THE RELATIONSHIP BETWEEN INTERNAL CONTROLS AND THE FINANCIAL PERFORMANCE OF CEMENT MANUFACTURING COMPANIES IN KENYA

BY

MOGUNDE MAKORI BONVAS

D61/77065/2015

A RESEARCH PROJECT PRESENTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

NOVEMBER, 2016

DECLARATION

I hereby declare that this research project is my own work and effort and that it has not been submitted anywhere for any award. Where other sources of information have been used, they have been acknowledged.

Signature: ……………………………….. Date: ……………………………

Bonvas Makori Mogunde

Reg. No: D61/77065/2015

This declaration has been submitted with my approval as the university supervisor.

Signed …………………….……………….Date …………………………….

Mr. Nicholas Simiyu

Lecturer

Department of Finance and Accounting

School of Business

University of Nairobi

ACKNOWLEDGEMENT

I would like to thank the Almighty God for good health during this study for without Him I would not be where I am today.

I would like to thank my supervisor Mr. Nicholus Simiyu and moderator Dr. Mirie Mwangi who guided me to successful completion of this project.

I appreciate my family and friends for their unfailing love, support and patience during this course.

Special appreciation also goes to management and employees of the cement companies I visited for completing the questionnaires in good time.

Finally am grateful to the MBA course mates, the entire academic staff of the University of Nairobi, thank you.

DEDICATION

This study is dedicated to my parents Nathan and Josephine who encouraged me to do my best always; to my brothers and sisters who provided the necessary support I thank you; to my wife and children may you exceed this.

TABLE OF CONTENTS

LIST OF ABBREVIATIONS AND ACRONYMS

ARM	-	Athi River Mining
BCL	-	Bamburi Cement Limited
CBK	-	Central Bank of Kenya
COSO	-	Committee of Sponsoring Organizations
EAPCC	-	East African Portland Cement Company
MVA	-	Market Value Added
NOI	-	Net Operating Income
ROA	-	Return on Assets
ROE	-	Return on Equity
ROR	-	Return on Revenue
ROS	-	Return on Sales
SPSS	-	Statistical package for Social Sciences
UNES	-	University of Nairobi Enterprises and Services

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

Large and small organizations have in place 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. The study sought to determine if a relation between components of internal controls performance in terms of ROCE of Kenyan cement manufacturing companies exist. The research employed descriptive survey design. Four companies were selected out of 7 registered cement manufacturing companies. Data for the study was gathered using a questionnaire. The study also used published financial statements as a source of secondary data. An oral interview was used to obtain information that was not obtained through questionnaires.

Regression analysis was used to find if a relationship between internal controls and financial performance as measured by ROCE exists. Statistical package for social sciences analyzed the data gathered through questionnaires. The results revealed that a positive relation exists between control environment, risk assessment, control activities, information and communication and monitoring with financial performance (ROCE) of cement companies incorporated in Kenya. The five components of internal control (control activities, risk assessment, control environment, monitoring, information and communication) were significant with values of less than 5% implying that all variables were statistically significant. Further the coefficient of determination indicated the independent variables contributed to 51.6% of the variation in financial performance as was explained by R^2 of 0.516 implying the model was a good predictor. The study concluded that a positive relationship exists between internal controls and financial performance of cement producing companies incorporated in Kenya. Companies that had effective internal controls experienced improved financial results.

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 Olumbe (2012), effective internal control system 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.

Treba (2003) says that internal controls are tools that ensure both large and small organisations achieve their missions and visions. As much as internal controls are regarded as part of auditor's and accountants' responsibility, top management must create conducive environment for proper functioning of these controls. It can be argued that, it's not only providing internal controls but also ensuring they are comprehensive and regularly monitored for effectiveness. 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.

1.1.1 Internal Controls

According to Hamed (2009) internal controls is a systematic way of carrying out organization's activities and procedures, within specified company rules and regulations for the overall success of the enterprise. 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. According to Mawanda (2008), it is believed that organizations' commitment to adhering to internal controls results in better performance unlike when organizations that lack commitment to internal controls.Internal controls ensure that the organization complies with regulations, keeps accurate records and efficient production of reliable reports. Liu (2005) and Rittenberg et al. (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.

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 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 responses are initiated 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 Financial Performance

Rutagi (1997) argues that, financial performance of organizations can be known by how well they perform while other researchers say financial performance involves the use of key financial indicators in gauging the degree of goal attainment, contribution made to improve revenue generation and supporting organizations invest in viable businesses (Heremans, 2007). Improved financial results can only be achieved if internal controls are incorporated in all business processes thereby eliminating resource errors, fraud and wastage of funds. Mawanda (2008) adds that good financial health is the potential to carry out business in efficient way, earning profits, existing in spite of industry challenges, growing and reacting to opportunities and challenges the environment presents. Also it is measured by the level attainment achieved by an organization. A firm's financial state and its performance evaluation over time can be assessed using ratio analysis because of its analytical capabilities.

Liquidity ratio is a measure of a company's ability to meet its financial obligations as and when they are due in the short term without hindering day-to-day operations. Solvency refers to credit worthiness of a firm. It is a measure of how well of a company can continue to meet its debt obligations. This implies that the total income after tax and all expenses except depreciation must be higher than amount owed to external supplies and providers of debt finance. Profitability is measured on the basis of return on sales, return on asset and return on equity. Yusuf (1995) argues that determination of financial success may be ascertained by comparing profit the business generates with the value of assets employed in business i.e. return on capital employed. This measure of performance is regarded as objective unlike other measures such as productivity and efficiency measures in business processes.

Income generating businesses require effective internal controls. The controls required comprise of mechanisms of ensuring financial and operating information is reliable and of high integrity, evaluating the existing controls to safeguard property, evaluation of personnel's adherence with organization's policies and procedures ,compliance with rules and regulations and an assessment of how efficient and effective the organization meets its objectives. (Ittner, 2003).

1.1.3 Internal Controls and Financial Performance

According to Jensen (2003) a system of internal controls comprising of internal audits are meant to primarily enhance directly or indirectly reliable financial results, by promoting accountability for those providers of financial and non-financial information. Doyle et al., (2005) says that internal controls play a big role in discovering major weaknesses and fraudulent activities, earnings management and restatements especially in organizations which experience lower incomes.

Internal control also comprise all controls relate into the organization strategies, management and governance, and all companywide activities and trading operations. This means that internal control is not only restricted to financial management, reporting, compliance issues but also extends to aspects of business performance. (COSO, 2012).

Overall, internal controls help the organization minimize risks that can affect its ability to achieve goals appropriately. Preventive internal controls prevent predicted malicious acts or omissions from occurring. Detective controls detect and report unwanted actions or omissions. Corrective controls rectify detected problems and ensure their non-recurrence. Another objective of internal control is to ensure that entity's operations are efficient and effective. This guarantees financial soundness and proper safeguarding of business property against theft or misuse. If this objective is attained then the entity will be able to improve in its financial performance and attain financial success (Ngubia, 2010).

1.1.4 Cement Manufacturing Companies in Kenya

Cement is a building material that is widely used in Kenya to construct buildings, roads and railway lines among others. The product has spurred development in construction industry over the past one decade. Major government projects such as the Thika Road construction and currently the standard gauge Railway would be almost impossible to implement without locally manufactured cement. The CBK (2007) report insists that cement is one of the key indicators of how the construction industry is growing. Besides being revenue contributor to government, construction industry promotes the growth of other related sectors thus acting as a catalyst for general economic development.

Kenya Cement Industry Report (2015) and Kenya Association of Manufacturers (2016), the Kenyan cement sector consists of six registered cement manufacturers (Appendix II). Of which National Cement, Savannah Cement, Athi River Mining (ARM), and Mombasa Cement are privately owned, while East African Portland Cement Company (EAPCC) is a Kenyan parastatal and Bamburi Cement Limited (BCL) owned by a multinational company known as Lafarge. CEMTECH Cement Company Limited has not started operations yet since its currently undergoing construction in Pokot District of Western

Kenya. EAPCC, ARM and BCL are the only publicly listed at the Nairobi Securities Exchange.

1.2 Research Problem

Slanislav (2006) highlighted that the substantial losses realized by many organizations has led to increased involvement in internal controls. He laments that, companies would have avoided significant losses if effectiveness of internal controls could be observed. According to Kaplan (2007) collapsing of Enron and WorldCom of United States is largely due to bad corporate governance standards and lack of sufficient internal controls. Insufficient internal controls provides opportunity for mismanagement of resources, corruption, wastage and gross violation of laid down rules and regulations thus leading to total business collapse.

Millichamp (2002) found that in a situation where the organization is run by the owner, he makes the formal controls less important since he controls the business. As the business grows and employs more people, the need for internal control rises. Internal controls in this regard become necessary in spite of the size of the business in guiding the daily business operations.

Organizations that have weak internal controls lack the ability to deliver quality products and services. This leads to inability to compete within the industry resulting to poor performance. 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. It is important that management familiarize themselves with procedures and mechanisms that will guarantee service delivery and the expected financial performance.

The study done by Ndungu (2013) on the effect of internal controls on revenue generation in University Of Nairobi Enterprises and Services limited (UNES) concluded that systems of internal control should be functioning as per the intended plans to help in enhancing efficiency and accurate data capturing. In this regard, functioning of internal controls will ensure the attainment of revenue collection targets. Kamau (2014) researched on the relationship between internal controls and financial performance of commercial manufacturing firms in Kenya and revealed that those manufacturing firms that invest on internal controls experience improvements in their financial performances unlike those with weaknesses in internal controls.

Matata (2015) researched on whether internal controls can affect performance of water companies within Kenya. He concluded that internal controls affect performance of water companies in Kenya. He observed a positive relationship suggesting that the more effective the internal controls the better the performance and vice versa. All these studies have focused on internal controls of various industries but no specific study has been done on the internal controls among cement manufacturing companies in Kenya. This study therefore, aimed at establishing if internal controls can have significant relationship with financial performance of companies that manufacture cement in Kenya.

1.3 Research Objective

The objective of this research is establishing the relationship existing between internal controls and the financial performance of companies that manufacture cement in Kenya.

1.4 Value of the Study

Findings of the research will help the management in identification of weaknesses within their internal controls. It will also benefit the management in re-assessing their controls to determine if they conform to relevant laws and legislation. Those in charge of financial management will also appreciate the internal controls and come up with ways of re-aligning their internal controls with the mission and objectives of the company. Policy makers will also understand the role of internal controls in policy formulation and implementation. This will see formulation of new policies and adjustments to the already existing ones to ensure better enforcement of standards.

Researchers and Scholars will get to know the extent at which internal controls affect financial performance of aviation companies since the study will add to the already available knowledge concerning internal controls. The findings herein can also be used as reference to other studies and further research. The company stakeholders, who consists of both the national and county governments, the mining authorities and all parties will be able to understand the contribution of internal controls in overall financial performance of entities.

Final the government as the greatest beneficiary in terms of revenue generated by these firms and as an employer of citizens can be able to provide appropriate legislation that encourage these companies adopt efficient and effective internal controls to aid the achievement of their business goals.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter presents a theoretical review, determinants of financial performance, empirical review, the conceptual framework and the summary of literature review. Theories surrounding internal controls will be examined in this chapter and measures of financial performance.

2.2 Theoretical Review

Theoretical review is the examination of past scholars work and how it relates to the subject under study. As far as this study is concerned, the components of internal controls will be examined which comprise of control environment, risk assessment, control activities, information and communication and monitoring. The importance of the five elements will be reviewed in relation to financial performance of entities.

2.2.1 Agency Theory

There is a link of contracts in organizations involving the shareholders referred as principals who provide capital and directors referred as agents whose duty is to use and control resources for the benefit of the principals (Jensen and Meckling, 1976). This theory argues that managers usually possess more relevant information than the owners and therefore leading to information asymmetry. The information asymmetry hinders the principal's ability to closely observe and know if their desires are being met by agents. The theory advocates the existence of firms as necessary mechanism to observe these contracts and be able to monitor and exercise control over business and prevent the agents' unethical behaviors. This theory works given the assumption that owners and directors actions are rational and that contracts are established to maximize their returns. (Jensen and Meckling, 1976).

The contract must be broad in scope so as to address the underlying issues of interest adequately between the agent and the principal. The principal endeavors to strengthen the relationship (agent-principal) by further employing professional auditors and establishing control systems to observe the actions of the agent (Jussi and Petri, 2004). Internal controls in this study help in reducing agency costs that impact the overall performance and furnish information about the actions of the agent to the principal thereby reducing information asymmetry, risk and loss of income.

2.2.2 Institutional theory

This theory is to greater extent social in nature which arises from the work of Meyer and Rowan (1977) and DiMaggio and Powell (1983). The theory argues that organizations grow and form new organization structures, procedures, systems and policies because they are necessary to operate. This new systems are not prompted by the rational economic aim of cost versus benefit analysis but because of constant evolving business environment which requires a change of practices and processes. Meyer and Rowan (1977) agrees that for organizations to thrive practices and process that are in tandem with the company's activities and embraced in society. Companies that comply with this requirement thrive and their legitimacy increases notwithstanding of their current efficacy of already adopted practices and processes. Development of Internal controls in the organization is influenced by the institutional environment rather than market pressures to promote efficiency.

2.2.3 Stewardship Theory

The agency theory suggests that directors will not in any way behave or make decisions that maximize returns to the owners provided suitable management structures are in place to secure the interests of the owners (Jensen and Meckling 1976). Danaldson and Davis (1991) defined stewardship theory thus when management is left on its own, will act responsibly as faithful stewards of resources under their control. This theory is normally used in place of agency theory whereby the role of managers is viewed as being stewards, aligning their goals with the organization goals. Those organizations that operate under this theory are believed to have effective corporate governance.

The theory recognizes the role of the directors as maximizers of the potential of companies in addition to addressing the sustainability of the firm and meeting organizational and individual ends. Agyris (1973) differentiates agency theory being a theory claiming individuals as economic beings as opposed to stewardship theory where individual desires are subdued resulting in rational decisions. Donaldson and Davis (1991) on stewardship ideology, recognizes governance structures that promote discretion and authority. The theory proposes that a manager should also serve as a chairman for him to facilitate the objective achievement of goals. The two roles will see the organization achieve superior results and meet shareholders expectations. Fama (1980), adds that duality of roles will ensure effective management of resources and careers. This means that effective stewardship minimizes fraud, misuse of funds, corruption, and other crimes that would arise as a result of weak internal controls. This theory encompasses trust and commitment between managers and owners in pursuant of their shared interests.

2.3 Determinants of Financial Performance

Performance is defined as an accomplishment of objectives set out to be achieved. In terms of finance it’s a degree to which the financial objectives of a firm have been achieved. There are various ways a firm can measure its financial health however it’s advised to aggregate all measures. Reid and Ashelby (2002) says that objective measure of performance is useful than subjective measures. Subjective measures have difficulties in qualitative data collection and reliability of such data. Whittington and Kurt (2001) mentioned that objective performance measures include; growths in profits, sales growth and return on assets employed. There are also accounting based measures of performance which uses returns on; capital employed, equity, and sales (ROCE,ROE,ROS) respectively . Return on assets is calculated by dividing net income by total assets, return on equity by dividing net income by total equity and return on sales by dividing net income by total sales in a given period. Financial experts; Stern Stewart and others came up with MVA (market value added which measures the surplus revenue generated after deducting the initial amount invested by the owners (John and Morris, 2011).

Return on revenue computes the profitability after all expenses incurred in the business have been subtracted from gross profit. Taxes, bank charges, administrative expenses and others must that facilitates business operations must be eliminated. The ratio is useful when comparing profitability of two or more consecutive periods and also comparing the net profit and gross profit. When the ratio increases its probable that expenses are efficiently managed while a decrease in the ration indicates rising expenses.

Return on Assets is a ratio indicating how well a company is performing in comparison with total assets employed. Management obtains the idea of how efficient it has utilized its assets to earn a return. Annual earnings are divided by total assets which comprise of debt and capital since the two sources of income finance operations depending on the size of the firm. Small firms prefer debt financing while large firms combine equity and debt. The ratio provides owners of capital with information of how effective the firm can transform investments into net income. Higher ROA is deemed good performance since the firm is getting positive returns from invested assets.

Another measure of a company's' financial health is Return on Equity. Shareholders' value is measured by comparing net income against the value of shares invested. The ratio is useful to shareholders and management for comparison of profitability of firms operating in the same industry. The amount returned is shown as fraction of shares invested. A ratio greater than one indicates better performance.

2.4 Empirical review

The control environment as a part of internal controls, forms the basis upon which other internal controls can be effectively implemented. Studies reveal that understanding of entity's environment is a fundamental requirement in audit practices. The knowledge of the entity ensure that the auditor assesses and identifies risks of misstatements in financial reports prepared by management. According to Sarens and De Beelde (2006) there are certain features such as management tone, risk level, controls, the extent to which information technology and transaction controls are combined, clear communication of risks and internal controls forms part of internal audit task and fraud discovery performed by organizations.

According to Barra (2010) strengthening internal controls and penalties to cub fraud among managerial and non-managerial employees yield differing results. Accoding to information collected from both groups (managerial and non-managerial) of employees revealed that more amounts of net assets are stolen per fraud when controls exist than when they are non-existent. Managerial employees need maximum penalties while non-managerial employees need alternative controls and minimum penalties. The study suggests that detective controls incorporated in the internal controls contributes to the effectiveness of segregation of tasks. It's the responsibility of every employee to participate in promoting the effectiveness of internal controls. Top management ensure that they have been established and maintained in every department.

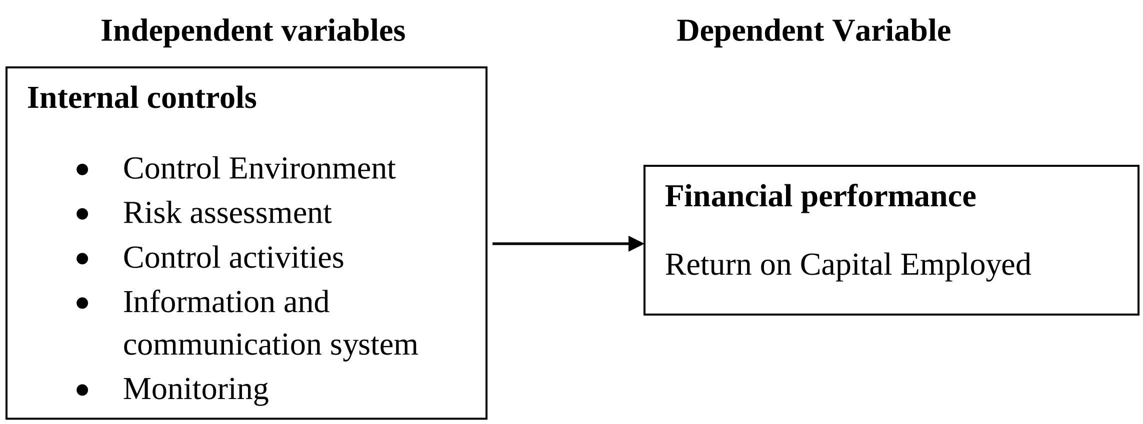
In his study Mawanda (2008) investigated how internal controls relate to the financial soundness of organizations that provide higher education in Uganda. He endeavored to investigate if the poor performance was related with weak internal controls. The findings indicated that performance is strongly related with internal controls. The study suggests hiring competent personnel in internal audit staff to perform what the University desires. The study therefore appreciates the role of independent audit function that adds value to the operations of the organization. Internal audit functions may involve risk management,, governance and management of internal controls over fraudulent activities, compliance with regulations and reliability of financial reporting.

A study done by Ewa and Udoayang (2012) to determine whether the ability to probe fraud among staff and their life style and detection of fraud was as a result of design of internal controls. He obtained data from 13 banks registered in Nigeria using a questionnaire and analyzed it using it using ratio and percentages. The study concluded that the design of internal controls impacts staff perspective on fraud. Strong internal controls prevents staff fraud as opposed to weak internal controls that provide an opportunity to perpetrate fraudulent activities.

A study done by Mwachiro (2013) about internal controls and revenue collection, investigated the internal controls in operation at Kenya Revenue Authority with a view to establish whether such internal controls have produced any meaningful results in increased collected revenue. The study established a strong relationship exist between internal controls and amount of revenue collected by Kenya revenue Authority. Weak internal controls encourage collusion for purposes of committing fraud, loss of cash and wastages of revenue collected. The five factors of internal controls i.e. control environment; risk assessment; control activities and information and communication must be in place for the institution to realize its goals.

2.5 Conceptual Framework

Figure 2.1 Conceptual Framework



Source: Researcher (2016)

The conceptual framework describes how relationship the dependent variables and independent variables relate to each other.

2.6 Summary of Literature Review

It is worth noting that from the highlighted studies; effective internal control system in organizations reduces risk of financial impropriety, resource wastages and loss of assets thereby improving financial performance. However, no research done locally has delved into how the five components of internal controls relate with financial performance of Kenyan cement companies. This research will try to clearly bring this relationship between components of internal control (independent variable) and financial performance (dependent variable) of Cement manufacturing companies.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter describes the research design, the targeted population, means that will be used to collect data, data analysis and data validity versus reliability.

3.2 Research design

These research adopted descriptive survey research design to determine whether availability of internal controls in companies relate to its financial performance. The research design adopted provides a truthful summary of entities, things or circumstances (Saunders, Lewis and Thornhill, 2003). Therefore, great quantity of data was obtained from a substantial populace economically. Internal controls are assumed to influence financial performance.

3.3 Target Population

Population is a whole set of objects, things, items or persons with shared discernible features (Mugenda and Mugenda, 2003). The research targeted all staff in accounting and finance departments of Cement Manufacturing Companies. As per the Kenya Association of Manufacturers 2016, there are 7 Cement Manufacturing Companies in Kenya.

3.4 Sample Design

The study used a sample of 4 out of 6 Cement manufacturing companies in Kenya. Eight respondents from the four companies were selected to represent seven Cement manufacturing companies. CEMTECH Cement Company Limited was excluded because it is newly established.

3.5 Data Collection

Data gathering was done by use of primary collection techniques. A structured questionnaire was designed and distributed to the targeted companies. Information gathered through oral interviews also supplemented data collected by and supplemented with oral interviews. Questionnaires were administered to staff working in accounting and finance departments during working hours and then collected later. The secondary data also involved the comparison of financial performance results of selected companies over a period spanning five years (2011-2015).

3.5.1 Validity and Reliability of Research Instrument

Validity is the correctness, meaning and practicality of inferences a researcher makes based on the information collected. An appropriate conclusion is one that is relevant to the aim with which the study is undertaken. On the other hand, a meaningful inference is one that says something about the meaning of the information obtained through the use of tools. There are three types of; content-related, criterion-related and construct-related. (Kombo and Tromp, 2006). He further suggests the use of an expert such as a professional accountant or an independent auditor to assess content validity. Since accountants are qualified experts, inferences made from the data collected were valid. Reliability in research is the extent to which instrument used in research produces consistent results upon frequent similar experiments. In this study, the questionnaire was pre – tested using the designated sample of three respondents from the departments. Individuals involved in the pilot study were barred from participating in the actual study to avoid possible bias.

3.6 Data Analysis

The information gathered during research was coded and grouped in similar criteria and was further tabularized for response analysis. Data analysis employed Statistical Package for Social Sciences (SPSS Version 20.0) program. Descriptive statistics i.e. mean and standard deviations was used to summarize and relate variables to be obtained from the findings.

The data was analyzed by the use of multiple regression equation:

$$Y= \beta_0+\beta_1 x_1+\beta_2 x_2+\beta_3 x_3+\beta_4 x_4+\beta_5 x_5+E$$

Where:$\boldsymbol{\beta_0}, \boldsymbol{\beta_1}, \boldsymbol{\beta_2}, \boldsymbol{\beta_3}, \boldsymbol{\beta_4}, \boldsymbol{\beta_5}$ were regression coefficients

Y	**-**	Financial performance as measured in terms of ROCE
x_1	-	Control Environment
x_2	-	Risk Assessment
x_3	-	Control Activities
x_4	-	Information and Communication
x_5	-	Monitoring
E	-	Error term

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

The chapter contains data analysis, the results of study and discussions with the objective of answering the research problem. The sample consisted of four Cement manufacturing companies operating in Athi River area. A total of 36 respondents were targeted and 32 respondents successfully completed the questionnaires giving a response rate of 88%. Thus, according to Mugenda and Mugenda (1999), a response rate of 88% as per this study is excellent.

4.2 General Information

The study aims at establishing the response rate of each company and the period of existence. The study targeted respondents from East Africa Portland Cement located at Athi River, Savannah Cement located at Athi River, Bamburi Cement located at Athi River, and Athi River Mining Company also located at Athi River.

4.2.1 Response Rate

Table 4.1 Response Rate

Name	Frequency	Percent	Valid Percent	Cumulative percent
East African Portland Cement	8	25.0	25.0	25.0
Athi River Mining Cement	8	25.0	25.0	50.0
Savannah Cement	8	25.0	25.0	75.0
Bamburi Cement	8	25.0	25.0	100.0
Total	32	100.0	100.0	

Source: Researcher 2016

Table 4.1 indicates the study had equal number of respondents from each targeted company. East Africa Portland Cement had 8 respondents which make 25% of total respondents; Athi River Mining Cement had 8 respondents which make 25% of total respondents; Savannah Cement had 8 respondent which is 25% of total respondents and Bamburi 8 respondents which is 25% of total respondents.

4.3 Descriptive statistics on the extent of functionality of internal controls

This part will provide summarized results of the study on the five components of internal controls. Responses from respondents are tabulated in terms of mean and corresponding standard variations to establish how they relate with financial performance.

4.3.1 Control Environment

Control environment influences the effectiveness of the other elements of internal controls. Controlling the environment constitute employees behavior and morals, upholding professionalism, participation, organization structure, style of management, authorization and human personnel policies**.**

Table 4.2 Control Environment

Control Environment	N	Mean	Standard Deviation
Adequate awareness of desirable behavior and morals	32	3.2188	1.15659
Commitment to competence	32	3.3438	1.0658
Involvement by those in charge of administration	32	3.3438	.93703
Clear management style and philosophy	32	2.7813	1.12836
Appropriateness of organizational structure	32	3.5938	.83702
Adequate reporting and authorization hierarchies	31	3.4516	.85005
Sound human resource policies and practices	32	3.5313	.94985

Source: Researcher 2016

Table 4.2 contains summary of findings as to the extent to which the organization controls the environment. The findings indicate that respondents seemed to agree that adequate awareness of desirable behavior and morals is in place with a mean of 3.2188. There is a standard deviation of 1.15659 which suggests significant dissimilarities of responses concerning adequate awareness of desirable behavior and morals.

The results as shown in table 4.2 reveal that respondents agree that the organization is committed to competence as reflected with mean of 3.3438. The standard deviation value of 1.0658 suggests that there were varied responses concerning commitment to competence.

Respondents seemed to agree that there was participation by those charged with governance as reflected by a mean of 3.3438. The standard deviation of 0.93703 implies differing answers concerning the participation by those charged with governance. Concerning understanding of management philosophy and management style there was a mean of 2.7813 and standard deviation of 1.12836.

A mean of 3.5938 imply that respondent agree to the appropriateness of organizational structure; still with a standard deviation of 0.83702 signify differing responses in regard the appropriateness of organization structure.

The results from the study also reveal that respondents agree to the statement about adequate reporting and organizational hierarchies (mean=3.4516) although varied responses were obtained (standard deviation=0.85005).The results in the table 4.2 show that there are sound human resource policies and practices which had (Mean=3.5313, SD=0.94985).

4.3.2 Risk Assessment

Risk assessment means analyzing that might hinder the attainment 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.

Table 4.3 Risk Assessment

Risk Assessment	N	Mean	Standard Deviation
Obtains information for recognizing risks of material misstatement in financial records by receiving explanations from inside and outside the company.	32	3.3750	0.90696
Risk analysis and evaluation is a continuous activity in the organization	32	3.4688	0.80259
Analyzing procedures performed on both financial data and non-financial data	32	3.3125	1.09065
Scrutinizing processes supporting inquiries of top management, other employees, and provision of to assist understand the entity	32	3.3125	1.06066
Financial risks have been identified and documented by management	32	3.0938	0.99545

Source: Researcher 2016

In table 4.3 above, most companies performed risk assessment to determine factors that might hinder the attainment of objectives. From the results, companies obtained information for recognizing risks of material misstatement in financial records by receiving explanations from inside and outside the company (Mean=3.3750 and standard deviation=0.90696). Risk analysis and evaluation is a continuous activity in the organization (Mean=3.4688, Standard deviation=0.80259). Analyzing procedures performed on both financial data and non-financial data (Mean=3.3125, Standard deviation=1.09065). Scrutinizing processes supporting inquiries of top management, other employees, and provision of to assist understand the entity (Mean=3.3125, Standard deviation=1.06066). Risk identification and documentation had (Mean=3.0938, Standard deviation=0.99545).

4.3.3 Control Activities

Control activities enhance proper implementation of policies and procedures of organizations. Below are the results from the study on the extent the company controls activities.

Table 4.4 Control Activities

Control Activities	N	Mean	Standard Deviation
Reconciliation and review of functions focusing on financial compliance	32	3.2188	1.23744
Authorization and approval of transaction to ensure activity is consistent with departmental goals	32	3.4688	1.07716
Segregation of duties to reduce risk of errors	31	3.5484	0.99461
Physical security of inventories, cash, equipment and other assets is ensured.	32	3.2500	1.13592

Source: Researcher 2016

From the table above 4.4 above, all companies controlled their activities. Reconciliation and review of functions focusing on financial compliance (Mean=3.2188 and a Standard deviation=1.23744). Authorization and approval of transaction to ensure activity is consistent with departmental goals (Mean=3.4688 and a Standard deviation=1.07716). Segregation of duties to reduce risks of errors (Mean=3.5484 and Standard deviation=0.99461). Physical security in regard to inventories, cash, equipment and other assets (Mean=3.2500 and Standard deviation=1.13592). This information suggest control activities were carried out as part of internal controls in these Cement manufacturing companies in Kenya.

4.3.4 Information and Communication

This study intended to find out the extent to which the factors outlined below were adhered to and how they related to financial performance. The following results were obtained.

Table 4.5 Information and Communication

Information and Communication	N	Mean	Standard Deviation
There is effective communication of yearly plans	32	3.6250	.90696
There are established channels of communication to permit sharing reports policies and breach of rules.	32	3.4063	.94560
Communication facilitates coordination of functions	31	3.2903	1.13118
Board members, including independent directors, have access to accurate and relevant information to carry out fiduciary responsibilities	32	3.1875	.93109
Information technology infrastructure is modern and maintained	31	3.2258	1.05545
Shareholders, customers, lenders, sock markets and regulators and other stakeholders obtain information necessary for decision making.	32	3.3750	.75134

Source: Researcher 2016

The findings obtained in table 4.5 show that information and communication was carried out to a large extent by the companies under the study. To a large extent there was effective communication of yearly plans (Mean=3.6250, Standard deviation=0.90696). To a large extent also, there are established channels of communication to permit sharing reports policies and breach of rules (Mean=3.4063, Standard deviation=0.94560). Communication facilitates coordination of functions (Mean=3.2903, Standard deviation=1.13118). Board members, including independent directors, have access to accurate and relevant information to carry out fiduciary responsibilities (Mean=3.1875, Standard deviation=0.93109). Information technology infrastructure is modern and maintained (Mean=3.2258, Standard deviation=1.05545). Shareholders, customers, lenders, sock markets and regulators and other stakeholders obtain information necessary for decision making. (Mean=3.3750, Standard deviation=0.75134). The study concluded that most companies implemented effective information and communication systems.

4.3.5 Monitoring

This study aimed at establishing the extent to which monitoring can be related with financial performance. The following findings were obtained in table 4.6 below.

Table 4.6 Monitoring

Monitoring	N	Mean	Standard Deviation
There is regular assessment of procedures and controls using appropriate organizational reporting tools and review of aging of debtors' accounts in deciding amount for doubtful debts reserves.	32	3.2188	1.18415
Use of external tax/audit specialists to review and assess internal controls.	32	4.3125	5.30026
There is evaluation and reporting of actual performance against budgeted levels.	32	3.6250	0.90696
There is logical methodology to resolving recognized internal control concerns.	32	3.3438	0.90195
There are applications configured to stop, involve pre-approval, or inform relevant authorities in case certain standards are not observed.	32	3.4063	1.04293

Source: Researcher 2016

From the results in table 4.6, respondents seemed to agree that there is regular assessment of procedures and controls using appropriate organizational reporting tools and review of aging of debtors' accounts in deciding amount for doubtful debts reserves. (Mean=3.2188, Standard deviation=1.18415), There is use of external tax or audit specialists to review and assess internal controls (Mean=4.3125, Standard deviation =5.30026), most companies do evaluation and reporting of actual performance against budgeted levels. (Mean=3.6250, SD=0.90696), there is logical methodology to resolving recognized internal control concerns. (Mean=3.3438, Standard deviation=0.90195) and there are applications configured to stop, involve pre-approval, or inform relevant authorities in case certain standards are not observed. (Mean=3.4063, SD=1.04293). This results show that monitoring was an important internal control activity in all companies hence positive financial performance.

4.4 Regression Analysis

The objective of the study was establishing if a relationship exists between internal controls and performance in terms of ROCE of cement companies in Kenya. A multiple regression analysis was employed to measure the relationship. Independent variables were (control environment, risk assessment, control activities, information and communication system and monitoring) and dependent variable was financial performance (in terms of return on capital employed). The statistical package for social sciences (SPSS) was used.

4.4.1 Model Summary

The model summary displays results of regression analysis. Table 4.7 below show the results.

Table 4.7 Model Summary

Model	R	R squared	Adjusted R squared	Sig. F change
1	0.697	0.516	0.501	0.031

Source: Researcher 2016

The table 4.7 above shows a model summary of regression analysis. The value of R^2 is 0.516 which is the percentage variation in the dependent variable being explained by the changes in the independent variables i.e. control activities, risk assessment, control environment, information and communication and monitoring explains 51.6% of the financial performance (Y). Models that can explain more than 40% of the variability can be taken as useful model. The P-value of 0.031(3.1%) is less than 0.05 (5%) implying that the model of financial performance as measured by ROCE is significant at the 5% significance.

4.4.2 Analysis of Variance

Variance analysis was conducted to test the relationship between internal controls and financial performance of cement companies in Kenya. Table 4.8 below shows the findings.

Table 4.8 ANOVA

Model	Sum of squares	df	Mean square	F	Sig
Regression	20.494	4	5.123	6.923	$.018^b$
Residual	19.973	27	0.740		
Total	40.708	31			

Source: Researcher 2016

The probability value of 1.8 %< 5% at 95% confidence level indicates that the regression relationship was significant in predicting how the independent variables influenced financial performance. The calculated F value at 5% significance level was 6.923. The overall model was deemed significant since the calculated F is more than critical value of F (value=2.17).

4.4.3 Test for Coefficients

The following table 4.9 shows the level of significance on the variables, standardized and unstandardized coefficients.

Table 4.9 Coefficients of Regression Equation

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std Error	Beta		
1	(Constant)	3.341	0.797		4.161	0.008
	Control Environment (X1)	1.687	0.220	.241	3.848	0.024
	Risk Assessment (X2)	0.523	0.290	.716	2.024	0.039
	Control Activities (X3)	1.367	0.192	.550	2.581	0.013
	Information and Communication (X4)	0.783	0.231	.611	1.978	0.037
	Monitoring (X5)	0.557	0.282	.540	2.162	0.047

Source: Researcher 2016

From the findings in table 4.9, the regression equation is:

Y=3.341+1.687X+0.523X2+1.1.367X3+0.783X4+0.557X5+E

Where; Y = Financial performance (ROCE)

X1 = Control Environment

X2 = Risk Assessment

X3 = Control Activities

X4 = Information and Communication

X5 = Monitoring

E = Error term

From the table 4.9 above, if all independent variables were constant, the variable Y would be 3.341. An establishment of control environment would result in the change of Y by 1.687. Introducing risk assessment would further increase financial performance (Y) by 0.523. Control activities would increase in financial performance (Y) by 1.367. By also incorporating communication and information system financial performance would improve by 0.783. Monitoring would lead to an increase in financial performance by 0.557. Taking significance level at 5%, all the predicting variables under consideration are statistically significant (taking P values of less than 5%).

4.5 Summary and Interpretation of Findings

According to the results, the response rate was 8 respondents from each company. The results reveal that control activities is a common practice across all cement manufacturing companies in Kenya as it is regarded as being critical element in internal control system. Risk assessment as a functionality of internal control is also observed by all cement manufacturing companies as mechanism of mitigating risks. The researcher also established that it is a common practice of cement manufacturing companies to control environment for other components of internal control to be effective. However, in some companies management philosophy and management style is not practiced. The study further found out that information and communication is functional to a large extent in these companies. All companies monitored their activities as part of internal control to ensure attainment of predetermined results.

The results of regression analysis reveals that a positive relationship exists between the five internal control components and performance (ROCE) of these cement companies. The five independent variables have a significance level of lower than 5% implying that all variables are statistically significant. Further the coefficient of determination reveals that the independent variables contributed 51.6% of financial performance variation as explained by R^2 of 0.516, suggesting that the model used was a good predictor. The findings are supported by a study done by Kamau (2014) who evaluated the effect s internal controls would have on the financial performance of manufacturing companies in Kenya. His results of regression analysis showed a strong positive relationship existed between internal controls and performance. Also, Matata (2015) did a research to see what effects internal controls would have on Kenyan water companies' financial performance. His findings established a strong positive relationship existed between established internal controls and the performance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter gives the summary of study, the researcher's conclusion and policy recommendations based on the findings in chapter four. Limitations of the study and suggestions for further research is also provided.

5.2 Summary of Findings

The researcher's objective was to establish if there exists a relationship between internal controls and financial performance of cement manufacturing companies in Kenya. The study revealed that cement manufacturing companies have established control environment circumstances to a large extent. The study found out that respondents were in agreement that control environment contributes to effective implementation of other internal control activities. On risk assessment the companies endeavor in identifying risks of material misstatement, risk analysis and evaluation, analyzing procedures performed on both financial data and non-financial data, observation and carrying inspection and documentation of risks.

Control of activities as part of internal control is exercised to a large extent. Reconciliation and review of functions focusing on financial compliance, authorization and approval of transaction to ensure activity is consistent with departmental goals, reviews of functions focusing on financial compliance and physical security of inventories, cash, equipment and other assets is ensured was also a common practice.

The results revealed that information for identifying risks of material misstatement, risk analysis and evaluation, analytical procedures performed on financial and non-financial information, observation and inspection procedures and documentation of risks are the risk assessment factors that had a relationship with the financial performance. Companies monitored their activities as part of internal control to ensure attainment of predetermined results. Further, the findings revealed that information and communication was carried out to a large extent by the companies under the study in spite of varied responses in regard to the questions.

The results of multiple regression analysis showed that a relationship exists between internal controls and performance of cement companies operating in Kenya. Any change of control activities, risk assessment, control environment, monitoring and information and communication will lead to a change in financial performance of these companies assuming no intervening variables in play. The stronger the internal controls the higher is the performance level of cement companies in Kenya.

5.3 Conclusion

The study concludes that there is a direct relationship between internal controls and financial performance of cement manufacturing companies in Kenya. Companies control activities to enhance proper implementation of policies and procedures of organizations. Also, factors that might hinder the attainment company's objectives are assessed appropriately. Also these companies are committed to control environment activities. However, mean of 2.7813 which is below the mean average imply that respondents dis agreed on management philosophy and management style. This might imply respondents concerns with management philosophy and management style of the companies. The study further concludes the companies' information and communication is functional to a large extent in all companies and also companies monitor their activities as part of internal control to ensure attainment of predetermined objective of profitability.

5.4 Recommendations

From the research findings, it was evident that management philosophy and management style is not clearly understood. The study recommends adoption of management philosophy and style that is realigned with the characteristics a company to ensure organizational effectiveness. Management should take into account of their organizational goals, cultural values while adopting management styles and philosophy since there is no one best management style.

The companies studied should endeavor to at all times to base their decisions on results of research and development. Research and development function should be established and allocated sufficient resource to do research on various matters that can lead to business improvement and profitability. The study recommends staffing the internal audit function with competent personnel to improve the implementation of internal controls.

The research recommends strengthening of internal controls to be able to deal with changing business, technology, legislation, competition, economic conditions and industry practices. By strengthening internal controls, most financial frauds can be prevented. Consequently, cement manufacturing companies must commit to conserve the environment by efficient management of energy, waste management and reduction of greenhouse emissions.

Finally, there should be periodic reports about the effectiveness of control activities, risk assessment, control environment, information and communication and monitoring to facilitate evaluation of their effectiveness. All personnel involved in monitoring the internal controls should be regularly trained to enhance their skills and expertise as professionals.

5.5 Limitations of the study

The study focused on 4 cement manufacturing companies whereas there are 7 such companies in Kenya. Therefore this finding may not be used for generalizations of all 7 companies. Additionally, CEMTECH Cement Company Limited which is located in West Pokot County in Kenya is currently under construction.

The research is based on the responses given on internal controls by respondents and therefore some responses may be misleading as no attempt was made to practically check whether internal controls relate to financial performance. It was assumed that the respondents were objective, free and fair while completing the questionnaire.

The study focused on cement manufacturing companies. These findings may mislead if generalized and applied to other manufacturing firms of other industries.

5.6 Suggestion for Further Research

The study recommends that a study should be undertaken on the relationship of internal controls and other measures of financial performance such as liquidity measures (current ratio, quick ratio, inventory holding period, receivables collection period, payables period), gearing ratios (financial gearing, interest cover), investors ratios and others.

The study dealt with cement manufacturing companies. Further research on the relationship between internal controls and financial performance should be undertaken on other private and public sector entities. It is also important to incorporate intervening variables such as politics, inflation, interest rates and others in the study to see the overall relationship with performance of these companies.

REFERENCES

Agyris, C. (1973). Some Limits of Rational Man Organizational Theory: *Public Administration Review*, 33, 253-267.

Aikins, S. (2011), "An Examination of Role of Government Internal Audits Improving Financial Performance", *Public Finance and Management*, 11(4), 306-337.

Amudo, A., & Inanga, E. L. (2009). Evaluation of Internal Control Systems: A case study from Uganda, *International Research Journal of Finance and Economics*, ISSN1450-2887

Barra, R. A. (2010), "The Impact of Internal Controls and Penalties on Fraud", *Journal of Information Systems,* 24(1), 11-29.

Bowrin, A. K. (2004), Internal Control in Trinidad and Tobago Religious Organizations, Accounting*, Auditing and Accountability Journal*, 17 (1), 121-152.

Brink, N. (2009). Theoretical Approach in an Internal Control System: A Conceptual framework and usability of Internal Audit. *International Journal of Economic Sciences and Applied Research* 4 (1): 19-34.

Central Bank of Kenya (2007) GDP Growth**,** Monthly Economic Review, January.

Costs of Family and Non-Family Firms: Conceptual Issues and Exploratory Evidence". Entrepreneurship Theory and Practice, 28(4): 355-362.

COSO (2012)-The Committee of Sponsoring Organizations of the Treadway Commission, AICPA, New Jersey, USA, Enterprise Risk Management - *Integrated Framework, September 2012,*

Committee of Sponsoring Organizations of the Treadway Commission (COSO); (1985, 1992, 2005, 2012). *Internal Control over External Financial Reporting: A Compendium of Approaches and Examples.*

Danaldson.L. Davis. J.H. (1991). Stewardship theory or Agency Theory: CEO Governance and Shareholders Returns. *Australian Graduate School of management.* University of New South Wales.

DiMaggio, P. J., and Powell W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields, *American Sociological Review* 48:147-60.

Doyle, J., W. Ge, and S. McVay (2005), "Determinants of Weaknesses in Internal Control over Financial Reporting and the Implications for Earnings Quality", *Journal of Accounting, Auditing and Finance*, 8 (1),31-52.

Esmailjee A E K (1993). Internal Control: The Case of Nyayo Bus Corporation. *Unpublished MBA Project Report, School of Business*, University of Nairobi.

Ewa, E. U.&Udoayang, J. O. (2012), The Impact of Internal Control Design on Banks" Ability to Investigate Staff Fraud, and Life Style and Fraud Detection in Nigeria, *International Journal of Research in Economics & Social Sciences*, 2 (2), 32-43

Fama, E.F. (1980). Agency Problems and the Theory of the Firm: *Journal of Political Economy*, 88(2), 288-307.

Gitau, G. M. (2011). Effect of strategic implementation on the performance of firms in the aviation industry in Kenya, *Unpublished MBA Project*, UON

Gavrilov, L. A and Gavrilova, N. S (2001), "The Reliability Theory of Aging and Longevity", *Accounting, Auditing and Finance*, 213 (4): 527–45.

Hamed, A.(2009). A clear Look at Internal Control: Theory and Concept. *Unpublished MBA Research Paper*. University of Nairobi.

Heremans, Dirk.(2007), *Corporate Governance Issues for Banks: a Financial Stability Perspective*, Working paper.

Hongming, C and Yanan, S. (2012). An *Empirical Study on the Correlation between the Internal Control and Enterprise Value-Based on the Information System.*

IATA. (2008). Airport Privatization and Environment: two Leadership Challenges for Japan Press release No:3.

Ittner, C.D.,Larcker, D.F. &Randall, T. (2003). Performance implications of strategic performance measurement in financial services firms, *Accounting, Organization and Society Journal*, Philadelphia PA; Elsevier Ltd.

Jensen, M. C. and Meckling, W. H. (1976). *Theory of the firm*: Managerial behavior, agency costs, and ownership Structure.

John J. and Morris (2011). *The impact of enterprise resource planning (ERP) Systems on the Effectiveness of internal controls over financial reporting.*

Jussi, N and Petri, S. (2004). "Does Agency Theory Provide a General Framework for Audit Pricing?" *International Journal of Auditing*, 8 (2), 253-262.

Kakucha, W. (2009). *An Evaluation of Internal Controls*: Newyork Amocom.

Kamau, C. N. (2014). Effect of Internal Controls on the Financial Perfomance of Manufacturing Firms in Kenya. *Unpublished MBA Project Report, School of Business*, University of Nairobi.

Kaplan E. and Schultz Y. (2007). The Effect of Social Confrontation on Individuals' intentions to Internally report fraud. *Behavioral Research in Accounting American Accounting Association* Vol. 22, No. 2.

Karagiorgos, T., Drogalas, G., Gotzamanis, E. and Tampakoudis, I. (2009), "The Contribution of Internal Auditing to Management", *International Journal of Management Research and Technology,* 3 (2), 417-427.

Kenya Cement Industry Report, 2012 & 2015.

Kombo, K. & Tromp. (2006). Proposal and Thesis Writing. Makuyu : Pauline Publications

Kothari, C. R. (2000). Research *Methodology*: *Methods and Techniques*. New Delhi:

Wiley.

Mawanda, S. P., (2008). Effects of internal control systems on financial performance in an institution of higher learning in Uganda: A case of Uganda Martyrs University, *Unpublishe thesis*, Uganda Matyrs University.

Matata, M.L., (2015). The Effect of Internal Controls on the Performance of Water Companies in Kenya: *Unpublished MBA Project*, University of Nairobi.

Meyer, J. W., and Rowan B. (1977). Institutionalized organizations: Formal structure as myth and ceremony, *American Journal of Sociology* 83:340-63.

Millichamp, A. H. (2002). *Auditing by Millichamp 8th Edition.* London, NewYork: Continoum Limited.

Mugenda, O.M. and Mugenda, A. G. (1999), *Research Methods: Quantitative and Qualitative Approaches.* Nairobi: ACTS Press.

Mwachiro, D.B, (2013). Effect of internal controls on revenue collection in KRA: *Unpublished MBA Project*, University of Nairobi.

Nachmias, C.F and Nachmias, D. (1996). *Research Methods in the Social Science,*

London: Arnold Publishing. 5^{th} Edition.

Ndungu, (2013). Effect of internal controls on revenue generation in University of Nairobi Enterprise and Services limited: *Unpublished MBA Project*, University of Nairobi.

Ngubia, L. (2010) A survey of the Inventory Control Techniques Adopted by Supermarkets in Nairobi. *Unpublished MBA Project*, University of Nairobi, School of Business, Nairobi

Olumbe, C.O. (2012). The relationship between Internal Controls and Corporate Governance in Commercial Banks in Kenya. *Unpublished Research Thesis*. University of Nairobi.

Ochieng A. P. (2015).External Environmental Factors Influencing Financial Performance of Kenya Airways: *Unpublished MBA project*, University of Nairobi.

Reid, K., &Ashelby, T. (2002). The Swansea Internal Quality Audit Processes Quality Assurance in Education.

Rezaee, Z., Elam, R and Sharbatoghlie, A. (2001), "Continuous Auditing: The Audit of the Future", *Managerial Auditing Journal*, 16(3), 150-158.

Rutagi. R (1997), *Performance of parastatal Organizations in Uganda.*

Sarens, G and De Beelde, I. (2006),"Internal Auditors' Perception about their Role in Risk Man-agement: A Comparison between US and Belgian Companies", *Managerial Auditing Journal*, 21(1), 63-80.

Saunders, M., Lewis, P. & Thornhill, A. (2003). Research Methods for Business Students, United Kingdom, Prentice-hall, Pearson Education.

Slanislav, K. (2006). Tax Revenue Prediction under Condition of Perfect Control over Tax Collection Authority. *Journal of department of Business and Economics*. Columbia University.

Stanford University. (2008), "Competitiveness in the Airline industry", *International Journal of Social Economics*, Vol.10.

Theofanis, K., Drogalas, G and Giovanis, N. (2011). “Evaluation of the Effectiveness of Internal Audit in Greek Hotel Business”, *International Journal of Economic Sciences and Applied Research,* 4(1), 19-34.

Tosi, H.L., Brownlee, A.L., Silva, P. & Jeffrey, P.K. (2003). An Empirical Exploration of Decision Making Under Agency Controls and Stewardship Structure: *Academy of Management,* 40(8), 2053-71.

Treba. L. M. (2003). Evaluating internal controls: control self-assessment in Government, *Journal of Finance and Accountin*g, 4(3); 55-67

Whittington, P. (2001). *Principles of Auditing and other Assurance Services*. McGraw Hill High Education. 5thEdition.

Woolf E., (1982). *Auditing Today*, Prentice Hall International. 3rd Edition.

Yusuf, A.(1995) Critical success factors for small business: perception of South Pacific Entrepreneurs. *Journal of Small Business Management, Volume 33 Number 2, page 68 -73.*

APPENDICES

Appendix I: A QUESTIONNAIRE

Introduction

The objective of this research is to establish the relationship between internal controls and financial performance of Cement Manufacturing Companies in Kenya.

Please answer the questions in this questionnaire by inserting "X" against the most appropriate answer in the boxes provided. **(Where; 1= strongly disagree; 2= disagree; 3= not sure; 4= agree; 5= strongly agree)**

Name of your company……………………………………………………………

Control Activities

1. Rank the extent to which the organization controls the environment?

CONTROL ENVIRONMENT	Strongly dis agree [1]	Dis agree [2]	Not sure [3]	Agree [4]	Strongly agree [5]
Adequate awareness of desirable behavior and morals					
Commitment to competence					
Involvement by those in charge of administration					
Clear management style and philosophy					
Appropriateness of organizational structure					
Adequate reporting and authorization hierarchies					

Sound human resource policies and practices					

2. Rank the extent to which the organization performs risk assessment procedures?

RISK ASSESSMENT	Strongly dis agree [1]	Dis agree [2]	Not sure [3]	Agree [4]	Strongly agree [5]
Obtains information for recognizing risks of material misstatement in financial records by receiving explanations from inside and outside the company.					
Risk analysis and evaluation is a continuous activity in the organization					
Analyzing procedures performed on both financial data and non-financial data					
Scrutinizing processes supporting inquiries of top management, other employees, and provision of to assist understand the entity					
Financial risks have been identified and documented by management					

3. Rank the extent to which your organization controls activities?

CONTROL ACTIVITIES	Strongly dis agree [1]	Dis agree [2]	Not sure [3]	Agree [4]	Strongly agree [5]
Reconciliation and review of functions 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					
Physical security of inventories, cash, equipment and other assets is ensured.					

4. Rank the extent to which your organization is effective in Information and Communication?

INFORMATION AND COMMUNICATION	Strongly dis agree [1]	Dis agree [2]	Not sure [3]	Agree [4]	Strongly agree [5]
There is effective communication of					

yearly plans					
There are established channels of communication to permit sharing reports policies and breach of rules.					
Communication facilitates coordination of functions					
Board members, including independent directors, have access to accurate and relevant information to carry out fiduciary responsibilities					
Information technology infrastructure is modern and maintained					
Shareholders, customers, lenders, sock markets and regulators and other stakeholders obtain information necessary for decision making.					

5. Rank the extent to which your organization performs monitoring function?

MONITORING	Strongly dis agree [1]	Dis agree [2]	Not sure [3]	Agree [4]	Strongly agree [5]
There is regular assessment of					

procedures and controls using appropriate organizational reporting tools and review of aging of debtors' accounts in deciding amount for doubtful debts reserves.					
Use of external tax/audit specialists to review and assess internal controls.					
There is evaluation and reporting of actual performance against budgeted levels					
There is systematic approach to resolving identified internal control issues					
There are applications configured to stop, involve pre-approval, or inform relevant authorities in case certain standards are not observed.					

THANK YOU FOR YOUR COOPERATION

Appendix II: Cement Manufacturing Companies in Kenya

Company	**Location**	**Product**
Bamburi Cement Limited (BMBC)	Mombasa	Nguvu
Athi River Mining Limited (ARML)	Athi River	Rhino
East African Portland Cement Ltd (EAPC)	Athi River	Blue Triangle
National Cement Company Limited (NCC)	Lukenya	Simba
Mombasa Cement Limited (MCL)	Athi River	Nyumba
Savannah Cement Company (SCC)	Athi River	Savannah
CEMTECH Cement Company Limited	Pokot District (proposed)	.........N/A...........

Source: Kenya Association of Manufacturers (2016)