficiently effectively contribute revenue collection. Another 33% did not agree that organization's systems internal controls sufficiently effectively contribute revenue collection.

4.3.5 Are the systems internal controls referred in above functioning as they are intended

The respondents were asked to indicate whether the systems internal controls referred in above function as they are intended. The results are presented in Figure 4.6.



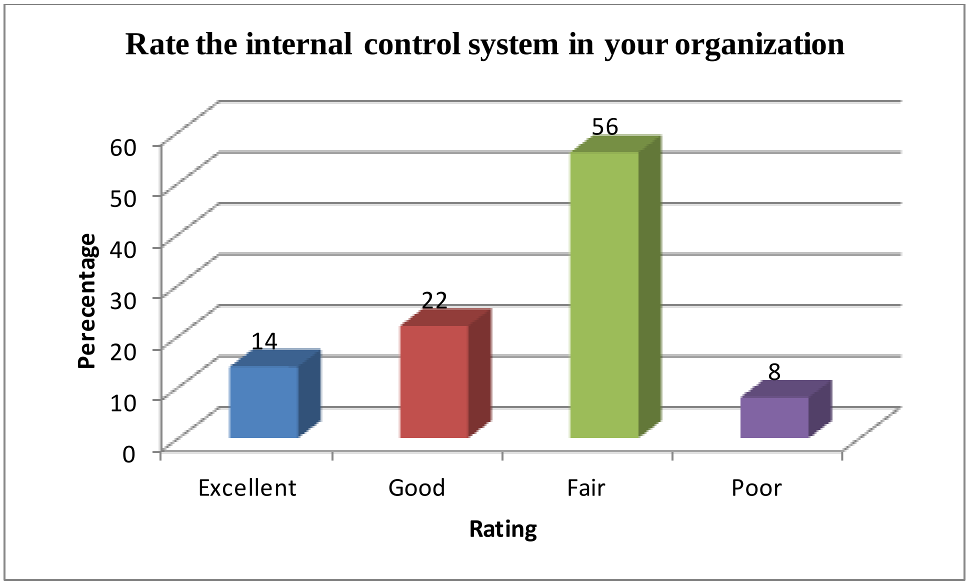
(Source: Author 2017)

Figure 4.6 are the systems internal controls referred in above functioning as they are intended

Results in figure 4.6 shows that majority 74% of the managers indicated that the systems internal controls referred in figure 4.5 did not function as they are intended. Another 26% agreed that the systems internal controls referred functioned as intended.

4.3.6 Rate the internal control system in your organization

The managers were asked to rate the internal control system in the organization. The results are presented in Figure 4.7.



(Source: Author 2017)

Figure 4.7 Rate the internal control system in your organization

Majority 56 % of the managers rated internal control system fair, 22% rated internal controls good, 14% rated hem excellent while 8% rated them poor. This implies that adoption and performance of internal controls in revenue collection have not been implemented fully.

4.4 Descriptive Statistics

The main attributes of the data in the study were defined using descriptive statistics. Simple measures and summaries about the study's sample were presented in accordance with the study goals.

4.4.1 Control environment

The study sought to examine the impact of control environment on revenue collection for commercial state corporations in Kenya. The respondents were required to respond on statements related to control environment. The responses were rated on a five likert point scale in table 4.3.

Table 4.3: Control environment and revenue collection for commercial state corporations in Kenya

Statement	Very low extent	Low extent	Moderate extent	Great extent	Very great extent	Mean	SD
The management has established policies and procedures for all major operations of the entity	14.0%	12.0%	48.0%	24.0%	2.0%	2.9	1.0
A well elaborate Organization Structure reflecting the chain of command	22.0%	22.0%	40.0%	10.0%	6.0%	2.6	1.1
Management is committed to implementation of internal control systems	26.0%	10.0%	42.0%	8.0%	14.0%	2.7	1.3
The ethical values are upheld in every management decisions concerning all stakeholders organization's benefits.	20.0%	18.0%	48.0%	6.0%	8.0%	2.6	1.1
Audit committee maintains a direct line of communication with external and internal auditors of the entity	16.0%	12.0%	50.0%	8.0%	14.0%	2.9	1.2
Specific lines of responsibility and authority have been established to ensure compliance with procedures and policies.	18.0%	14.0%	50.0%	14.0%	4.0%	2.7	1.1
Average						2.7	1.1

(Source: Survey Data, 2017)

Results in table 4.3 revealed that at most of the managers 48% indicated that the management has established policies and procedures for all major operations of the entity to a moderate extent. The results also showed that most of the managers 40% indicated that a well elaborate Organization Structure reflecting the chain of command to a moderate extent. The results also showed that most of the managers 42% indicated that management is committed to implementation of internal control systems to a moderate extent. Further, result findings indicated that showed that most of the managers 48% indicated that ethical values being upheld in all the decisions of the management dealing with all stakeholders for the organization's benefit to a moderate extent, while majority 50% acknowledged that audit committee adequately maintains a direct line of communication with the entity's external and internal auditors to a moderate extent. The responses had an average mean of 2.7 which implying that a substantial number of the managers were agreeing to the statements in the questionnaire to a moderate extent. The standard deviation was 1.1 meaning that the responses were aggregated around the mean response.

4.4.2 Risk assessment

The study sought to examine the effect of risk assessment on revenue collection for commercial state corporations in Kenya. The responses were rated on a five likert scale in table 4.4.

Table 4.4: Risk assessment and revenue collection for commercial state corporations in Kenya

Statement	Very low extent	Low extent	Moderate extent	Great extent	Very great extent	Mean	SD
Financial risks being identified and documented by management	10.0%	34.0%	42.0%	8.0%	6.0%	2.6	1.0
Risk analysis and evaluation of internal and external environment before making any decision being a continuous activity in the organization	12.0%	20.0%	54.0%	6.0%	8.0%	2.8	1.0
Analyzing procedures	12.0%	24.0%	48.0%	6.0%	10.0%		

performed on both financial data and nonfinancial data						2.8	1.1
Management putting in place mechanisms for mitigation of critical risks	14.0%	22.0%	52.0%	4.0%	8.0%	2.7	1.0
Staff being adequately involved in internal controls	21.0%	19.0%	50.0%	4.0%	6.0%	2.6	1.1
Average						2.7	1.0

(Source: Survey Data, 2017)

Results in table 4.4 revealed that at most of the managers 42% indicated that financial risks are identified and documented by management to a moderate extent. The results also showed that majority of the managers 54% indicated that risk analysis and evaluation of internal and external environment before making any decision being a continuous activity in the organization is done to a moderate extent. The results also showed that most of the managers 48% indicated that analyzing procedures performed on both financial data and nonfinancial data are done to a moderate extent. Further, result findings showed that majority of the managers 52% indicated that management is putting in place mechanisms for mitigation of critical risks to a moderate extent, while majority 50% acknowledged that the staff is adequately involved in internal controls to a moderate extent.

4.4.3 Control activities

The study sought to establish the effect of control activities on revenue collection for commercial state corporations in Kenya. The respondents were asked to respond on statements related to control activities. The responses were rated on a five likert scale in table 4.5

Table 4.5: Control activities and revenue collection for commercial state corporations in Kenya

Statement	Very low extent	Low extent	Moderate extent	Great extent	Very great extent	Mean	SD
Reconciliation and review of functions is	14.0%	22.0%	50.0%	4.0%	10.0%		

done monthly focusing on financial compliance						2.7	1.1
Authorization and approval of transaction to ensure activity is consistent with departmental goals	10.0%	28.0%	54.0%	6.0%	2.0%	2.6	0.8
Segregation of duties to reduce risk of errors on revenue collection and general accounting	6.0%	30.0%	44.0%	10.0%	10.0%	2.8	1.0
Accounting records being limited to employees with designated responsibility for such records	22.0%	20.0%	50.0%	4.0%	4.0%	2.5	1.0
Changes to the prescribed billing amount requiring the approval of an authorized individual	8.0%	12.0%	64.0%	4.0%	12.0%	3.0	1.0
Average						2.7	1.0

(Source: Survey Data, 2017)

Results in table 4.5 revealed that majority of the managers 50% indicated that reconciliation and review of functions is done monthly focusing on financial compliance to a moderate extent. The results also showed that majority of the managers 54% indicated that authorization and approval of transaction to ensure activity is consistent with departmental goals is done to a moderate extent. The results also showed that most of the managers 44% indicated that segregation of duties to reduce risk of errors on revenue collection and general accounting is done to a moderate extent. Further, result findings showed that majority of the managers 50% indicated that accounting records being limited to employees with designated responsibility for such records are performed to a moderate extent, while majority 64% acknowledged that the changes to the prescribed billing amount requiring the approval of an authorized individual is done to a moderate extent.

4.4.4 Information and communication

The study sought to establish the effect of information and communication on revenue collection for commercial state corporations in Kenya. The responses were rated on a five likert scale in table 4.6

Table 4.6: Information and communication and revenue collection for commercial state corporations in Kenya

Statement	Very low extent	Low extent	Moderate extent	Great extent	Very great extent	SD	Mean
Management has set up effective reporting of revenue targets to be achieved in a particular financial year	10.0%	16.0%	64.0%	6.0%	4.0%	.9	2.8
Established channels of communication to permit sharing reports policies and breach of rules.	14.0%	20.0%	50.0%	10.0%	6.0%	1.0	2.7
All employees understand the concept and importance of internal controls including the division of responsibility.	16.0%	22.0%	54.0%	0.0%	8.0%	1.0	2.6
Management has identified individuals responsible for coordinating the various activities within the entity.	22.0%	8.0%	58.0%	8.0%	4.0%	1.0	2.6
Reporting system on organizational structures spells out all the responsibilities of	10.0%	22.0%	54.0%	8.0%	6.0%		

each section/unit.	1.0	2.8
Average	1.0	2.7

(Source: Survey Data, 2017)

Results in table 4.6 revealed that majority of the managers 64% indicated that management has set up effective reporting of revenue targets to be achieved in a particular financial year to a moderate extent. The results also showed that majority of the managers 50% indicated that establishing channels of communication to permit sharing reports policies and breach of rules has been done to a moderate extent. Further, result findings showed that majority of the managers 58% indicated that management has identified individuals responsible for coordinating the various activities within the entity to a moderate extent.

4.4.5 Monitoring

The study sought to establish the effect of monitoring on revenue collection for commercial state corporations in Kenya. The respondents were asked to respond on statements related to monitoring. The responses were rated on a five likert scale in table 4.7

Table 4.7: Monitoring and revenue collection for commercial state corporations in Kenya

Statement	Very low extent	Low extent	Moderate extent	Great extent	Very great extent	Mean	SD
Management assessing the system of control from time to time	12.0%	20.0%	50.0%	10.0%	8.0%	2.8	1.0
Regular and periodic reviews of collection before the end of year report	18.0%	18.0%	54.0%	10.0%	0.0%	2.6	0.9
Use of internal audit and external audit specialists to review and assess internal controls.	18.0%	12.0%	64.0%	4.0%	2.0%	2.6	0.9
Independent process checks and evaluations of control activities on	16.0%	18.0%	56.0%	4.0%	6.0%		

an ongoing basis						2.7	1.0
Evaluation and reporting of actual performance against budgeted levels	14.0%	24.0%	48.0%	6.0%	8.0%	2.7	1.1
Systematic approach to resolving identified non- compliance items as internal control issues as noted in the reports.	10.0%	16.0%	51.0%	15.0%	8.0%	2.8	1.3
Average						2.8	1.0

(Source: Survey Data, 2017)

Results in table 4.7 revealed that majority of the managers 50% indicated that the management assesses the system of control from time to time to a moderate extent. The results also showed that majority of the managers 54% indicated that regular and periodic reviews of collection before the end of year report is done to a moderate extent. The results also showed that majority of the managers 64% indicated that use internal audit and external audit specialists to review and assess internal controls to a moderate extent. Further, result findings showed that majority of the managers 54% indicated that independent process checks and evaluations of control activities on an ongoing basis to a moderate extent, while most of the managers 48% acknowledged that evaluation and reporting of actual performance against budgeted levels is done to a moderate extent. Finally, majority of the managers 51% indicated that systematic approach to resolving identified non- compliance items as internal control issues as noted in the reports is done to a moderate extent.

4.5 Inferential analysis

Inferential statistics was used to make predictions regarding the study population. Pearson correlation and regression model was used.

4.5.1 Correlation analysis

The researcher was also interested in testing the association among variables. The findings are as presented in Table 4.8. The association between two variables lying between (-) strong negative correlation and (+) perfect positive correlation was established using correlation analysis. Pearson correlation was utilized to analyze the level of association between the revenue collection of commercial state corporations in Kenya and the independent variables for this study

The study found out that there was a positive and statistically significant correlation (r=.572, p = .000) between control environment and revenue collection of commercial state corporations in Kenya. The study also found out that there was a positive and significant correlation between risk assessment and revenue collection of commercial state corporations in Kenya as evidenced by (r = .571, p = .000). Control activities was also found to have a positive and significant association with revenue collection of commercial state corporations as evidenced by (r = .595, p = .000). Further, the study also found out that there is a positive and significant correlation between information and communication and revenue collection of commercial state corporations in Kenya as evidenced by (r = .504, p = .000). Finally, monitoring was also found to have a positive and significant association with revenue collection of commercial state corporations in Kenya (r = .557, p = .000). Analysis of correlation among the independent variables revealed that the association was weak hence could not cause. The rule of thumb is that anytime the correlation coefficient exceeds 0.7, then Multicollinearity is said to occur.

Table 4.8: Correlation matrix of variables

		Control environment	**Risk assessment**	**control activities**	**Information and communication**	**Monitoring**	**Revenue collection**
Control environment	Pearson Correlation	1	.368**	.507**	.238*	.292*	.572**
	Sig. (2-tailed)		0.000	0.000	0.016		0.000
Risk assessment	Pearson Correlation	.368**	1	.339**	.226*	.368**	.571**
	Sig. (2-	0.000		0.000	0.022	0.009	0.000

	tailed)							
control activities	Pearson Correlation	.507**	.339**	1	.358**		.612**	.595**
	Sig. (2-tailed)	0.000	0.000			0.000	0.000	0.000
Information and communication	Pearson Correlation	.238*	.226*	.358**		1	1.000	.504**
	Sig. (2-tailed)	0.016	0.022	0.000				0.000
Monitoring	Pearson Correlation	.487**	1	.242*	.212*		.568**	.557**
	Sig. (2-tailed)	0.000		0.024		0.049	0.000	0.000
Revenue collection	Pearson Correlation	.572**	.571**	.595**	.504**		.292*	1
	Sig. (2-tailed)	**0.000**	**0.000**	**0.000**		**0.000**	0.040	

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

(Source: Survey Data, 2017)

4.6 Regression Analysis

Revenue collection of commercial state corporations in Kenya was regressed against control environment, risk Assessment, control activities, information and communication and monitoring. The regression analysis was undertaken at 5% significance level. The study obtained the model summary statistics as shown in table 4.9.

Table 4.9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.791[a]	.6750	.554	.40408

Source: Research Findings (2017)

The coefficient of determination which was R squared indicates the deviations in the response variable that is as a result of changes in the predictor variables. From the outcome in table 4.9, the value of R square was 0.675, an indication that 67.5 percent of the deviations in revenue collection of commercial state corporations in Kenya are caused by changes in control environment, risk assessment, control activities, information and communication and monitoring. Other variables not included in the model justify for 32.5 percent of the variations in revenue collection of commercial state corporations in Kenya. Also, the results revealed that there exists a strong relationship among the selected independent variables and revenue collection of commercial state corporations as shown by the correlation coefficient (R) equal to 67.5%. Table 4.10 shows the ANOVA results of the study.

Table 4.10: Analysis of Variance

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	13.552	3	11.571	49.522	.000
Residual	8.531	48	0.234		
Total	**21.083**	**51**			

Source: Research findings (2017)

The p value is 0.000 which is less than p=0.05. This implies that the model was statistically significant in predicting how risk assessment, control environment, control activities, information and communication and monitoring affect revenue collection of commercial state corporations in Kenya. The F value derived indicates that the data used was linear and therefore can be used for regression analysis.

The researcher used t-test to determine the significance of each individual variable used in this study as a predictor of revenue collection of commercial state corporations in Kenya. The p-value under sig. column was used as an indicator of the significance of the relationship between the dependent and the independent variables. At 95% confidence level, a p-value of less than 0.05 was interpreted as a measure of statistical significance. As such, a p-value above 0.05 indicates a statistically insignificant relationship between the dependent and the independent variables. The regression results of the model are as shown in table 4.11.

Table 4.11: Regressions of coefficients

Variable	B	Std. Error	Beta	t	Sig.
(Constant)	9.744	0.249		0.294	0.769
Control environment	0.215	0.062	0.256	3.448	0.001
Risk assessment	0.306	0.064	0.328	4.793	0.000
Control activities	0.241	0.072	0.254	3.332	0.000
Information and communication	0.376	0.101	0.341	3.709	0.000
Monitoring	0.263	0.064	0.278	4.137	0.000

Source: Research Findings (2017)

From the above results, it is evident that control environment produced a positive and statistically significant relationship with revenue collection of commercial state corporations in Kenya (r =.215, p = .001), risk assessment had positive and statistically significant relationship with revenue collection of commercial state corporations (r =.306, p = .000), control activities had positive and statistically significant relationship with revenue collection of commercial state corporations (r =.241, p = .000) while information and communication had positive and statistically significant relationship with revenue collection of commercial state corporations (r =.376, p = .000). Finally, regression results showed that monitoring had a positive and statistically significant relationship with revenue collection of commercial state corporations (r =.263, p = .000).

The following regression equation was estimated:

$Y = 9.744 + 0.215X_1 + 0.306X_2 + 0.241X_3 + 0.376X_4 + 0.263X_5$

Where,

Y = Revenue collection of commercial state corporations in Kenya

X_1= Control environment

X_2 = Risk assessment

X_3 = Control activities

X_4= Information and communication

X_5 = Monitoring

On the estimated regression model above, the constant = 9.744 shows that if the independent variables (risk assessment, control environment, control activities, information and communication and monitoring) were put at zero, revenue collection of commercial state corporations in Kenya would still be 9.744. An increase control environment variable by one unit would increase the revenue collection by state corporations by 0.215. A unit increase in risk assessment would lead to an increase in revenue collection of commercial state corporations by 0.306, a unit increase in control activities would lead to an increase in revenue collection of commercial state corporations by 0.241 units. Further, a unit increase in information and communication would lead to an increase in revenue collection of commercial state corporations by .376 while a unit increase in monitoring would lead to an increase in revenue collection of commercial state corporations by .263.

4.7 Discussion of Research Findings

The study reviewed the association between internal controls and revenue collections for commercial state corporations in Kenya. Independent variables for this study were control activities,, risk assessment, control environment, monitoring and information and communication. The dependent variable of this study was revenue collection of commercial state corporations in Kenya. The effect of each of the independent variable on the dependent variable was analyzed in terms of strength and direction.

The Pearson correlation coefficients between the variables revealed that that there was a positive and statistically significant correlation between control environment and revenue collection of the Kenyan commercial state corporations. The study also showed that there exist a positive association between control activities, risk assessment, information and communication and monitoring and revenue collection of commercial state corporations in Kenya.

The model summary revealed that control activities, risk assessment, control environment, monitoring and information and communication explains 67.5% of changes in the dependent variable as indicated by the value of R^2 which implies that there are other factors not included in this model that account for 32.5% of changes in revenue collection of commercial state corporations in Kenya. The model is fit at 95% level of confidence since the F-value is 49.522. Therefore, it can be concluded that overall the multiple regression model was statistically significant and is a good predictor for explaining the criteria in which the independent variables influence revenue collection of commercial state corporations in Kenya.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the findings of the previous chapter, conclusion, and limitations encountered during the study. This chapter also highlights the policy recommendations that policy makers can implement to increase revenue collection of commercial state corporations in Kenya. Lastly the chapter presents suggestions for further research.

5.2 Summary of Findings

The study sought to review the association between internal controls and revenue collection for commercial state corporations in Kenya. The independent variables for the study were control activities, control environment, risk assessment, monitoring and information and communication. The cross sectional research design was employed in the study. Primary data were collected using questionnaires and analyzed using SPSS software version 21.

From the results of correlation analysis, there is a positive and statistically significant correlation between control environment and revenue collection for commercial state corporations in Kenya. The study also found out that there is a positive and significant correlation between risk assessment and revenue collection for commercial state corporations in Kenya. The model summary revealed that the independent variables: risk assessment, control environment, control activities, monitoring and information and communication explains 67.5% of changes in the dependent variable as indicated by the value of R^2 which implies that the are other factors not included in this model that account for 32.5% of changes in revenue collection for commercial state corporations in Kenya. The model is fit at 95% level of confidence since the F-value is 40.418.

Regression results showed that control environment indicated a positive and statistically significant relationship with revenue collection for commercial state corporations in Kenya, risk assessment had positive and statistically significant relationship with revenue collection for commercial state corporations, control activities had positive and statistically significant relationship with revenue collection for commercial state corporations while information and communication had positive and statistically significant relationship with revenue collection for commercial state corporations in Kenya. Finally, regression results showed that monitoring had positive and statistically significant relationship with revenue collection for commercial state corporations in Kenya.

5.3 Conclusion

The findings that revenue collection for commercial state corporations in Kenya is significantly affected by control environment, control activities, risk assessment, monitoring and information and communication. The study found that control environment had positive and statistically significant relationship with revenue collection for commercial state corporations.

The study found that risk assessment has positive and statistically significant values for this study and therefore it is concluded that a unit in increase in risk assessment leads to a unit increase revenue collection for commercial state corporations in Kenya. Control activities was found to have a positive and statistically significant relationship with revenue collection for commercial state corporations and this means that a unit in increase in risk assessment leads to a unit increase revenue collection for commercial state corporations in Kenya.

It was also concluded that information and communication had positive and statistically significant relationship with revenue collection for commercial state corporations implying that a unit in increase in risk assessment leads to a unit increase revenue collection for commercial state corporations in Kenya. Further, it was also concluded that monitoring had positive and statistically significant relationship with revenue collection for commercial state corporations implying that a unit in increase in risk monitoring leads to a unit increase revenue collection for commercial state corporations in Kenya.

Finally, the study concludes that the independent variables selected for this study risk assessment, control environment, control activities, monitoring and information and communication affects revenue collection for commercial state corporations in Kenya. It is therefore sufficient to conclude that these variables significantly influence revenue collection for commercial state corporations as shown by the p value in ANOVA summary. The fact that the predictor variables explain 67.5% of changes in revenue collection for commercial state corporations in Kenya implies that there are other factors influencing in revenue collection for commercial state corporations in Kenya.

5.4 Recommendations

The study noted that there was a positive influence of control environment on revenue collection for commercial state corporations in Kenya. This study recommends environment audit and segregation of duties to control fraud.

The study established that there was a positive influence of risk assessment on revenue collection for commercial state corporations in Kenya. This study recommends more financing to conduct risk assessment and prevent the occurrence of risks.

Control activities was also found to a positive influence of risk assessment on revenue collection for commercial state corporations in Kenya. This study recommends segregation of duties among commercial state employees.

A strong positive and significant association was noted between information and communication and revenue collection for commercial state corporations. It is recommended that state corporation should adopt modern internal controls through the adoption of integrated Financial Resource Management.

Finally, it is recommended that risk monitoring should be conducted periodically to assess potential frauds within the corporations.

5.5 Limitations of the Study

Some of the managers were unwilling to participate in the study. However, this was mitigated by assuring them of confidentiality and that the data collected was meant for the purposes of academic research only.

Further, some of the managers had tied schedules. This was mitigated by choosing convenient time to collect data. This was also mitigated by dropping the questionnaire and picking it at a later date and also sending it via email and booking an appointment to collect it physically.

The study relied much on primary data which is prone to bias. However, the study requested the respondents to be truthful as much as possible.

5.6 Suggestions for Further Research

The study relied much on primary data which is prone to bias. This is because secondary data was minimal and majority of the commercial state corporation did not post their revenue generated online and were not available within KNBS reports. Future research should involve use of secondary data to prove or disapprove the results obtained in this study. There are other factors affecting revenue collection for commercial State Corporation like employee competence and ethical practices of the employees. Future research should incorporate such factors.

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APPENDICES

Appendix I: Questionnaire

UNIVERSITY OF NAIROBI
COLLEGE OF HUMANITIES & SOCIAL SCIENCES
SCHOOL OF BUSINESS

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Nairobi, KENYA

27 September 2017

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

INTRODUCTORY LETTER FOR RESEARCH
MUTUA ELIZABETH MUTETHYA – REGISTRATION NO. D63/84283/2015

This is to confirm that the above named is a bona fide student in the Master of Science in Finance (Msc. Finance) option degree program in this University. She is conducting research on ***"The Relationship between Internal Controls and Revenue Collection for Commercial State Corporations in Kenya".***

The purpose of this letter is to kindly request you to assist and facilitate the student with necessary data which forms an integral part of the research project. The information and data required is needed for academic purposes only and will be treated in **Strict-Confidence**.

Your co-operation will be highly appreciated.

Thank you.

Graduate Studies Office
P.O. Box 30197
NAIROBI
University School of Business

Jane Muturi
For: MSc. Finance Co-Ordinator,
School of Business

JK/nwk

This questionnaire has been designed to collect information on the existence of internal controls within commercial state corporations in Kenya which will then be compared to their revenue data for a period of 5 years. Please read carefully and answer the questions as honestly as possible. The information gathered will be used purely for the purpose of academic research and will be treated with utmost confidence.

Instructions

1. Tick appropriately in the box or fill in the space provided.

2. Feel free to give further relevant information to the research.

PART A: BIOGRAPHIC INFORMATION

1. Your highest level of professional training and education?

Diploma ☐ Degree ☐ Master's degree ☐ PhD ☐

2. How long have you worked with the organization?

Below 5 years ☐ 5 to 10 years ☐ Above 10 years ☐

3. How frequent does your organization review its internal controls?

After 5 years ☐ Annually ☐ Half yearly ☐ When need arises ☐

4. In your opinion, do your organization's systems of internal controls sufficiently and effectively contribute to revenue collection? .... How does your role support it?..
....

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

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

Excellent ☐ Good ☐ Fair ☐ Poor ☐

PART B: THE EXTENT OF INTERNAL CONTROL COMPONENTS IN YOUR ORGANIZATION

Component One: Control Environment

To what extent do you practice the following attributes of control environment in your organization? Use 1- Very low extent, 2-Low extent, 3-Moderate extent, 4- Great extent, 5- Very great extent

Component	**1**	**2**	**3**	**4**	**5**
The management has established policies and procedures for all major operations of the entity					
A well elaborate Organization Structure reflecting the chain of command					
Management is committed to implementation of internal control systems					
Ethical values being upheld in all management decisions dealing with all stakeholders for the benefit of the organization.					

Audit committee adequately maintains a direct line of communication with the entity's external and internal auditors					
Specific lines of authority and responsibility have been established to ensure compliance with policies and procedures.					

Component Two: Risk Assessment

To what extent do you practice the following attributes of risk assessment in your organization? Use 1- Very low extent, 2-Low extent, 3-Moderate extent, 4- Great extent, 5- Very great extent

Component	**1**	**2**	**3**	**4**	**5**
Financial risks being identified and documented by management					
Risk analysis and evaluation of internal and external environment before making any decision being a continuous activity in the organization					
Analyzing procedures performed on both financial data and nonfinancial data					
Management putting in place mechanisms for mitigation of critical risks					
Staff being adequately involved in internal controls					

Component Three: Control Activities

To what extent do you practice the following attributes of control activities in your organization? Use 1- Very low extent, 2-Low extent, 3-Moderate extent, 4- Great extent, 5- Very great extent

Component	**1**	**2**	**3**	**4**	**5**
Reconciliation and review of functions is done monthly focusing on financial compliance					
Authorization and approval of transaction to ensure activity is consistent with departmental goals					
Segregation of duties to reduce risk of errors on revenue collection and general accounting					
Accounting records being limited to employees with designated responsibility for such records					
Changes to the prescribed billing amount requiring the approval of an authorized individual					

Component Four: Information and Communication

To what extent do you practice the following attributes of information and communication controls in your firm? Use 1- Very low extent, 2-Low extent, 3-Moderate extent, 4- Great extent, 5- Very great extent

Component	**1**	**2**	**3**	**4**	**5**
Management has set up effective reporting of revenue targets to be achieved in a particular financial year					
Established channels of communication to permit sharing reports policies and breach of rules.					
All employees understand the concept and importance of internal controls including the division of responsibility.					
Management has identified individuals responsible for coordinating the various activities within the entity.					
Reporting system on organizational structures spells out all the responsibilities of each section/unit.					

Component Five: Monitoring

To what extent do you practice the following attributes of monitoring as controls in your organization? Use 1- Very low extent, 2-Low extent, 3-Moderate extent, 4- Great extent, 5- Very great extent

Component	**1**	**2**	**3**	**4**	**5**
Management assessing the system of control from time to time					
Regular and periodic reviews of collection before the end of year report					
Use of internal audit and external audit specialists to review and assess internal controls.					
Independent process checks and evaluations of control activities on an ongoing basis					
Evaluation and reporting of actual performance against budgeted levels					
Systematic approach to resolving identified non- compliance items as internal control issues as noted in the reports.					

Thank you for your participation

Appendix II: List of Commercial State Corporations in Kenya

S /No.	Commercial State corporations	Sector
1.	Agro-Chemical and Food company	Agriculture, Livestock & Fisheries
2.	Kenya Meat Commission	Agriculture, Livestock & Fisheries
3.	Muhoroni Sugar Company Ltd	Agriculture, Livestock & Fisheries
4.	Nyayo Tea Zones development Corporation	Agriculture, Livestock & Fisheries
5.	South Nyanza Sugar Company Limited	Agriculture, Livestock & Fisheries
6.	Chemilil Sugar Company Ltd	Agriculture, Livestock & Fisheries
7.	Nzoia Sugar Company Ltd	Agriculture, Livestock & Fisheries
8.	Simlaw Seeds	Agriculture, Livestock & Fisheries
9.	Fisheries Development and Promotion Service (new	Agriculture, Livestock & Fisheries
10.	Kenya Wildlife Conservation Service	East African Affairs, Commerce & Tourism
11.	Kenya National Trading Trading (KNTC) East	East African Affairs, Commerce & Tourism
12.	Kenya Safari Lodges and Hotels Ltd East African	East African Affairs, Commerce & Tourism
13.	Golf Hotel Kakamega East African	East African Affairs, Commerce & Tourism
14.	Kabarnet Hotel Limited East African	East African Affairs, Commerce & Tourism
15.	Mt Elgon Lodge East African	East African Affairs, Commerce & Tourism
16.	Sunset Hotel Kisumu East African	East African Affairs , Commerce & Tourism
17.	Jomo Kenyatta Foundation	Education, Science & Technology
18.	Jomo Kenyatta University Enterprises Ltd	Education, Science & Technology
19.	Kenya Literature Bureau (KLB)	Education, Science

		&Technology
20.	Rivatex (East Africa) Ltd	Education, Science & Technology
21.	School Equipment Production Unit	Education, Science & Technology
22.	University of Nairobi Enterprises Ltd	Education, Science & Technology
23.	University of Nairobi Press (UONP)	Education, Science & Technology
24.	Development Bank of Kenya Ltd	Industrialization & Enterprise Development
25.	Sony Sugar Company Ltd	Agriculture, Livestock & Fisheries
26.	East Africa Portland Cement ltd	Industrialization & Enterprise Development
27.	New Kenya Co-operative Creameries	Industrialization & Enterprise Development
28.	Kenya Industrial Estates	Industrialization & Enterprise Development
29.	National Housing Corporation	Lands, Housing & Urban Development
30.	Consolidated Bank of Kenya	National Treasury
31.	Kenya National Assurance Co. (2001) Ltd	National Treasury
32.	Kenya Reinsurance Corporation Ltd	National Treasury
33.	Kenya National Shipping Line	Transport & Infrastructure
34.	Kenya Animal Genetics Resource	Agriculture, Livestock & Fisheries
35.	Kenya Seed Company (KSC)	Agriculture, Livestock & Fisheries
36.	Kenya Veterinary Vaccine Production Institute	Agriculture, Livestock & Fisheries
37.	National Cereals & Produce Board(NCPB)	Agriculture, Livestock & Fisheries
38.	Kenyatta International Convention Centre	East African Affairs, Commerce & Tourism
39.	Geothermal Development Company (GDC)	Energy & Petroleum
40.	Kenya Electricity Generating Company	Energy & Petroleum
41.	Kenya Electricity Transmission Company	Energy & Petroleum
42.	Kenya Pipeline Company (KPC)	Energy & Petroleum
43.	Kenya Power and Lighting Company (KPLC	Energy & Petroleum
44.	National Oil Corporation of Kenya	Energy & Petroleum
45.	National Water Conservation and Pipeline Corporation Environment, Water & Natural Resources	Industrialization & Enterprise

46.	Numerical Machining Complex	Industrialization & Enterprise
47.	Kenya Broadcasting Corporation	Information, Communication & Technology
48.	Postal Corporation of Kenya	Information, Communication & Technology
49.	Kenya Development Bank	National Treasury
50.	Tourism Finance Corporation	National Treasury
51.	Kenya Post Office Savings Bank	National Treasury
52.	Kenya Airports Authority (KAA)	Transport & Infrastructure
53.	Kenya Ports Authority (KPA)	Transport & Infrastructure
54.	Kenya Railways Corporation (KRC	Transport & Infrastructure

Source: Presidential Taskforce on Parastatal Reforms (2015)