EFFECT OF INTERNAL CONTROL SYSTEMS ON FINANCIAL PERFORMANCE OF THE GOVERNMENT OWNED SUGAR FIRMS IN KENYA

BY

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DECLARATION

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

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D63/7977/2017

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

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Above all, I thank God, my strength, for the good health and the ability he bestowed me to do this project.

DEDICATION

I dedicate this project to my mother Rebecca Lagat and my father William Lagat, without whose support and prayers there would not have been a project.

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LIST OF ABBREVIATONS

CMA: Capital Market Authority

COMESA: Common Market for Eastern and Southern Africa

COSO: Committee of Sponsoring Organizations

ICS: Internal Control System

KSB: Kenya Sugar Board

KSI: Kenya Sugar Institute

MFIs: Micro Finance Institutions

NSE: Nairobi Securities Exchange

ROA: Return on Asset

ROE: Return on Equity

SPSS: Statistical Package for Social Sciences

UNES: University of Nairobi Enterprise and Services

ABSTRACT

The study sought to investigate the effect of internal control systems on financial performance of state-owned sugar companies in Kenya. The independent variable for the study was internal control systems and the dependent variable was firm's financial performance. It adopted descriptive research design. The population consisted of all five state-owned sugar companies in Kenya. The study used primary data was collected using a structured questionnaire which was analyzed using descriptive and inferential statistics to analyze on SPSS version 22. The targeted respondents were the senior management staff in various departments of the firm; that is accounting, human resource, procurement and security department. Data obtained and analyzed was from 30 respondents of the target population.27 of respondent who represents 90% answered the questionnaire as required while 3 respondents who represented 10% did not answer the questionnaire as required. The model summary R-square value was 0.520 implying that the predictor variables selected for this study explains 52% of changes in the dependent variable. The study found that internal control system has a positive significant effect on financial performance of state-owned sugar companies in Kenya. Based on the risk assessment, the study concluded that, in an effort to manage its risks, the company has ensured risks are assessed in relation to changes in the operational environment. In addition, the study concluded that the company has set forth a good working relationship between the staff, they are committed to their jobs, all employees have work schedules hence no job conflicts and that there is a mechanism to monitor regular attendance of staff. The study recommended that the management should always put in place mechanisms to enable it identify risks that affect achievement of the company's financial objectives.

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. 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, operations, fixed assets control and controls over laid down structures. According to Jensen and Payne (2003), internal controls enhance financial performance through increased accountability in management of organization resources.

There are several theories that discuss internal control and the study used Agency Theory, Institutional Theory and Stakeholder Theory. Agency theory developed by Jensen and Meckling (1976) states that internal control involves entrusting of one's obligations to another person to do them on their behalf. This delegation helps in promoting efficiency and productivity through division of labor. The institution theory developed by Scott (1995) perceives institutions as social structures that have gained higher degree of resilience. The structures should work in association with given resources and activities to enhance stability. According to the contingency theory developed by Drazin and Van de Ven (1985) the optimal way in which a company could be organized is contingent or dependent on the kind of environment in which the company operates

Consequently, the country imports the commodity duty-free from Common Market for Eastern and Southern Africa (COMESA) to plug the deficit and give local millers room to prepare for full opening up of the market. Since 2004, Kenya has fought for extension of the COMESA safeguards extension on the back of the area under cane declining from 75,000 hectares to 30,000 hectares. The safeguards are meant to protect millers from influx of cheap regional sugar. Two of the most critical issues for justifying COMESA safeguards are privatization of State-owned millers, and lowering cost of production of the commodity in the country compared to other countries in the bloc (KSB, 2015).

1.1.1 Internal Control Systems

The Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework refers internal controls as a systematic way of carrying out organization's activities and procedures, within specified company rules and regulations for the overall success of the enterprise (COSO, 2011). Hongming and Yanan (2012), adds that internal controls acts like the nervous system of human beings that is distributed in the entire enterprise transferring all kinds of information to and from those in managerial positions. This network is directly connected to the structure an organization adopts and the rules and regulations that govern the running of business. According to Whittington (2001), internal controls span beyond issues relating to bookkeeping and production of financial reports. He further notes that internal controls can be regarded as organized procedures that lead to evaluation of the level of how predetermined objectives relation with the actual results of the company.

Rittenberg and Schwieger (2005), highlights six benefits of having internal controls, they include; detecting error and fraud, minimizing illegal activities, adding entity knowledge ensures quality data, creation of business physical facilities and reducing audit fees. Internal controls are important to management as they ensure orderly operations; reduce resource wastage, adherence to regulations and accurate financial reports hence increase investors' confidence in the financial statements. As much as internal controls are regarded as part of auditors' and accountants' responsibility, top management must create conducive environment for proper functioning of these controls. It can be argued that, it is not only providing internal controls but also ensuring they are comprehensive and regularly monitored for effectiveness (Singleton at al., 2006).

Feng and McKay (2009) explain that effective internal control involves the adoption of best information and communication system. Moreover, it is important for firms to bring on board committees members with professional qualifications and technical background of inventory management practices. The key measures of an effective internal control system include; control environment, monitoring activities, risk assessment, control activities and information and communication (Woolf, 2013)

1.1.2 Financial Performance

Financial performance has been defined as a measure of how well a firm uses its available resources in the generation of revenues. It provides a guideline that gives a way for future decisions relating to business developments, assets acquisitions and managerial control (Kraus, A. & Litzenberger, 1973). It reflects what has been achieved by the management in monetary terms over a specific duration and can be utilized in making comparison of like firms in the one industry. Financial performance is the ability of an organization to conduct business in efficient way, earning profits, existing in spite of industry challenges, growing and reacting to opportunities and challenges the environment presents. It is measured by the level attainment achieved by an organization (Mawanda, 2008)

According to Ponce (2011), financial performance is a good indicator of assessing the firm and is often used in gauging the efficiency of the management in converting company resources into profits. It is an important aspect in organizations for them to maintain their activities in general and for guarantee of fair returns to the shareholders. The survival of a business is dependent on its financial performance in the long run. It involves the capacity of a business establishment to generate sufficient benefits from its operations and is considered by many as the main goal of the firm (Leah, 2008).

According to Kaplan & Norton (1992), financial performance is measured using various parameters such as; Return on Equity and Return on Asset. ROE is measure in terms of net income after tax divided by total equity capital. On the other hand, ROA indicates the return on all assets of the company and is frequently used by firms as an overall index of financial performance. It is computed by dividing Net Income after Taxes by Total Assets (Reese & Cool, 1978).

1.1.3 Internal Controls and Financial Performance

Several theories have shown positive relationship of internal controls on firm performance. For instance, agency theory assumes that through separating ownership and control of organization managers are likely to act in owners' best interests. Therefore, the interest of managers should be aligned to match the organizational goals through various control structures (Zimmerman, 2011). According to the contingency theory, a company would achieve its goals when it is organized based on the environment in which it relates (Richard, 2003). Contingency theory claims that different kinds of controls should be put in place to accomplish different objectives while considering the business environment to achieve performance targets. Business performance is affected by internal and external factors where internal factors can be controlled through sound internal control systems. External factors affect the overall industry and control mechanisms have minimal effect on them (Jokipii, 2009).

According to Bastia (2008), the management of the complexities following globalization increased the need for adequate internal control systems that in turn control risks as well as pursue business performance. According to Olumbe (2012), effective internal control systems help the organization prevent and eradicate errors, fraud and minimize wastage. However, he adds that weak internal controls lead to ineffective programs and that bring losses. According to Mawanda (2008) upholds the idea that if organizations establish effective internal controls, financial performance would improve tremendously. Top management have the sole responsibility of ensuring that internal controls work to promote organization's financial and business policies.

Ndungu (2013) found that through changing the competitive surroundings, the extent to which ICS of organizations must be extensively structured to safeguard continuous increase in returns is obvious. Mwakimasinde, Odhiambo & Byaruhanga (2018) found that there is a positive significant relationship between ICS and financial performance. On the other hand, Chandra (2002) found that a sound and effective risk assessment process helps firm's management in detecting any internal and external threat to the firm hence enhancing performance,

1.1.4 Government Owned Sugar Firms in Kenya

The olden times of sugar industry in Kenya was introduced in the 1900's by Indian settlers. Establishment of first sugar production factory in 1992 at Kibos currently as Nyanza province that was known as Miwani sugar mills followed this. Five years later, Madhvani group of India opened a second company named Ramisi Sugar Company. All these firms were privately owned. After Independence, the government expanded production by investing in growing schemes and factories. They included Muhoroni Sugar in 1966, Chemelil in 1968, Mumias in 1973, Nzoia in 1978 and South Nyanza Sugar Company (Sony)-Awendo in 1979. Privately owned companies include West Kenya, Kibos Sugar and Allied Industries Limited, Butali Sugar Mills, Transmara, Sukari Industries Limited, Kwale International and Kisii Sugar Factory. The Kenya Sugar Board (KSB) formally known as Kenya Sugar Authority (KSA) is the main regulator of Kenyan sugar industry (SRI, 2018).

The sugar industry sector in Kenya is poorly performing with the country experiencing a sugar deficit that is being covered by cheap imports. The door to import sugar to fill the deficit has resulted to over-importations that have flooded the market making it uneconomical to sell locally manufactured sugar (Ng'etich, 2017). The ever-increasing farm inputs and transport costs involved in sugar production have been a thorn in the flesh of farmers. Unscrupulous traders and millers have found it cheaper to import the commodity even if it means smuggling and repackaging it as a Kenyan product. In addition, the climatic condition in the western part where sugar farming is practiced has been worsening every day of the year. Due to these challenges, the existing and outgrowing sugar companies are struggling to cope with the economic and environmental condition (Mwakimasinde, Odhiambo & Byaruhanga, 2018). For this reason, this study intends to focus on government owned sugar firms in Kenya with the objective to determine how internal control affects the performance of these firms.

1.2 Research Problem

The role of internal control systems as a corporate governance mechanism is gaining a lot of importance because of changing technologies, increase in business risks and complexity of handling business transactions. Agency theory advocates for presence of internal control mechanism as a way of enhancing the general performance of an institution (Jensen and Meckling, 1976). On the other hand, the contingency theory argues that organization effectiveness is contingent on efficient internal control system used since no similar organization structure is applicable to different organization. Therefore, this show that firms should have much focus on internal factors through enhancing their internal control systems in order to boost their financial performance (Njeri, 2014).

The cost of production in Kenya is quite high compared to other sugar producing countries in the world. The cost of production of sugar in COMESA region is between Sh25,000 and Sh35,000 per tonne, while in Kenya the cost of production cost stands at Sh60,000 (COMESA, 2017). This implies imported sugar is quite cheap compared to the locally manufactured sugar. Millers are holding on huge stocks that they are unable to sell because of the flooded market (CMA, 2017). This has made Muhoroni Sugar Company to shut down, due to the inability to meet its liabilities. In addition, Mumias sugar have been facing financial distress over the recent past, where its share prices have reduced by 86% decrease compared with listing prices of sh 6.27 in 2001 and current price of sh 0.90 (NSE, 2017). There is no doubt that adequate measures need to be put in place to save the industry. The companies have to work on their internal control systems to safeguard resources in effort of minimizing the cost of production as the government put measures to curb unlawful import that is hurting the industry. The recent challenges facing sugar firms in Kenya raises questions on the adequacy of their internal control systems despite a myriad of industrial factors hence need for further study.

Both international and local studies have been conducted, where conflicting results have been found. Eniola & Akinselure (2016) found a negative significant relationship between internal control and fraud pertained in the organization. Shabri, Saad and Bakar (2016) found that internal control systems had positive effect on profitability of cooperative firms. Muraleetharan (2011) found that internal control is statistically significant in predicting performance. Mawanda (2008) found internal control dimensions have a positive significant effect on performance. Locally, Asiligwa (2017) found a positive relationship between internal control systems and financial performance of commercial banks. Mogunde (2016) found that there was a positive relationship of the internal control variables on financial performance. Oyoo (2014) found that there existed a positive relationship between internal control systems and financial performance of MFIs. Ndungu (2013) concluded that internal control systems of UNES influence revenue generation.

Although the findings of all the studies undertaken in Kenya so far indicate positive responses to firm financial performance, there still lays a gap since none of the studies done in the Kenya focused on internal control in sugar industry. In addition, most of the studies conducted globally shows mixed reactions in relation to ICS and financial performance hence difficult to give a conclusive result. The lack of consensus among the various theoretical arguments on the effect of internal control on firm performance of firms by international and local researchers is reason enough to conduct further examination on the area of study. This paper therefore tends to fill this gaps by determining how internal control system influences financial performance of sugar firms in Kenya. It attempted to give an explanation to the question, what is the effect of internal control system on the financial performance of sugar firms in Kenya?

1.3 Research Objective

The objective of this study is to determine the effect of internal control systems on financial performance of the sugar firms in Kenya

1.4 Value of the Study

The study benefits sugar firm managers on improving on service delivery by the internal control system that are accommodative and merge with organization objectives. According to Korten (2009) when managers are empowered with the necessary resources then they will have the capability to transform the organization visions into objectives, which are achievable in a measurable and short period. Therefore, managerial practice through required skill, knowledge and experience facilitates the achievement of the required performance.

Scholars and academicians in the finance discipline can also use the study recommendations for further study to conduct future studies to broaden the knowledge on internal control. Furthermore, they can consider the methods and results of this research and possibly extend it in various directions. The study adds to the present information on internal control system and financial performance in the Kenyan context. This study also adds to the existing theoretical knowledge on topic of the study.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter examines the relevant literature relating to effects of internal control systems and financial performance. It presents the theoretical literature review and the internal control systems. Empirical literature from international and local studies, conceptual framework and summary based on the review is also discussed.

2.2 Theoretical Review

This presents review of the relevant theories that explains the associations between internal control systems and financial performance. This study is anchored by the following theories: Agency Theory, Institutional Theory and Contingency theory.

2.2.1 Agency Theory

Jensen and Meckling (1976) developed the theory. The theory assumes a work relationship where an executive member engages another person to perform services on their behalf. In the arrangement, the principal gives some authority of decision making to an appointed agent. Such delegation of duties helps in promoting efficiency and productivity through division of labor. For the relationship to work, the principal has to trust the agent and assume that the agent will work in the principals' best interest. However, due to self-interest and information asymmetries, a principal may not have reasons to trust an agent and will need to put in place mechanisms to ensure the delegate's interests merge with their own. Internal control measures for instance, auditing is what many organizations use to ensure agents' interest are in line with the organizations goals and objectives. However, auditors may collude and hence other stakeholders may not fully rely on them (Wallace, 1980). Therefore, this theory advocates for strong internal control measures to ensure that the interests of all stakeholders are safeguarded.

Donaldson (1990) criticized the theory for having methodology of individualism, regressive simplification, narrowly defined motivational model, governance defensiveness and wrong ideological framework. Agency theory assumes that individuals are rational and obey economic model of human behavior. However, individual activity should not be considered as equivalent to organizational activity. Additionally, the fundamentals of agency theory are information decentralization and divergence in attitudes toward risks and goals'. The theory is of relevance to this study because adequate internal control systems can help in aligning of interest and help in enhancing financial performance.

2.2.2 Institution Theory

Scott (1995) developed the theory. According to institutional theory, institutions are social structures that have gained higher degree of resilience. The structures comprises of three elements namely: regulative, normative and cultural cognitive. These elements work inclusively with associated resources and activities to enhance financial stability and improve the living standards if the public. The carriers that transmit institutions include routines, rational systems and symbolic systems. Institutions have different jurisdiction, from the local interpersonal relationships to the world systems.

According to the institutional and the neo-institutional theory, environmental alignment and organizational practices results from normative, coercive and mimetic forces. These forces lead the organization to adopt internal control systems to bring homogeneity in organizations (Tickle, 2013). Internal control structures helps in conforming all social expectations within the organization. However, the theory is criticized for assuming organizational positivity and the failure to focus on strategic behavior. Contrary to the perceptions of the institutional theory, organizations can engage in strategies that are manipulative and that can shape the political and social effectiveness.

2.2.3 Contingency Theory

Drazin and Van de Ven (1985) developed the contingency theory. The theory suggests that the optimal way in which a company could be organized is contingent or dependent on the kind of environment in which the company operates. The followers of the contingency theory assert that the theory is based on two assumptions. First, it assumes that no strategy is considered “universally superior” and there is no one best way in which a company could be organized (Donaldson, 2001). On the second assumption, the theory postulates that the choice of approach, structure or control system depends on the contingency circumstances such as the environment, risk profile, strategy, size, the organizational structure and best activities at hand (Richard, 2003).

Specifically, the contingency theory puts forward that companies are not closed systems that could be structured without considering environmental characteristics and the manner in which they affect the company (Jokipii, 2006). To improve and maintain performance, firms ought to continually assess the risk of interaction with the environment, monitoring processes and the commitment of the organization to such contingencies. This suggests that internal control as part of organizational structure or design is not static. According to Eriksson-Zetterquist, Müllern, and Styhre (2011) the theory helps to relax the idea that the only best way to organize a company is meeting shareholders" goal as suggested by the agency theory. Donaldson (2006) further opines that when companies intensify either the extent of the internal control implementation or review of the controls, they keep on minimizing the misfit to quasi-misfit and ultimately enhance performance.

2.3 Determinants of Financial Performance

Both the internal and external factors determine financial performance of a firm. Each firm faces specific internal factors while external factors are general and result from prevailing industrial and macroeconomic conditions. This section explains various determinants of financial performance such as; internal control system, firm size and capital structure.

2.3.1 Internal Control Systems

Ndungu (2013) defines internal control systems as set of organizational procedures and policies that ensure that all transactions are processed in the proper way in order to avoid theft, waste and misuse of organization's resources. Internal control systems can be classified into detective, preventive, directive and corrective or compensating controls. These functions purport to minimize material errors, omissions, wastes, malicious acts and fraud that in turn ruin firm performance (Udu, 2006). Effective internal control system includes; control environment, monitoring activities, risk assessment, control activities and information and communication (Woolf, 2013)

Whittington and Pany (2006) refer to control environment as that aspect of internal control that offers the structure and discipline for the realization of the main objectives of internal control systems in addition to the climate that affects the entire quality of the systems of internal control. Control environment relates to the management and other key staff who make decisions in an organization reflecting their philosophy and style. Equally, a control environment is influenced by the culture of organization and has a way of affecting the manner in which an organization's activities are structured (Ndugu, 2013). According to Gyasi (2013) when the control environment is strong, the organization achieves favorable performance and commitment to growth is enhanced.

Risk assessment is the identification and analysis of management relevant risk to the preparation of financial statements (Sudsomboon & Ussahawanitchakit, 2009)). Risk assessment process forms part of the internal control components. According to Woolf (2013), in order for corporate organizations to identify and evaluate controllable and non-controllable risks that affect operations on a timely manner, risk assessment must be conducted on an on-going basis. Controllable risks are those risks that procedures of internal mechanism can reduce or eliminate while uncontrollable risks are risks that result from the environment in which the organization operates and cannot be reduced. According to Kaplan (2008), an effective design and implementation of risk assessment process would enhance corporate performance. Siayor (2010) adds that the consequence of an effective risk assessment process on performance is obvious because it forms the basis of whether internal control activities are important.

Control activities are the actions that are established through policies and procedures to help ensure that management's directives to manage risks and achieve objectives are carried out, including the use of technology to conduct business activities. Control activities dimensions could be preventive, detective, or a combination of both (Arwinge, 2013). General control activities involve developing controls to ensure integrity of information systems as well as control access to information systems. Policies and procedures establish what an organization requires from its staff. According to Njeri (2014), control activities are built in business processes and help to avoid unnecessary costs and enable quick response to changing conditions. This infers that where an organization builds into its business process strong control activities, performance levels are enhanced.

According to Treba (2003), a crucial aspect of any complete internal control system is regularly monitoring how effective the internal controls are, in order to find out whether or not they are properly designed and functioning. Saiyor (2010) found that monitoring involves all process of evaluating the quality of internal control systems performance over time. Constructs employed in measuring monitoring include on-going monitoring and separate evaluations by internal auditors. The essence of monitoring internal control systems is to ensure that systems are properly designed and are operating effectively (Whittington & Pany, 2006). Effective monitoring of internal control and achieve performance targets, personnel are expected to know and understand the objectives, mission, and the level of risk tolerance of the organization, as well as their individual responsibilities.

Communication systems denote methods and channels that organizations adopt to convey essential information, directives and policies (Shim, 2011). Of importance is the fact that, for communication systems to be effective, information must flow up, down and across the organization by means of identifying, capturing and passing on pertinent information in a timely manner to responsible parties to take appropriate action. Similarly, in a former contribution, Noel (2010) maintains that surrounding the activities of control environment are systems of information and communication that allow the people of the organization to pick up and interchange the information required to control, manage and conduct its operations. However, weaknesses in the information and communication may render the other components ineffective and may cause wastes of resources and clients' dissatisfaction (COSO, 2011).

2.4 Empirical Review

This section reviews the current state of the subject matter. It provides evidence on prior studies. The purpose of this section is to uncover the existing gaps in literature and how the present study contributes to resolving such gaps. Various critiques are drawn in this section. The section also lays the basis for comparison of the results of the present study to existing literature. The detailed review is presented below. Shabri, Saad and Bakar (2016) researched on the effect of internal control systems on profitability of cooperative in Malaysia. The study was a case study analysis and data was collected through interview method. Regression analysis was used to analyze data and the study found that internal control systems had positive effect on profitability of cooperative. The study creates a contextual knowledge gap that the current study seeks to fill because it was done on cooperative societies in Malaysia.

Eniola & Akinselure (2016) did a study to determine the relationship between internal control and financial performance of listed manufacturing firms in Nigeria. The study adopted survey research design. Primary data was collected using a questionnaire where a sample of 150 questionnaires was distributed to five manufacturing firms in Kenya. Data collected was tabulated on multiple regression analysis and analyzed through SPSS. The study found there is a negative significant relationship between internal control and fraud pertained in the organization. This study recommends that, firms should adopt strategies that will enhance internal control system that will eradicate fraud cases.

Muraleetharan (2011) researched on the impact of internal controls on financial performance of Jaffna district organizations in Sri Lanka. Data was collected through self-assessment questionnaire and personal interviews and 181 respondents were drawn from employees who were employed by 47 public and private institutions in Jaffna district. Data was analyzed using SPSS where regression analysis tools were used. The study found that internal control is statistically significant in predicting performance. The study creates a contextual research gap because it was done in Sri Lanka and cannot be generalized in Kenya. Mawanda (2008) conducted a research study on effect of ICS in financial performance of Uganda Martyrs University. Both secondary and primary data was collected and a case study research design was used. A formal interview guide and structured questionnaire was used to collect data. The target population involved a sample of 270 staff members from Uganda Martyrs University. Data collected was analyzed using SPSS. The study found internal control dimension have a positive significant effect on performance of the institution.

Asiligwa (2017) researched on effect of internal controls on the financial performance of commercial banks in Kenya. Descriptive research design was adopted in the study. The population of the study was 43 commercial banks in Kenya. The study used five elements of internal controls as suggested by COSO committee and ROE was used as a measure of financial performance. Questionnaires were used in primary data collection and financial statements provided data on financial performance. Regression and correlation models were used in data analysis. The study concluded that there was a positive relationship between internal control systems and financial performance of commercial banks. The study creates contextual knowledge gap because it focused on banking sector.

Mogunde (2016) researched on the relationship between internal controls and financial performance of cement firms in Kenya. The population of the study was seven cement firms but four firms were selected for study purpose. The research design adopted was survey research design. Data was collected using questionnaire approach and financial statements were used as source of secondary data. Data analysis was done through SPSS where regression analysis was used to show the relationship between the variables. The study found that there was a positive relationship of the internal control variables on financial performance. This study creates a contextual knowledge gap that the present study seeks to fill because the focus was on cement firms.

Oyoo (2014) examined the effect of systems of internal control on financial performance of micro-finance institutions in Kisumu. The target population comprised 18 registered micro-finance institutions. However, convenient sampling was done where only seven institutions were chosen for the study and five respondents in every institution were picked. Data of the primary nature was collected through questionnaires while secondary data was gathered from annual reports. Data was analyzed through inferential and descriptive statistics where correlation tools were used to the relationships between variables. The study concluded that there existed a positive relationship between internal control systems and financial performance of MFIs.

Ndungu (2013), researched on the effect of internal controls on revenue generation in University of Nairobi Enterprise and Services (UNES) using mixed research approach. The target population was the workers of the UNES for the 2013 calendar year. A simple random sampling technique was used to select a sample size of 45 employees from the target population with a 62 percent response rate. Descriptive research design was used for the study and primary data were collected by the use of structured questionnaires, whereas secondary data were collected from management reports and other published documents. The data analysis was done using descriptive and inferential statistics. Pie chart, bar chart and linear regression tools were adopted. Based on the findings the study concluded that internal control systems of UNES influence revenue generation.

2.5 Conceptual Framework

The Conceptual framework describes the relationship between independent and dependent variables of the study. This research seeks to establish effect of internal control system, corporate governance and firm size (independent variables) on financial performance (dependent variable).

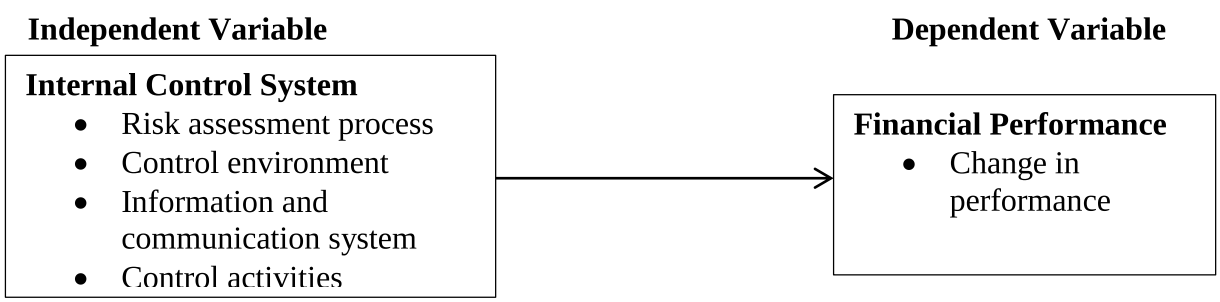

Figure 2. 1: Conceptual Framework

Sources: Researcher, 2018

2.6 Summary of Literature Review

The literature review relating to the theoretical, conceptual issue and empirical studies on the effect of internal controls on performance have been reviewed. Most of the studies carried out in Uganda, Nigeria, Kenya, Sri Lanka and Ghana were on educational, SMEs and banking industries. This raises issues regarding applicability of their findings to the Kenyan sugar industry. Knowledge gap and lessons learnt from the review led to the construction of the conceptual framework. The review of related literature also served as a guide towards the methodology and reporting of results.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes methods of research to be applied to objectively establish the effect of internal control systems on financial performance of sugar firms in Kenya. It also illustrates the population of study, research design, data collection, analysis criteria and analytical model.

3.2 Research Design

Research design can be defined as an outline of the actual measures, adopted by an investigator for testing the correlation involving dependent variables as well as independent variables (Kothari, 2008). The research used a survey research design. The design is appropriate for this study because it is flexible and can be administered through different modes for data collection such as; questionnaire and interview guide.

3.3 Target Population

According to Mugenda and Mugenda (2003), target population refers to the total element that the research findings are generalized. Population is regarded as all the associates of a given group to which the study is associated, while the reachable population is viewed at in terms of those basics in the target population in the scope of the study. According to Kenya Sugar Board, there are total of five governments owned and eight privately owned sugar manufacturers in Kenya (Appendix I). All the five government owned sugar firms in Kenya formed the sample population of this study.

3.4 Data Collection

The research employed primary. The primary data was collected using questionnaires (Appendix II) administered to the respondents through "drop and pick" method. The questionnaire has 6 sections first section entailed respondent's demographic background, section two entails information relating to control environment process, section three collect information regarding risk assessment. The fourth section entails on control activities while the fifth section collected data regarding to information and communication. The sixth section entails data regarding financial performance. A five-point Likert scale was be used for the close ended questions where 1- Strongly Disagree, 2- Disagree, 3- Undecided, 4- Agree and 5- Strongly Agree.3.5 Data Analysis. The target respondent includes the senior management staffs in various departments of the firm; that is accounting, human resource, procurement and security department.

3.5 Diagnostic Tests

Normality test is done because it is impractical to achieve accurate and reliable deductions about the reality on whether the population from which the sample is derived is normally distributed (Ghasemi & Zahediasl, 2012). This study used Kolmogorov-Smirnov test of normality and the graphical method to assess whether the data is normally distributed.

3.6 Data Analysis

Since the study gathers both quantitative and qualitative data, using semi structured questionnaires. The study applied descriptive statistic data analysis method to analyze numerical data gathered using closed ended questions. This study used Statistical

Package for Social Science (SPSS) version 21 to analyze the independent and dependent variables, whereby inferential statistics and multiple regression model was applied. Quantitative data was analyzed using Percentages and frequency counts through descriptive statistics. The research adopted Measures of central tendency such as mean and measures of dispersion such as standard deviation. In addition, inferential statistics were used to Simple descriptive statistics were used to determine the effect of internal controls on the performance and multiple regression analysis shows the degree of correlation between the variables.

3.6.1 Analytical Model

The analytical model is used in analyzing the interrelation of the predictor variables on the response variable is:

$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + €$

Where;

Y = Financial Performance - Measured by through Likert scale

X_1= Control Environment- Measured using five-point Likert scale

X_2= Risk Assessment- Measured using five-point Likert scale

X_3= Information and Communication - Measured using five-point Likert scale.

X_4= Control Activities- Measured using five-point Likert scale

α = Constant; y intercept that is, the value of y when x is equal to zero

β = Coefficients of the model

€ = Error term

3.6.2 Test of Significance

The F test and T test was used to test the significance of the regression equation and variables used in the study respectively. The significance of regression model was determined at 5% and at 95% confidence interval.

CHAPTER FOUR: DATA ANLYSIS, FINDINGS AND INTEPRETATION

4.1 Introduction

This chapter presents detailed analysis of the collected data through the questionnaires. The questionnaires were sorted and coded through use of excel and SPSS. The collected Data was summarized and presented informs of percentages, pie charts, tables and figures. The data was collected from, top management staff who included the branch managers, credit officers and departmental managers. Section 4.3 highlights the summary statistics while section 4.4 discusses the results of diagnostic tests. Section 4.4 presents the inferential statistics.

4.2 Data presentation

4.2.1 Response rate

As presented in figure 4:1 below, the study targeted 45 sugar companies' employees. Data obtained and analyzed was from 30 respondents of the target population.27 of respondent who represents 90% answered the questionnaire as required while 3 respondents who represented 10% did not answer the questionnaire as required. From the analysis more than 50% of the respondents were able to answer the questionnaire as required, therefore adequate for reporting (Mugenda & Mugenda, 1999).

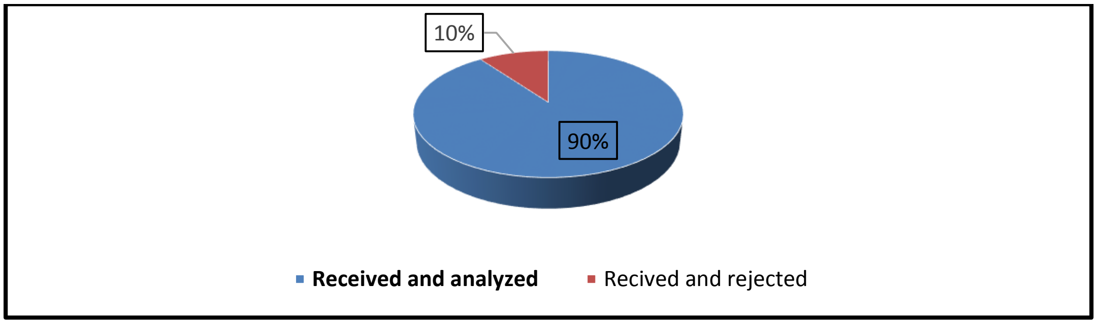

Figure 4.1: Response rate

Source: Researcher 2018

4.2.2 Number of years worked

The study asked the respondent to indicate number of years worked with the company as presented in figure 4:2, the findings indicated that 4% have been with the organization for less than 5 years,15% less than 6years, 48% for a period of 6 to 10 years and 33% for 10 to 15 years.

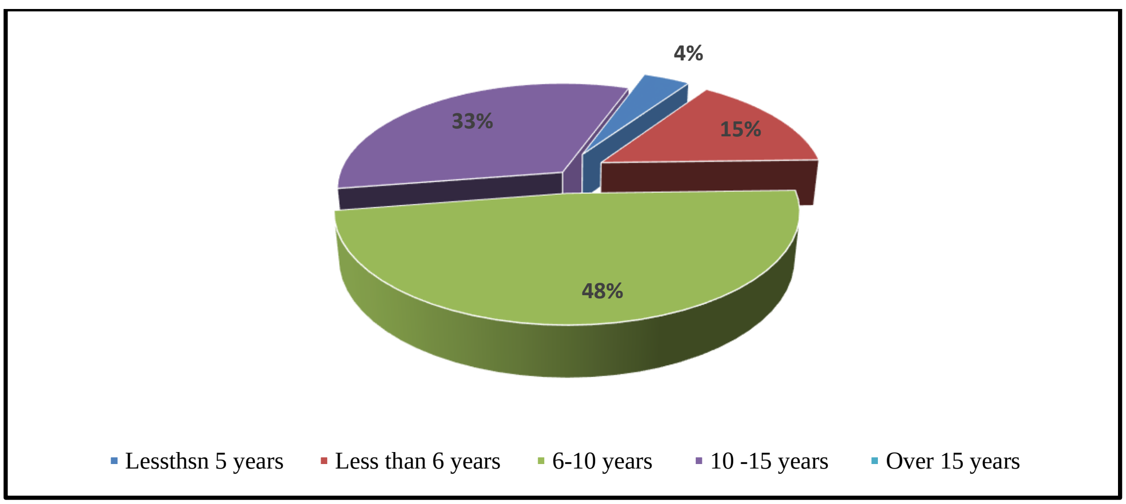

Figure 4.2: Number of years worked

Source: Researcher 2018

4.2.3 Level of education

The respondent were asked to indicate their level of education ,from the analysis 48% were bachelor's degree holders ,33% master's degree holders ,15% diploma holders and 4% secondary certificate .

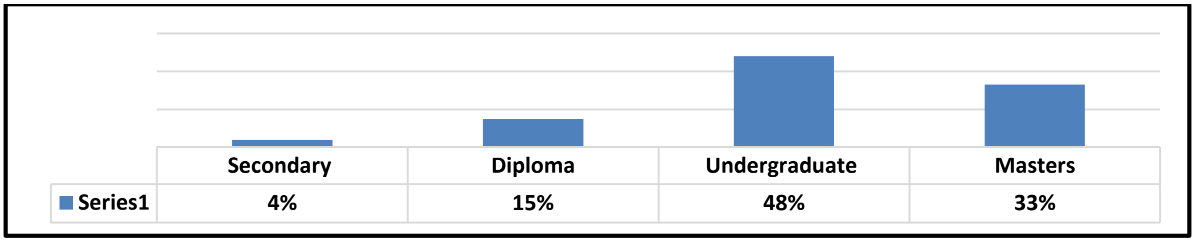

Figure 4.3: Number of years worked

Source: Researcher 2018

4.2.4 Designation

The study asked the respondent to indicate number of years worked with the company presented in figure 4:2, the findings indicated that 48% accountant,19% human resource manager,7% security manager,4% stores manger,4% network operator,4 nucleus estate manager and 15% procurement manage. From the findings it is clear majority of the respondent were accountants.

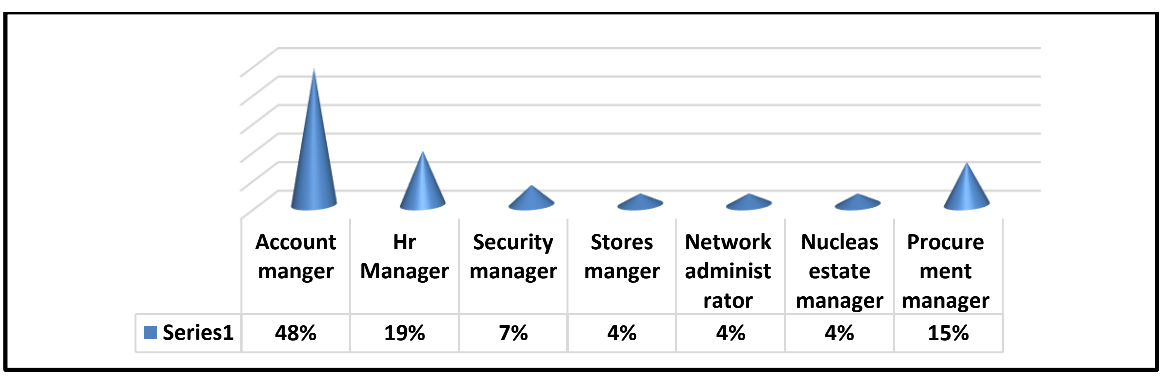

Figure 4.4: Designation

Source: Researcher 2018

4.3 Diagnostic Analysis

As presented in table 4.1 below control environment, Risk assessment, information and communication and control activities had a variance of inflation factor of (2.234, 2.752, 1.669, 1.183.From the findings the VIF value lies between 1-10, this indicated there was no multicollinearity. Further if VIF value is less than one or more than ten it means there is multicollinearity .From this analysis there was absence of multicollinearity therefore further analysis could be conducted.

Table 4.1: Multi Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	Control environment	.448	2.234
	Risk assessment	.363	2.752
	Information and communication system	.599	1.669
	Control activities	.845	1.183

a. Dependent Variable: Financial performance

Source: Researcher 2018

4.4 Descriptive Analysis

4.4.1 Control environment

The study sought to establish the effect of control environment on financial performance, finding are indicated in table 4.2 below;

Table 4.2: Control Environment

	N	Minimum	Maximum	Mean	Std. Deviation
Staff have good working relationships between themselves	27	3.00	5.00	4.3333	.55470
Every employee is well aware of internal control system in place for our institution	27	1.00	5.00	3.7407	.94432
Staff of our company are committed to their jobs	27	3.00	5.00	4.0000	.39223
There is a mechanism to monitor regular attendance of staff	27	1.00	5.00	4.0741	.78082
All employees have work schedules hence no job conflicts	27	1.00	5.00	3.7778	.80064
All jobs are standardized	27	2.00	5.00	3.5185	.70002
All the duties are performed according to the approved standards	27	2.00	5.00	3.5556	.80064
The work structure is flexible that it allows staff to go on leave in the month of their choice without pressure	27	2.00	5.00	3.8148	.73574

As presented in table 4.2, the study asked if Staff have good working relationships between themselves, the findings were (4.33 mean), implying the respondents agreed with the statement. Further, the study inquired if every employee is well aware of internal control system in place for the institution, the findings were (3.74 mean) implying the respondent agreed with the statement. The study also inquired if Staff are committed to their jobs, the findings were (4.00 mean) indicating the respondent agreed with the statement. Further the study inquired if there is a mechanism to monitor regular attendance of staff, the findings were (4.074 mean) indicating the respondent agreed with the statement .I addition the study inquired if all employees have work schedules hence no job conflicts, the findings were (3.78 mean) implying the respondent agreed with the statement. Also the study asked if all jobs are standardized, the findings were (3.518

mean) implying the respondent agreed with the statement .In addition the study asked if all the duties are performed according to the approved standards the findings were 3.56 mean) indicating the respondent agreed with the statement . Lastly, the study asked if work structure is flexible that it allows staff to go on leave in the month of their choice without pressure the findings were 3.184 mean indicating the respondent were undecided. In conclusion, from the findings the majority of the respondents agreed control environment has an effect on financial performance.

4.4.2 Risk Assessment

The study sought to establish the effect of risk assessment on financial performance; the findings are presented in table 4.3 below.

Table 4.3: Risk Assessment

	N	Minimum	Maximum	Mean	Std. Deviation
Risks are assessed in relation to changes in the operational environment of the firm	27	2.00	4.00	3.6296	.68770
There are mechanisms in place to identify and react to changes that can bring about risk on the firm	27	2.00	4.00	3.8889	.42366
Management has a criteria for ascertaining the fraud-related risks to the organization	27	2.00	5.00	4.0000	.55470
Changes of new staff is clearly examined for the risks it may cause	27	2.00	5.00	3.8148	.62247
Management has put in place mechanisms reduce to risks that may result from fraud in the company	27	2.00	5.00	3.9630	.43690
Management identifies risks that affect achievement of the Company's objectives	27	2.00	5.00	4.0000	.55470
Valid N (list wise)	27				

Source: Researcher 2018

The study asked if risks are assessed in relation to changes in the operational environment of the firm, the finding were (3.62 mean) meaning the respondent agreed with the statement. In addition, the study inquired if there are mechanisms in place to identify and react to changes that can bring about risk on the firm. The findings indicated (3.89 mean) implying the respondents agreed with the statement. Further the study asked if management has a criteria for ascertaining the fraud-related risks to the organization, the findings were (4.00 mean) the respondents agree with the statement .Also the study asked if changes of new staff is clearly examined for the risks it may cause, the findings were (3.814 mean) implying the respondent agreed with the statement. The study further asked if management has put in place mechanisms to reduce to risks that may result from fraud in the company, the findings were (3.963 mean) indicating the respondents agreed with the statement. Lastly the study inquired if management identifies risks that affect achievement of the Company's objectives, the findings were (4.00 mean) this indicated the respondents agreed with the statement. In conclusion, the respondent agreed that risk assessment mechanism is an important aspect in the organization.

4.4.3 Information and communication

The study sought to determine the effect of information and communication, on financial performance; the findings are shown in table 4.4 below;

Table 4.4: Information and Communication

	N	Minimum	Maximum	Mean	Std. Deviation
The reporting system on Company spells out all the responsibilities of each section/unit in the Organization	27	2.00	5.00	3.9630	.51750
The company policies on information and communications provide well-established techniques and mechanisms to address non-compliance in financial matters.	27	3.00	4.00	3.9630	.19245
Communication helps us to evaluate how well guidelines and policies of the Company are working and being implemented	27	2.00	5.00	3.9630	.43690
The company has well established information and communication channels	27	2.00	5.00	3.8889	.57735
Management receives timely, relevant, and reliable reports for decision-making	27	2.00	4.00	3.9259	.38490
There is effective reporting of revenue targets to be achieved in a particular financial year	27	2.00	5.00	3.8889	.57735
There is a financial reporting software	27	3.00	5.00	4.0741	.38490

Source: Researcher 2018

The study asked if reporting system on Company spells out all the responsibilities of each section/unit in the organization, the findings were (3.96 mean) implying the respondents were in agreement with the statement. In addition, the study inquired if, the company policies on information and communications provide well-established techniques and mechanisms to address non-compliance in financial matters, the findings indicated (3.96 mean) implying the respondents agreed with the statement. Further the study asked if, the company has well established information and communication channels, the findings were (3.89 mean) implying the respondents agreed with the statement. Lastly, the study inquired if there is financial reporting software, the findings indicated a (4.07 mean) implying the respondents agreed with the statement. From the findings, it is clear information and communication has an effect on financial performance.

4.4.4 Control activities

The study sought to determine the effect of control activities on financial performance, the findings are presented in table 4.5 below;

Table 4.5: Control Activities

	N	Minimum	Maximum	Mean	Std. Deviation
The company has developed effective policies and procedures on information and communication	27	3	5	4.07	.474
It is impossible for one staff to have access to all valuable information without the consent of senior staff	27	2.00	5.00	3.9259	.54954
Controls are in place to exclude incurring expenditure above allocated in the Budget	27	1.00	5.00	3.8148	.78628
The company has appropriate entity policies regarding such matters as acceptable business practices, conflicts of interest, and codes of conduct have been established and they adequately communicated.	27	2.00	5.00	3.9259	.54954
The company has appropriate entity policies regarding such matters as acceptable business practices, conflicts of interest, and codes of conduct have been established and they adequately communicated.	27	2.00	5.00	4.0370	.58714
Employee performance evaluation techniques are implemented to identify incompetent or ineffective employees	27	1.00	5.00	3.9259	.78082
Valid N (list wise)	27				

Source: Researcher 2018

As indicate in table 4.5, the study asked if, the company has developed effective policies and procedures on information and communication, the findings were (4.07 mean) the respondent agreed with the statement. Also the study inquired if, it is impossible for one staff to have access to all valuable information without the consent of senior staff, the findings were, (3.92 mean) implying the respondent agreed with the statement. Further the study asked if ,controls are in place to exclude incurring expenditure above allocated in the Budget, the findings were ,(3.81 mean) implying the respondent were in agreement with the statement. In addition, the study inquired if the company has appropriate entity policies regarding such matters as acceptable business practices, conflicts of interest, and codes of conduct have been established and they adequately communicated, the findings were (3.92 mean) indicating the respondents agree with the statement. Further, the study asked if the company has appropriate entity policies regarding such matters as acceptable business practices, conflicts of interest, and codes of conduct have been established and they adequately communicated the findings were (4.03 mean) implying the respondents agreed with the statement. Lastly, the study asked if Employee performance evaluation techniques are implemented to identify incompetent or ineffective employees the fin dings were (3.92 mean) the respondents agreed with the statement. In conclusion, the findings indicate control activities are essential in an organization.

4.4.5 Financial Performance

Table 4.6: Financial Performance

	N	Minimum	Maximum	Mean	Std. Deviation
Sugar firms base their profitability on the internal control system	27	2.00	5.00	4.4722	.6542
Effective internal control system increase translates to increased regular turnover	27	1.00	5.00	4.3520	.8218
Competition has an effect on the firm's market position	27	2.00	5.00	4.1667	1.0281
Performance of the internal control system is the determinant for sustainability and financial profitability	27	2.00	5.00	4.3054	.85589
Return on Asset affects non-financial performance of a firm	27	5.00	2.00	2.6544	.77254

Source: Researcher, 2018

The study asked if sugar firms base their profitability on the internal control system, the findings were 4.4722 mean, implying the respondent strongly agreed with the statement. Further study inquired if effective internal control system increase translates to increased regular turnover, the result was 4.3520 mean, indicating the respondents' strongly agreed with the statement. The study also asked if competition has an effect on the firm's market position, the findings was 4.1667 mean, indicating the respondent agree with the statement. In addition, the study queried if performance of the internal control system is the determinant for sustainability and financial profitability, the findings indicated 4.305 mean, implying the respondents strongly agreed with the statement. Lastly, the study inquired if Return on Asset affects non-financial performance of a firm, the findings indicated a 2.65 mean, implying the respondent disagreed with the statement. In conclusion, the findings indicated the respondents were in agreement with the statements.

4.5 Correlation Analysis

Correlation analysis refers to extent to which research variables are related. Correlation analysis was employed to establish the strength of the relationship that exists among dependent and independent variables whereby internal control systems utilized as independent variables while the asset returns was used as the dependent variable. Pearson correlation varies from -1.00 to +1.00 with positive values indicating positive relations while negative values suggest negative relations among study variables.

Table 4.7: Correlation Analysis

		Y	X_1	X_2	X_3	X_4
Financial performance	Pearson Correlation	1				
	Sig. (2-tailed)					
Control environment	Pearson Correlation	.787**	1			
	Sig. (2-tailed)	.000				
Risk assessment	Pearson Correlation	.591**	.723**	1		
	Sig. (2-tailed)	.000				
Information and communication	Pearson Correlation	.654**	.446*	.577**	1	

System	Sig. (2-tailed)	.000	.020			
Control activities	Pearson Correlation	-.014	-.183	-.019	-.272	1
	Sig. (2-tailed)	.944	.360	.923	.170	

Source: Research findings (2018)

Correlation analysis was used to show the associations between variables. The results in the above table shows the correlation between firm performance and control environment is positive (r =0.787) and significant since the p =0.001 which is less than 0.05. This implies that an improved firm performance is associated with an increase in control environment. The study results also revealed a positive association between firm performance and Risk assessment which was statistically insignificant (r =0. 591, p =0.001). The correlation findings further showed that there was positive correlation between firm performance and Information and communication system which was statistically significant (r =0. 654, p =0.000). Meaning that these variables tend to increase together that is, increase in firm performance is associated with increase in Information and communication system. Findings also showed a negative correlation between firm performance and Control activities which was statistically insignificant (r = -014, p =0.944).

4.6 Regression Analysis

Financial performance of state owned sugar firms in Kenya was regressed against four predictor variables; Control activities, Risk assessment, Information and communication system and Control environment. The regression analysis was executed at 5%

significance level. The study obtained the model summary statistics as illustrated in table below.

4.6.1 Model Summary

Table 4.8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.721[a]	.520	.492	.07398

Source: Research findings (2018)

Regression analysis results presented in table 4.6 above indicate R, which is correlation coefficient, was 0.721, which points to a strong relationship between the studies variables. Coefficient of determination ($R2$) of 0.520 indicates that 52% of the variations in financial performance are expounded by the predictor factors in the analytical model (Control activities, Risk assessment, Information and communication system and Control environment). On the other side, 48% of the variation in value of financial performance is explained by other factors not included in the model. The value of adjusted R was .492, which indicates that there was 49.2% variation in financial performance of the government owned sugar companies due to changes in number of independent variable.

4.6.2 Analysis of Variance

Table 4.9: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.843	4	.211	38.485	.000[b]
	Residual	.120	22	.005		
	Total	.963	26			

Source: Research findings (2018)

The significance value is 0.01 which is less than p=0.05. This implies that the model was statistically significant in predicting how Control activities, Risk assessment, Information and communication system and Control environment affect financial performance of government-owned sugar companies.

4.5.3 Coefficient of Determination

Table 4.10: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.227	.187		11.880	.000
	Control environment	.081	.028	.327	2.902	.008
	Risk assessment	.235	.057	.516	4.129	.000
	Information and communication system	.018	.012	.244	2.500	.020
	Control activities	-.045	.030	-.122	-1.487	.151

From the above results, it is evident that there is positive and significant relationship between control environment and ROA shown by p values that are less than 5%. Risk assessment and Information and communication system produced positive and statistically significant values for this study as shown by p values that are less than 5%.

Control activities produced negative but statistically insignificant relationship as shown by as shown by p values that are more than 5%.

The following regression equation was estimated:

$$\mathbf{Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon}$$

$$Y = 2.227 + 0.081X_1 + 0.235X_2 + 0.018X_3 - 0.045X_4$$

On the estimated regression model above, the constant = 2.227 shows that if selected dependent variables were rated zero, sugar firms' financial performance would be 2.227. A unit increase in control environment would result to an increase in sugar firms' financial performance by 0.081. A unit increase in Risk assessment and Information and communication system would result to an increase in sugar firms' financial performance by 0.235 and 0.018 respectively while a unit increases in Control activities would lead to a decrease in financial performance by 0.045.

4.7 Discussion of the Research Findings

The research purposed to explore the effect of internal control system on financial performance of government-owned sugar companies. The firm's financial performance was measured using return on asset ratio while the internal control systems used in model includes; Control activities, Risk assessment, Information and communication system and Control environment. The effect of each of the independent variable on the dependent variable was analyzed in terms of strength and direction.

On the correlation matrix, the findings indicated there was a strong correlation between financial performance and Risk assessment, Information and communication system, while negative correlation was found between financial performance and Control activities. Further model analysis findings indicated there is a strong (R= 0.721) association between internal control systems and financial performance of DTM's. The independent variables namely Control activities, Risk assessment, Information and communication system and Control environment could explain about 52% the total variations of financial performance of sugar firms owned by Kenya government.

The significant of ANOVA results of the study showed that the model was significant at 5% significance level with an F-ratio of 38.485 and a P value of 0.001. The study coefficients results indicated that Control environment P-value 0.008, Risk assessment P-value 0.001 and Information and communication system P-value 0.020 significantly affects financial performance of sugar firms, with P-value <0.05. Therefore, the overall regression model was statistically significant and suitable in predicting how the independent variables selected affects ROA of sugar firms in Kenya.

The findings of this study are similar to Muraleetharan (2011) who researched on the impact of internal controls on financial performance of Jaffna district organizations in Sri Lanka. Data was collected through self-assessment questionnaire and personal interviews and 181 respondents were drawn from employees who were employed by 47 public and private institutions in Jaffna district. Data was analyzed using SPSS where regression analysis tools were used. The study found that internal control is statistically significant in predicting performance. Locally, Asiligwa (2017) researched on effect of internal controls on the financial performance of commercial banks in Kenya. Descriptive research design was adopted in the study. The population of the study was 43 commercial banks in Kenya. The study concluded that there was a positive relationship between internal control systems and financial performance of commercial banks.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter focuses on the summary, research outcome, conclusions and the recommendations of the study. The researcher then presents the limitations of the study and recommendations for further studies.

5.2 Summary of the findings

The study sought to investigate the effect of internal control systems on financial performance of state-owned sugar companies in Kenya. The independent variable for the study was internal control systems and the dependent variable was firm’s financial performance. It adopted descriptive research design. The population consisted of all 5 state-owned sugar companies in Kenya. The study used primary data was collected using a structured questionnaire which was analyzed using descriptive and inferential statistics to analyze on SPSS version 22. The targeted respondents were the senior management staff in various departments of the firm; that is accounting, human resource, procurement and security department. Data obtained and analyzed was from 30 respondents of the target population.27 of respondent who represents 90% answered the questionnaire as required while 3 respondents who represented 10% did not answer the questionnaire as required.

The model summary R-square value was 0.520 implying that the predictor variables selected for this study explains 52% of changes in the dependent variable. This means that there are other factors not included in this model that account for 48% of changes in financial performance of state-owned sugar firms in Kenya. The model is fit at 95% confidence level. Therefore, the overall multiple regression models was statistically significant and thus suitable in explaining how the financial performance of the state-owned sugar firms in Kenya is affected by the selected independent variables.

The regression results show that when all the independent variables selected for the study have zero value, financial performance of state-owned sugar firms in Kenya would be 2.227. An increase in control environment would result to an increase in sugar firms' financial performance by 81%. An increase in Risk assessment and Information and communication system would result to an increase in sugar firms' financial performance by 23.5% and 1.8% respectively while a unit increase in Control activities would lead to a decrease in financial performance by 4.5%.

5.3 Conclusions

Based on the analyzed data, there are several conclusions drawn. First, as part of its control measures to improve its financial performance, the study concluded that the company has set forth a good working relationship between the staff, they are committed to their jobs, all employees have work schedules hence no job conflicts and that there is a mechanism to monitor regular attendance of staff.

Based on the risk assessment, the study concluded that in an effort to manage its risks, the company has ensured risks are assessed in relation to changes in the operational environment. There are mechanisms in place to identify and react to changes that can have dramatic effects on the Company, the management has criteria for ascertaining the fraud-related risks to the organization and communication channels are in place for changes in service delivery. There are well-defined objectives for the Company, changes of new staff are clearly examined for the risks it may cause and that management identifies risks that affect achievement of the Company's objectives.

As regards to the information and communication system, the study observed that, to enhance its information systems, the company has effective reporting of revenue targets to be achieved in a particular financial year. Information flows freely in the company without any interference, the reporting system on company spells out all the responsibilities of each section/unit in the organization and communication helps us to evaluate how well guidelines and policies of the company are working and being implemented and that all operational information is given to staff in time.

5.4 Recommendations

Based on the objective under study, the following recommendations were made: first, there is need for the company to standardize the jobs within the company, hiring process for contract staff is transparent and work structure is flexible to allow staff to go on leave in the month of their choice without pressure.

Secondly, the study recommended that the management should always put in place mechanisms to enable it identify risks that affect achievement of the company's objectives and that it should also put in place mechanisms reduce to risks that may result from fraud in the company.

Thirdly, the management should ensure it receives timely, relevant, and reliable reports for decision-making and that all relevant information is communicated to staff, all channels of communication are utilized by Company staff, and that there is quick and free flow of information in time. This will enable them communicate decisions made to the junior employees on time.

5.5 Limitations of the Study

There were a number of factors proving limiting to smoothing execution of this study. The study was limited to using primary data and not secondary data since most of the information was not easily available, the information that was available did not meet the researcher's specification. Using primary data had challenges since some of the respondents did not return the questionnaires.

The study was limited to state-owned sugar companies in Kenya only hence this study finding cannot be generalized to private sugar companies. In addition, some of the respondents were not be willing to give out information that their identity would be revealed and that could work on their disadvantage. Confidentiality is a very sensitive matter at workplace and therefore it was a limitation to the researcher.

For data analysis purposes, the researcher applied a multiple linear regression model. Due to the shortcomings involved when using regression models such as erroneous and misleading results when the variable values change, the researcher cannot be able to generalize the findings with certainty. If more and more data is added to the functional regression model, the hypothesized relationship between two or more variables may not hold.

5.6 Suggestions for Further Research

The study only concentrated on the effect of internal control systems on financial performance of the state-owned sugar firms in Kenya. Further studies should be done on effect of internal control of private owned sugar companies in Kenya.

This study focused on internal control system and financial performance and relied on primary data. This study therefore recommends further studies using secondary data. Due to the shortcomings of regression models, other models such as the Vector Error Correction Model (VECM) can be used to explain the various relationships between the variables.

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APPENDICES

Appendix I: Sugar Firms in Kenya

Government-owned sugar manufacturers

1. Mumias Sugar Company
2. Nzoia Sugar Factory
3. South Nyanza Sugar Company
4. Muhoroni Sugar Company
5. Chemelil Sugar Factory

Appendix II: Questionnaire

EFFECT OF INTERNAL CONTROL SYSTEM ON FINANCIAL PERFORMANCE OF SUGAR FIRMS IN KENYA

Please read each of the questions carefully and follow the instruction given. Kindly give answers in the spaces provided and tick **(√)** in the box that matches your response to the questions where applicable. The answers provided will be for academic purpose only and will be treated with utmost confidentiality.

SECTION ONE: DEMOGRAPHIC AND RESPONDENTS PROFILE

1. Name of the firm(optional)

………………………………………………………………………

2. How long the firm has been in existence?

…………………………………………………………

3. How long have you worked in this position?

    (a) Less than five years ( )
    (b) 6-10 years ( )
    (c) 10 – 15 years ( )
    (d) Over 15 years ( )

4. Please indicate your designation

    (a) Account Manager ( )
    (b) HR Manager ( )
    (c) Procurement Manager
    (d) Security Manager ( )
    (e) Others ………………….

5. What is your education level?

    (a) Secondary ( )

(b) College Diploma ( )

(c) Undergraduate Degree ( )

(d) Graduate Degree ( )

(e) Others (Specify) ( )

SECTION TWO: CONTROL ENVIRONMENT

To what extent do you agree with the following statements with regard to control environment process in your firm? Use: 1- Strongly Disagree, 2- Disagree, 3- Undecided, 4- Agree and 5- Strongly Agree.

Statement	**1**	**2**	**3**	**4**	**5**
Staff have good working relationships between themselves					
Every employee is well aware of internal control system in place for our institution					
Staff of our company are committed to their jobs					
There is a mechanism to monitor regular attendance of staff					
All employees have work schedules hence no job conflicts					
All jobs are standardized					
All the duties are performed according to the approved standards					
The work structure is flexible that it allows staff to go on leave in the month of their choice without pressure					

SECTION THREE: RISK ASSESSMENT

To what extent do you agree with the following statements with regard to risk assessment in your firm? 1- Strongly Disagree, 2- Disagree3- Undecided, 4- Agree and 5- Strongly Agree.

Statement	**1**	**2**	**3**	**4**	**5**
Risks are assessed in relation to changes in the operational environment of the firm					
There are mechanisms in place to identify and react to changes that can bring about risk on the firm					
Management has a criteria for ascertaining the fraud-related risks to the organization					
Changes of new staff is clearly examined for the risks it may cause					
Management has put in place mechanisms reduce to risks that may result from fraud in the company					
Management identifies risks that affect achievement of the Company's objectives					

SECTION FOUR: INFORMATION AND COMMUNICATION SYSTEM

To what extent do you agree with the following statement with regard to information and communication procedures? Use: 1- Strongly Disagree, 2- Disagree, 3- Undecided, 4- Agree and 5- Strongly Agree.

Statement	**1**	**2**	**3**	**4**	**5**
The reporting system on Company spells out all the responsibilities of each section/unit in the Organization					
The company policies on information and communications provide well-established techniques and mechanisms to address non-compliance in financial matters.					
Communication helps us to evaluate how well guidelines and policies of the Company are working and being implemented					
The company has well established information and communication channels					
Management receives timely, relevant, and reliable reports for decision-making					
There is effective reporting of revenue targets to be achieved in a particular financial year					
There is a financial reporting software					

SECTION FIVE: CONTROL ACTIVITIES

To what extent do you agree with the following statements with regard to control activities? Use: 1- Strongly Disagree, 2- Disagree, 3- Undecided, 4- Agree and 5- Strongly Agree.

Statement	**1**	**2**	**3**	**4**	**5**
The company has developed effective policies and procedures on information and communication					
It is impossible for one staff to have access to all valuable information without the consent of senior staff					
Controls are in place to exclude incurring expenditure above allocated in the Budget					
Departments have budget reviews where actual are compared with budgeted expenditure and explanations for variances given					
The company has appropriate entity policies regarding such matters as acceptable business practices, conflicts of interest, and codes of conduct have been established and they adequately communicated.					
Employee performance evaluation techniques are implemented to identify incompetent or ineffective employees					

SECTION SIX: FINANCIAL PERFORMANCE

Based on the rating of five; (1) Strongly Disagree, (2) Disagree, (3) Not Sure, (4) Agree and (5) Strongly Agree, share your opinion by placing a tick

Statement	**1**	**2**	**3**	**4**	**5**
Sugar firms base their profitability on the internal control system					
Effective internal control system increase translates to increased regular turnover					
Competition has an effect on the firm's market position					
Profitability has an effect on firms financial health					
Return on Asset affects non-financial performance of a firm					