# THE RELATIONSHIP BETWEEN CORPORATE GOVERNANCE PRACTICES AND EARNINGS MANAGEMENT FOR COMPANIES QUOTED AT THE NAIROBI SECURITIES EXCHANGE

BY

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**REG NO: D61/72781/2012** 

# A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION OF THE UNIVERSITY OF NAIROBI

## **DECLARATION**

This management research report is my original work and has not been presented for award of a degree in any other university.

Signed...... Date.....

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This management research report has been submitted for examination with my

approval as the university supervisor.

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#### ACKNOWLEDGEMENT

I wish to recognize that I could not have started and completed this research successfully without the direction of my supervisor, Mr. Cyrus Iraya. The invaluable assistance combined with positive criticism, creative suggestions on what to do at each stage of this research right from the generation of the research idea, to its conceptualization, to the drafting of the research proposal, to the analysis of samples and preparation of the final report my gratitude is boundless.

Secondly, I am heavily indebted to various people and organizations for the success of this research project. The material and non-material support they gave to me during research are highly appreciated. I take this opportunity to express my sincere thanks to each of these people and organizations. First, the staff of the Jomo Kenyatta Library of the University of Nairobi who provided to me the opportunity to use the library facilities especially in the MBA and the Electronic Library section and the Capital Markets Authority for allowing the use of their online reports to mine so much data.

Finally, I appreciate the people who worked on the academic works cited in this study: those in the wider scholarly world and those in the business school. And to my family and friends who have helped, encouraged and inspired me as this research project took shape and was completed, I say Thank you and God bless.

## **DEDICATION**

To my loving wife Purity Njeri for your understanding and words of comfort and encouragement during those many hours of absence while attending to class work, to my daughter Prudence for your support and winning spirit on matters academic. Finally is to baby Alex for your keen interest in my books and laptop and being a vigorous study partner.

#### ABSTRACT

The regulatory response to financial scandals has been to take measures to protect information transparency, mitigate conflicts of interest and ensure the independence of auditors, all in order to protect the investors interests' and increase the confidence of capital markets (Leuz, Nanda & Wysocki, 2003). Unethical managers may be attracted to misstate financial statements when growth slows to maintain the appearance of consistent growth of the company (Summers and Sweeney, 2007). According to Dechow et al. (1995) earnings management is a strategy used by the management of a company to deliberately manipulate the company's earnings so that the figures match a pre-determined target. This practice is carried out for the purpose of income smoothing. Empirical studies have also concluded various relationships exist between corporate governance and earnings management. In Kenya, cases where managers and directors have been accused of poor corporate governance resulting to corporate scandals include the collapse of Euro Bank in 2004, the placement of Uchumi Supermarkets under receivership in 2004 due to mismanagement. The objective of the study was to establish the relationship between corporate governance practices and earnings management for companies quoted at the NSE.

This study adopted a descriptive research design. The target population consisted of the 49 companies that had been continuously and actively trading at the NSE between January 2010 and December 2012. The study used secondary quantitative data to analyze the relationship between corporate governance and earnings management. This data covered the period 2010 to 2012. The data collected was analyzed using linear regression and correlation analysis to test the relationship between the dependent variable Discretionary Accruals as an earnings management tool and specific corporate governance variables assumed to fit the NSE. The regression results were interpreted based on the Pearson correlation, R-squared, adjusted R-squared, Test of significance using F statistic through the Analysis of Variance (ANOVA), coefficients of the independent variables and their p-values.

From the findings, the study found that a unit increase in ownership concentration will cause a decrease in earnings management, further a unit increase in board size will lead to a decrease in earnings management, a unit increase in board independence will lead to a decrease in earnings management, a unit increase in board activity will lead to an increase in earnings management and a unit increase in CEO duality will further lead to an increase in earnings management. The study concluded that earnings management is negatively related to ownership concentration. The study also concluded, that board independence is negatively related to earnings management. In addition the study also concluded that adding outside directors to the board may improve in governance practices and may be helpful to the board in monitoring the firm's management of earnings which implies that investors will rely on the information revealed in the financial statements when there are more outside directors in the board. The study recommended the need for effective corporate governance practices at senior managerial level of quoted companies in Kenya to contribute to reduced earnings management and hence improve on actual firm liquidity and avert possible collapse of public organizations in Kenya.

# TABLE OF CONTENTS

DECLARATIONii
ACKNOWLEDGEMENTiii
DEDICATION
ABSTRACTv
TABLE OF CONTENTSvi
ABBREVIATIONS
LIST OF TABLESix
LIST OF FIGURES
CHAPTER ONE: INTRODUCTION
1.1 Background of the Study1
1.1.1Corporate Governance Practices
1.1.2 Earnings Management
1.1.3 Relationship between Corporate Governance and Earnings Management
1.1.4 Quoted Companies in the NSE
1.2 Research Problem
1.3 Objectives of the Study10
1.4 Value of the Study10
CHAPTER TWO: LITERATURE REVIEW
2.1 Introduction12
2.2 Theoretical framework12
2.2.1 Agency Theory
2.2.2 Stakeholder Theory15
2.2.3 Stewardship Theory16
2.2.4 The Big Bath Theory of Earnings Management17

2.3 Measures of Corporate Governance and Earnings Management	19
2.4 Empirical Literature	21
2.5 Summary of Literature Review	25
CHAPTER THREE: RESEARCH METHODOLOGY	27
3.1 Introduction	27
3.2 Research Design	27
3.3 Population and Sample	27
3.4 Data Collection Method and Instruments	28
3.5 Data Analysis	28
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION	31
4.1 Introduction	31
4.2 Analysis and interpretations	31
4.3 Regression Analysis	35
4.4 Discussion of the Findings	39
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION	NS42
5.1 Introduction	42
5.2 Summary of Findings	42
5.3 Conclusions	44
5.4 Limitation of the Study	45
5.5 Recommendations	46
REFERENCES	47
APPENDICES	58
APPENDIX I: INTRODUCTION LETTER	58
APPENDIX II: QUOTED COMPANIES IN NAIROBI SECURITIES 2010-2012.	59
APPENDIX III: INDEPENDENT VARIABLES	62
APPENDIX IV: EARNINGS MANAGEMENT	66

#### **ABBREVIATIONS**

- AIMS : Alternative Investment Market Segment
- BODs : Board of Directors
- CBK : Central Bank of Kenya
- CEO : Chief Executive Officer
- CMA : Capital Markets Authority
- FISMS: Fixed Income Security Market Segment
- GEMS : Growth Enterprise Market Segment
- IPOs : Initial Public Offers
- KRA : Kenya Revenue Authority
- MIMS : Main Investment Market Segment
- NSE : Nairobi Securities Exchange
- OECD : Organization for Economic and Corporation development
- SEC : Securities and Exchange Commission

# LIST OF TABLES

Table 4.1: Descriptive statistics	31
Table 4.2: Normality test results	32
Table 4.3: Correlation and the coefficient of determination	34
Table 4.4 Model Summary	36
Table 4.5: ANOVA	37
Table 4.6: Coefficients	38

# LIST OF FIGURES

Figure 4.1 Normality test results

33

#### **CHAPTER ONE: INTRODUCTION**

#### 1.1 Background of the Study

In recent years large accounting fraud uncovered in the stock markets has once again confirmed the existence of ethical failures and the importance of transparency and reliability of the financial information provided to markets (Lang and Lundholm, 2000). The regulatory response to financial scandals has been to take measures to protect information transparency, mitigate conflicts of interest and ensure the independence of auditors, all in order to protect the investors interests' and increase the confidence of capital markets (Leuz, Nanda & Wysocki, 2003). A weak corporate governance structure may provide an opportunity for managers to engage in behavior that would eventually result in a lower quality of reported earnings, which is a strong indication of a serious decay in business ethics (Jesus and Emma, 2013).

Since the studies published by Jensen and Meckling (1976) and Fama and Jensen (1983), it has been assumed that both, the role of the BODs and ownership structure, are crucial in monitoring managerial activity, as they are capable of reducing agency costs resulting from the alignment of ownership and management interests. Thus, several studies document a significant relation between the characteristics of the board of directors and the integrity of accounting information (Rahman and Ali 2006; Patelli and Prencipe 2007; Hashim and Devi 2008). All these studies relate mainly to Anglo-Saxon countries, where outside investors are well-protected by the legal system (e.g., United States, United Kingdom), the level of transparency is high and most listed firms present widely held ownership structures. The above scenarios cannot be readily applied, however, to the case of companies quoted at the Nairobi

Securities Exchange due to such characteristics as weak legal protection of minority shareholders' interests and concentrated ownership structures by few individuals and multinational corporations.

Unethical managers may be attracted to misstate financial statements when growth slows to maintain the appearance of consistent growth of the company (Summers and Sweeney, 2007). In as much the majority of auditor changes are legitimate reasons, the risk of audit failure and subsequent litigation is higher during an initial engagement that in subsequent years cited in Summers and Sweeney, 2007. Summers and Sweeney (2007) suggested that a client may even change auditors in order to reduce the likelihood of detection of a financial statement fraud. Therefore, investor confidence can only be enhanced with good corporate governance practices where there is accountability and transparency. After all investors can only trust management once the objectives and the return on their equity have been stated and hence demand for accountability from the directors.

It is on this background that this study sort to establish whether the CMA Guidelines on corporate Governance Practices and Disclosures as published under gazette notice No. 369 of 25<sup>th</sup> January 2002 and legal notice No. 60 of 3<sup>rd</sup> May 2002 were being enforced to prevent earnings management by companies listed at the NSE and to therefore identify regulatory areas needing more strengthening and tightening.

#### **1.1.1Corporate Governance Practices**

Corporate governance is the system by which companies are directed and controlled. Boards of directors are responsible for the governance of their companies. The shareholders' role in governance is to appoint the directors and the auditors and to satisfy themselves that an appropriate governance structure is in place, (The Cadbury Report, 1992).

Gazette Notice No. 3362 to the Capital Markets Act of Kenya (Cap. 485A), Guidelines on Corporate Governance practices by public listed Companies in Kenya, corporate governance is defined as the process and structure used to direct and manage business affairs of the company towards enhancing prosperity and corporate accounting with the ultimate objective of realizing shareholders long-term value while taking into account the interest of other stakeholders.

Gazette Notice No. 3362 to the Capital Markets Act of Kenya (Cap. 485A) requires the following corporate governance practices in listed companies in Kenya; that every quoted company is headed by an effective Board of directors and board committees, directors remunerations are established through formal and transparent procedures and approved by the shareholders. Such remuneration should also be competitive, linked to performance and sufficient to attract and retain diligent directors. Other considerations include board size, board activities characterized by board meetings, appointment procedures, and board independence requiring that at least one-third of the directors should be independent and non-executive and of diverse background. Sufficient supply and disclosure of information on aggregate directors loans, ownership concentration listing ten major shareholders of the company, share options and other forms of executive compensation. Other practices include accountability and audit of financial statements as a duty of the board in line with International Accounting Standards, appointment of independent auditors, maintaining independent and competent audit committees and designing a clear succession plan for the Board Chair and the CEO.

#### **1.1.2 Earnings Management**

Basic know how of earning management expresses some level of deception, which influence some outcome (Lawrence, 2009). Stolowy and Breton (2004), refers earning management as "manipulation of accounts". They describe it as the use of management's discretion to decide on accounting choices or to design transactions in a way that it will affect the chances of wealth transfer between the company and society, fund providers or managers. They further divide a manipulation of accounts into creative accounting, earning management and fraud. Earning management has been practiced in the last few decades. It occurs when managers use self or organization judgment in financial reporting and in designing transactions to alter financial reporting either to misguide some stakeholders about the underlying economic performance of the company or to have undue influence on contractual outcomes that depend on reporting accounting numbers (Healy and Wahlen, 1999). Fischer and Rosenzweiz (1995) gave a more precise definition of earnings management where he stated that it's the managers' action which increase / decrease current reported earnings of a company financials with no corresponding increase / decrease in the longterm economic gain in the company; this is the definition that will be used throughout the study.

According to Dechow et al. (1995) earnings management is a strategy used by the management of a company to deliberately manipulate the company's earnings so that the figures match a pre-determined target. This practice is carried out for the purpose of income smoothing. Thus rather than having years of exceptionally good or bad earnings, companies will try to keep the figures relatively stable by adding and removing cash from reserves account.

#### 1.1.3 Relationship between Corporate Governance and Earnings Management

A theoretical relationship between corporate governance and earnings management as demonstrated by various theories as follows; the agency theory posits a negative relationship between corporate governance and earnings management. Jensen and Meckling (1976) indicated that the principals who are the company owners can comfort themselves that the agent will make the most favourable decisions only if appropriate incentives and rewards are given and only if the agent is watched. This in effect supports monitoring of management by the director who according to the stewardship theory hold the fiduciary duty of safeguarding shareholder's interest. Higher monitoring by directors in their duty results to lower manipulation of earnings hence supporting a negative relationship between corporate governance and earnings management.

The big bath theory of earnings Management suggests that firms experiencing low earnings in a given year may take discretionary write downs to reduce even further the current period's earnings with the assumption that they can not be met with an extra punishment for the accelerated poor performance. Again this behaviour positively affects earnings management and can only be controlled by such firms practicing good corporate governance thus a negative relationship is further supported. The stakeholders theory leaves managers with immense uncontrolled power that positively affects earnings management to their advantage. Here again good corporate governance practices can help monitor management so as to safeguard accountability and transparency and the integrity of financial reports free of earnings management. Empirical studies have also concluded various relationships exist between corporate governance and earnings management. Jesus and Emma (2013) observed that insider shareholding, ownership concentration, institutional investors, board independence, a greater number of board meetings negatively affects earnings management while family ownership, board size positively affects earnings management. The existence of concentration of power (CEO duality) increases earnings management while a country with higher levels of governability shows a lower level on earnings management practices, (Bugshan, 2005). Liu and Lu, (2007) documented systematic differences in earnings management across the China's listed companies during 1999–2005, and empirically demonstrated that firms with higher corporate governance levels have lower levels of earnings management. Their empirical findings, although not being able to completely exclude other explanations, strongly suggested that agency conflicts between controlling shareholders and minority investors account for a significant portion of earnings management in China's listed firms.

Marion et al. (2008) posited that earnings management is limited by certain corporate governance practices most critical being audit committee independence and board independence being associated with lower performance adjusted discretionary accruals. However the empirical study concluded that increasing executive shareholdings provides incentives to manage earnings. Jesus and Emma (2013) empirically tested that when ownership concentration reaches a certain point, basically around 35.1 %, there is an increase in the use of discretionary accruals or earnings management. They also found that an increase in insiders ownership reduces earnings management by managers until such ownership reaches 14.1 % where the situation reverses with an increase in manipulative practices by insiders.

#### **1.1.4 Quoted Companies in the NSE**

A company quoted at the Nairobi Securities Exchange is one that has a minimum number of seven members according to the Companies Act chapter 486 of the laws of Kenya. Most of the public companies start as private companies then they convert to public companies when they invite members of the public to subscribe to their shares and debentures. The Companies Act requires that when the membership of a private company exceeds fifty, then it must convert to a public company.

The Nairobi Securities Exchange was constituted in 1954 as a voluntary association of stock brokers registered under the Societies Act. It has overseen privatization of various government parastatals over the years such as the successful sale of 20% of government stake at Kenya Commercial Bank in 1988, Kenya Airways in 2006, Safaricom and KenGen IPOs among others (www.nse.co.ke)

This study was for NSE quoted companies in Kenya that had fulfilled all prerequisite CMA listing requirements and had been listed by the NSE through an IPO or an introduction. Company shares were listed under the following segments; Growth Enterprise Market Segment (GEMS) that required a minimum capital of Kenya Shilling 10 Million, Alternative Investment Market Segment (AIMS) that required a minimum capital of Kenya Shilling 20 Million, Main Investment Market Segment (MIMS) that required a minimum capital of Kenya Shilling 50 Million and the Fixed Income Security Market Segment (FISMS) (NSE Fact book, 2008). There were 61 listed companies out of which 58 were equities and 6 were corporate bonds -3 of which had listed equities at the NSE divided into the agricultural, automobiles and accessories, banking, commercial and services, construction and allied, energy and

petroleum, insurance, investment, manufacturing and allied and telecommunication and technology sectors (<u>www.nse.co.ke</u>) The instruments traded were Equities, Preference shares, Treasury Bonds and Corporate Bonds. The area of concern for the study will be the MIMS which trade in equities.

#### **1.2 Research Problem**

As a result of a series of high- profile cases of corporate collapses worldwide among them Enron and WorldCom in the US, Marconi in the UK and Royal Ahold in the Netherlands, there has been an exponential increase in the amount of laws, rules and guidelines setting in place a heightened standard of corporate governance best practice (McConvill, 2005). Cases of corruption in Kenya have attracted lively debates in many legal and business sectors which have in result shaken both local and foreign investor confidence (Manyuru, 2005). According to (Ogoye, 2002) the increasing numbers of corporate failures and financial scandals have been caused by incompetence, fraud and abuse of office by the agents running the corporations.

In Kenya, cases where managers and directors have been accused of poor corporate governance resulting to corporate scandals include the collapse of Euro Bank in 2004, the placement of Uchumi Supermarkets under receivership in 2004 due to mismanagement, the near collapses of Unga Group, National Bank of Kenya and more recently Board room wrangles and the discovery of secret overseas bank accounts for siphoning company money by some directors at CMC Motors (Madiavale, 2011). The recently publicized huge losses and numerous unresolved disputes resulting to court cases by Kenya Airways and Kenol Kobil have also thrust corporate governance practices into the spotlight. Kenyan companies need to integrate ethics into their corporate culture and concentrate on putting appropriate corporate

governance mechanisms in place.

This further encourages the effective disclosure of information allowing investors to analyze financial markets and make informed decisions (Mwangi, 2009). Hendrikse (2004) states that the corporate failures witnessed recently confirmed that many directors put their own interests before those of the company and shareholders. In response the regulators have continuously spelt guidelines and regulations to ensure that there is prudential management in the organizations. This is in recognition that prior to 2002, poor management was one of the factors pointed out to be contributing to serious liquidity problems and collapse of public organizations in Kenya.

Internationally, there are studies in corporate governance and earnings management. These include Alghamdi (2012) who studied investigation into earnings management practices and the role of corporate governance and external audit in emerging markets from Saudi listed companies. Similarly, Jesus and Emma (2013) studied whether corporate governance influenced earnings management in Latin American markets.

Locally, there are many studies in corporate governance though none has focused on its relationship or effects to earnings management. Most studies have concentrated on profitability as a measure of financial performance and the effects of corporate governance to performance to various sectors of the economy. A few studies among them Kaboyo (2013) and Irungu (2010) have looked at the factors motivating earnings management and the relationship between macro economic variables and earnings management for listed firms at the NSE. Unlike most corporate governance studies, this study focused on the control aspect of corporate governance rather than the performance enhancing aspect. The study focused on a study period when managers in Kenya had an incentive to manage earnings due to the effect of macroeconomic factors in the country e.g. general election in 2013, interest rate escalation in 2011/2012 and foreign exchange depreciation in 2011. The research was guided by the question: Is there a relationship between corporate governance and earnings management for quoted companies at the NSE?

#### 1.3 Objectives of the Study

To establish the relationship between corporate governance practices and earnings management for companies quoted at the NSE.

#### **1.4 Value of the Study**

The study sort to create more awareness on the need for elaborate corporate governance practices in quoted companies at the NSE so as to reduce chances of opportunistic earnings management by management of these companies.

The empirical results would also provide general indicators of corporate governance useful for both the regulators such as CMA, NSE, CBK, KRA and the Registrar of Companies that would form key input in preparing new legislation and improved regulatory framework touching on governance.

To the shareholders of companies, the study was intended to sensitize them on the importance of ensuring that the board of directors' practices good corporate governance for the sake of maximizing their share value by appreciating board activities in relation to the quality of earnings reported.

The study was also expected to contribute to the existing body of academic knowledge through publishing the results of its key findings, as well as opening up areas of further research.

#### **CHAPTER TWO: LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter reviews the theories of Corporate Governance and Earnings management. The empirical evidence on the relationship between corporate governance and earnings management of a firm is outlined. Literature review is the analysis of the existing knowledge on a particular line of study. It focuses on the existing studies done by other scholars and researchers and provides some basic knowledge of the research topic.

#### 2.2 Theoretical framework

#### 2.2.1 Agency Theory

Agency theory (also known as contracting cost theory) is forecasted on the doctrine that individual agents choose actions that maximize their personal utility. In the modern corporation, there is a partition between the individuals making decisions that we refer to as managers and people bearing the wealth consequences of those decisions who are regarded as shareholders (David. et al, 1999).

In some situations like fraudulent earning management, managers may opt to undertake deeds that are not in preferences of shareholders. Agency Theory forecast about managerial functions and corporate diversification strategies. If managers obtain private benefits from broader horizons that exceed their private costs, agency theory forecast that managers will still maintain a diversification plan even if doing so decreases shareholders wealth (David. et al, 1999). Agency Theory which is the contract between the owners of financial resources (the principals) and managers (the agents) who are mandated with using and controlling that wealth is based on the reality that agents have more information than principals and that this information asymmetry adversely affects the principals' ability to monitor effectively whether their interests are being properly served by agents (Michael, 2003). Adverse selection may occur when the principal / owner(s) does not have access to all available information at the time a decision is made by a manager and is thus unable to determine whether managers' actions are in the best interest of the firm (Scapens, 1985). Agency Theory is also based on hypothesis that principals and agents act rationally and that they will use the contracting route to maximize their wealth (Michael, 2003). This means that because agents have self-seeking motives, they are likely to take the opportunity to act against the interests of the owners of the firm for example partaking unwarranted high perquisite consumption. Scapens (1985) refers to this dilemma as the "moral hazard" problem.

Earnings management is by and large practiced by senior management in a company. It means that because managers who are the agents have personal interest, there is a possibility for them to take the opportunity to act against the interest of the owners of the firm. Managers may sometimes not act in the best interest of shareholders when the control of company is different from its ownership (Livia et al., 2007). Livia further states that managers can be 'satisfiers' rather than 'maximisers' that is, they play it safe and look for a suitable level for growth because their main concern is to perpetuate their own existence rather than maximizing the value of the firm for its shareholders. Shareholders hands over the decision making authority to the agent (CEO) with trust that the agent will act in their best interests.

An inclusive theory about agency theory by Jensen and Meckling (1976) indicated that the principals who are the company owners can comfort themselves that the agent will make the most favourable decisions only if appropriate incentives and rewards are given and only if the agent is watched. Incentives involves things like stock options, bonuses and many other benefits which are related with how fine the results of management's decisions serve the interests of shareholders.

Scapens (1985) argues that a state of efficiency, or "pareto-optimality" exists in the contracting relationship between principal / owners and agent / managers when neither party can enhance their wealth at the pareto-optimality in the contracting process, then both the principals and agents must incur contracting expenses such as monitoring expenditure incurred by the principal to subject financial statements to external audit scrutiny and also undertake regular checks of management perquisites and inserting limits on management decisions. Agents on the other hand incur bonding costs such as the cost of internal audit, in order to signal to principal / owners that they are acting responsibly and in a manner consistent with their contract of employment. Such action also helps managers to secure their positions in the firm and protect their salaries (Rutto, 2011).

The essential concern of corporate governance also arises from the separation of ownership and control in modern organizations. This is the essence of the agency problem, as articulated by early scholars like Berle and Means (1932) and Jensen and Meckling (1976). It's in this context that responsibility for control is vested in the board and management, the shareholders' agents. The boards' meet a few times each year but in turn appoints management (as their agents) headed by the chief executive officer to manage the organization.

#### 2.2.2 Stakeholder Theory

The stakeholder theory takes account of a wider group of constituents rather than focusing on shareholders. A consequence of focusing on shareholders is maintenance of shareholder wealth as paramount, whereas when a wider stakeholders group such as employees, providers of credit, customers, suppliers, government and local authority is taken into account the overriding focus on shareholder value becomes less evident. This means that the shareholders have vested interest in trying to ensure that the resources are used to maximum effort which in turn should be to benefit the society as a whole (Madiavale, 2011).

Jensen (2001) argued that the proponents of the stakeholders' theory decline to specify how to make the necessary trade off among these competing interests, leaving managers with a theory that makes it impossible for them to make purposeful decisions. With no way to keep count, stakeholder theory makes managers unaccountable for their actions. It would seem the theory would be attractive to the self-interest of managers and directors and encourages earnings management by agents / managers.

Jensen (2001) therefore advocates enlightened value maximization which he says is identical to enlightened stakeholder theory. He states that enlightened value maximization utilizes much of the structure of stakeholder theory bur accepts maximization of the long run value of the firm as the criterion for making prerequisite tradeoffs among its stakeholders and therefore solves the problems that arise from multiple objectives that accompany the traditional stakeholder theory.

#### 2.2.3 Stewardship Theory

It is a requirement in Kenyan Company Law (Cap 486) that directors show a fiduciary duty towards the shareholders of the company. This means that the directors having a fiduciary duty can then be trusted and will act as stewards over the resources of the company. Therefore directors' duties are based on the stewardship theory.

Stewardship theory is an alternative view of agency theory, whereby managers, left on their own, will indeed act as responsible stewards of the assets they control. It stresses the beneficial consequences on shareholder returns if facilitative authority structures which unify command are put in place by having roles of CEO and chair held by the same person (CEO Duality) (Davis & Donaldson, 1997).

Stewardship theory does not put the manager under control of owners, it empowers managers to take autonomous executive action. As the name suggests, a steward is one who protects and maximizes shareholders wealth through firm performance, because by so doing, the steward's utility functions are maximized (Davis & Donaldson, 1997).

Contrary to agency theory's pessimistic assumptions about the self-interested and selfserving motives of executives, stewardship theory suggests the potential for what it calls the 'pro-organizational' motives of directors. What drives performance here is not the aligned greed of an executive but their personal identification with the aims and purposes of the organisation(Davis & Donaldson, 1997).

Stewardship theory refutes the assumption that executive aims and motives are opposed to those of the shareholder; both, it insists, have an interest in maximising the long-term stewardship of a company and are therefore already well aligned. From this stewardship theory suggests the potentially negative impact of a division of responsibilities between a chairman and chief executive. The roles, it suggests, should remain combined in order to protect a key aspect of high performance; the strength and authority of executive leadership. The implication for this study is to determine the effects of CEO duality to earnings management and discretionary accrual.

#### 2.2.4 The Big Bath Theory of Earnings Management

The big bath theory of earnings Management suggests that firms experiencing low earnings in a given year may take discretionary write downs to reduce even further the current period's earnings. The notion is that companies and their management may not be punished proportionately more for the big hit, if it takes to its already depressed earnings. This "clearing of the decks" makes it easier to generate higher profit in the later years (Dye, 1986).Good corporate governance practices have the implication of monitoring management's desire to deliberately overstate a company's losses in a given year so as to absorb itself from foreseeable losses in subsequent years.

Dye (1986) notes that management has two primary reasons to manage or manipulate earnings. One is an external demand to meet earnings forecasts and increase share price; the other represents an internal demand relating to optimal contracting. Earnings allow managers to communicate with their principles (e.g. BODs) concerning the level of their performances. Regarding the external demand to meet their earnings forecast, Chenheiter and Melumad (2002) note that, ceteris paribus, investors presume a higher level of permanent cash flow from a higher level of reported earnings. Since increasing cash flow translates into higher share price and earnings are perceived to be a surrogate of cash flow, higher earnings increase the value of the firm.

Managing earnings through big bath charges follow a different, yet simple, line of reasoning because earnings are made to look worse, at least in the current period. Henry and Schmitt (2001) noted that a company will take a large non-recurring loss one year, typically when the profit are already depressed, so that future earnings are not burdened. The result is either increased future earning or reduced variability of future earnings. The notion is that, when things are already bad (i.e. depressed earnings), making them worse by clearing out rubbish does little harm to the company's or management's reputation. The market punishes a firm relatively the same whether it misses its earnings mark by a modest or by plenty.

Although the big bath theory has been espoused in the accounting literature for years, little empirical testing of its presence exist. A few studies examined big bath charges on the periphery or as an aside to their main topic of earnings management in general.

For example Cameron and Stephens (1991) while examining the impact of nonrecurring items on the predictive ability or variability of earnings, found that these items are not used to smooth earnings but instead appear to be used more consistently with the big bath theory. Bauman et al. (2001) examined earnings management in relation to the discretionary adjustment associated with the valuation allowance for differed tax asset and found virtually no evidence in support of earnings management. Debt-holders have an incentive to monitor managerial performance to assess the risk of the firm (Legoria et al., 1999).

#### 2.3 Measures of Corporate Governance and Earnings Management

#### 2.3.1 Corporate Governance

Previous studies by Bugshan (2005), Jesus and Emma (2013), Xie et al. (2003), Lopez and Saona, (2005) and Cespedes et al. (2008) among others identified various variables of corporate governance and their measures were applied as follows; Ownership Concentration - Measured by proportion of ownership held by the main shareholder of institutional nature of the quoted company. Board Size is measured by the total number of directors in the board. Board Independence is measured by the proportion of non executive directors inside the board (non executive directors / total directors).

Board Activity is measured by number of board meetings held during the year.

CEO Duality is measured by a dummy value of 1 of the company CEO also pairs up as the Board Chair and 0 if otherwise. Internal ownership is measured by the proportion of shares greater than 1 % owned by members of Board of Directors and managers of the firms; Family ownership is measured by the proportion of shares held by family members. Institutional ownership is measured by the proportion of shares held by institutional investors.

Board activity is measured by the number of meetings held during the year. Control variables that have been associated with earnings management and corporate governance have also been included in these studies. They include; Debt Reliance measured as the ratio of total debt and total assets. Firm size measured by the natural logarithm of total assets at the end of year. Indebtedness level variable (Debt), calculated as the ratio of total debt and total assets. Growth measured in terms of the

relation of the difference in sales and sales of the previous period for firm in year under review. Return on Assets (ROA), calculated by the ratio between earnings before interest and taxes of year under review and the total net assets at beginning of year under review.  $\varepsilon$ : Standard Error term

#### 2.3.2 Earnings Management

Previous studies on earnings management by Xie et al. (2003) and Jesus and Emma (2013) were based on the Dechow et al. (1995) modification of the cross-sectional Jones discretionary accruals model and computed discretionary accruals as follows:

#### Equation 1: Total Accrual (TA) using the Cash flow approach.

 $TA = EBXA_t - OC_t$ 

Where TA = Total accruals, =  $EBXA_t = Earnings$  before extraordinary and abnormal items in year t,  $OC_t = Operating$  cash flow in year t

#### Equation 2: Cross – sectional Jones (1991) non-discretionary accruals model

 $TA_{j,g}/A_{j,g} = \alpha 0 (1/A_{j,g}) + \alpha 1 (\Delta REV_{j,g}/A_{j,g}) + \alpha 2 (PPE_{j,g}/A_{j,g})$ 

Where TA = Total accruals A = Beginning of year total assets  $\Delta REV = Change$  in net revenue PPE = Property, plant, and equipment j = denote firm from g industry group g = denote industry group

Equation 3: Dechow et al. (1995) modification of the cross-sectional Jones nondiscretionary accruals model

 $TA_{j,g}/A_{j,g} = \gamma 0 (1/A_{j,g}) + \gamma 1 ((\Delta REV_{j,g} - \Delta REC_{j,g})/A_{j,g}) + \gamma 2 (PPE_{j,g}/A_{j,g})$  where  $\Delta REC$  is the change in accounts receivables.

# Equation 4: Dechow et al. (1995) modification of the cross-sectional Jones discretionary accruals model

 $AA_j = TA_j/A_j - [\gamma^0 (1/A_j) + \gamma^1 ((\Delta REV_j - \Delta REC_j)/A_j) + \gamma^2 (PPE_j/A_j)]$  where  $\gamma^0$ ,  $\gamma^1$ , and  $\gamma^2$  are the fitted coefficients from equation (2) and  $AA_j$  = Discretionary Accrual (Earnings Management).

Dechow et al (1995) also assessed the ability of five accrual models to detect earnings management and found that the modified Jones Model is the most powerful in detecting earnings management in a sample of firms the SEC identified for overstating earnings. The evidence in Guay et al. (2006) suggests that only the Jones and modified Jones models produce abnormal accruals that are distinguishable from a random decomposition of earnings and thus consistent with abnormal accruals resulting from managerial decisions to increase and /or smooth income. Moreover, Bernard and skinner (2006) argue that Jones – type Model abnormal accruals systematically misclassify normal accruals as abnormal. Thus, current evidence suggests that accrual variables poorly measure the discretion managers' exercise to manage earnings.

#### **2.4 Empirical Literature**

Numerous studies have looked at the implications of corporate governance structures on firm earning management. Although the literature is not unanimous in its conclusions, there is clear evidence supporting the opinion that there is a significant relationship between governance structures and earnings management. Firms which implement sound corporate governance systems provide more useful information to investors and its stakeholders to reduce information asymmetry as well as to help the company improve its operations (Hsiang-tsai et al. 2005).

According to a survey by McKinsey & Company (2002), in 2002, 78 % of professional investors in Asia said they were willing to pay a premium for a well governed company. The average premium these investors were willing to pay ranged from 20% to 25%. Many scholars have attempted to investigate the relationship between good governance and earnings management in a more rigorous way.

Several studies document a significant relation between the characteristics of the board of directors and the integrity of accounting information (Rahman and Ali 2006; Patelli and Prencipe 2007; Hashim and Devi 2008). Some other studies analyze the effect of the internal ownership and shareholding concentration held by major shareholders on the quality of financial results (Lefort, 2005; Kim and Yi, 2006; Price et al. 2006). All these studies relate mainly to Anglo-Saxon countries, where outside investors are well-protected by the legal system (e.g., United States, United Kingdom), the level of transparency is high and most listed firm' present widely held ownership structures.

Empirical studies have been conducted on the effect of ownership structure on earnings management as an internal control mechanism that focuses on the aspects that define the ownership of the company and refers to the manner in which titles or rights of representation redistribute the capital of the company in one or more individuals or legal entities. The monitoring power derived from the ownership structure results in a kind of control exercised over the company and, particularly, over the top management team. Previous empirical studies mainly focused on the effect of insider ownership on the Earnings Management (Sanchez-Ballesta and Garcia-Meca, 2007; Teshima and Shuto, 2008), along with ownership concentration (measured by the fraction of ownership held by major shareholders or by the proportion of ownership held by the main shareholders of the firm) (De Miguel et al., 2004; Boubraki et al., 2005). However, Demsetz and Villalonga (2001) affirm that in order to treat ownership structure appropriately and to account for the complexity of interest represented in a given ownership structure, different dimensions of ownership structure must be considered.

Jesus and Emma (2013) investigated the relationship between corporate governance and earnings management in Latin American countries of Argentina, Brazil, Chile and Mexico from 2006 to 2009. Information was obtained for 435 firms and a total of 1740 observations were made. Descriptive analysis was used combining also regression analysis, time series and cross sections. Earnings management was measured using modified version of Jones as proposed by Dechow et al. (1995). They tested the effect of various corporate governance variables on earnings management e.g. ownership structure (namely internal ownership, ownership concentration, family ownership and institutional ownership), board of directors (board size, board independence, board activity), CEO duality and government index. The findings were that insider shareholding, ownership concentration, institutional investors, board independence, a greater number of board meetings negatively affects earnings management while family ownership, board size positively affects earnings management. The existence of concentration of power (CEO duality) increases earnings management while a country with higher levels of governability shows a lower level on earnings management practices (Jesus and Emma, 2013).

Abdullah and Norman (2010) sort to examine the effect of board structure, ownership structure, adviser structure and capital structure on discretionary current accruals – a proxy for earnings management for a sample of size-controlled rights issuers. Rights issues are basically chosen as a context in which firms have particular incentives to manage earnings. The results suggested that firms with higher debt to equity ratios, with lower proportions of non-executive directors, or with no large block owner are more likely to use discretionary current accruals to manipulate earnings around rights issue.

Leuz et al. (2003) examined using descriptive statistics systematic differences in earnings management across 31 countries. They proposed an explanation for these differences based on the notion that insiders, in an attempt to protect their private control benefits, use earnings management to conceal firm performance from outsiders. Therefore, earnings management was expected to decrease investor protection because strong protection limits insiders' ability to acquire private control benefits, which reduces their incentives to mask firm performance. The variables were computed from 70,955 firm-year observations for fiscal years 1990 to 1999 across 31 countries and 8,616 non-financial firms. By applying rank regression and two-stage least squares method, their findings were consistent with their prediction and suggested an endogenous link between corporate governance and the quality of reported earnings.

Dhaliwal, et al. (2002) investigated whether firms use income tax accruals as an earnings management tool when free pretax earnings fall short of market earning

expectations. They found that as the difference between analyst forecasts and premanaged earnings increases, fourths quarter effective tax rates decrease relative to third quarter effective tax rate. This finding is consistent with earnings management using total income tax expense.

Chen, et al. (2004) showed that the effect of good corporate governance on expected returns is more profound for firms with higher free cash flows but poor investment opportunities and for firms with lower insider ownership, consistent with agency costs of free cash flows as proposed by Jensen and Mecling (1976).

Locally Aduda, Chogii & Magutu (2013) investigated the importance of the board composition variables of proportion of non executive directors, proportion of executive directors, size of the board, and the role of CEO duality on firm performance for actively trading companies at the NSE between 2004 to 2007. Regression analysis and Tobin Q ratio were applied on the secondary data. The findings of the study were that overall regression models for the firm performance for both the Return on assets and Tobin Q ratio were significant. Therefore board composition variables cited above were important predictors of firm performance. The study also found that the significance of the individual variables in the overall specification models have differing significant variables on the basis of the measure of performance selected for the firm

#### **2.5 Summary of Literature Review**

The mixed results of various empirical studies indicate that corporate governance may play a role other than enhancing firm performance. Agency theory suggests a direct relation between effective monitoring of management and reduced costs of dysfunctional behaviour, rather than a direct increase of performance (Jensen and Meckling, 1976). Hence, corporate governance may act as an assurance to shareholders on the reliability of information provided by managers. Most studies that have corporate governance attributes to be significant have focused on its role in reducing agency costs and aligning managers' interests with the shareholders'.

Agency theory is the basis behind numerous literatures on corporate governance and earnings management. All stakeholders however should be considered in firm decisions and information content released from firms should have integrity and be useful to intended users. Voluntary disclosure of information should be encouraged. Corporate governance's primary objective is not to directly improve corporate performance, but to resolve agency problems by aligning management's interests with the interests of shareholders (Maher and Andersson, 2000).

Gaps in literature include lack of clear empirical literature on earnings management on companies quoted at the N.S.E in Kenya and lack of a literature on corporate governance practices affecting earnings management in Kenya by company managers. The study sort to provide such literature.
## **CHAPTER THREE: RESEARCH METHODOLOGY**

# **3.1 Introduction**

This chapter discusses the research design, the description of the study population, the sampling procedures, data collection procedures, data collection instrument, data analysis and the limitation of the study.

#### 3.2 Research Design

In order to look at the corporate governance practices and their associations or relationship with earning management by quoted companies at the NSE, this study adopted a descriptive research design. Descriptive research or study is one in which information is collected without changing the environment sometimes referred to as "correlational" or "observational" studies. Descriptive study was preferred for this study because it demonstrated associations or relationships between corporate governance practices and earnings management. It was a longitudinal study on the selected companies over three years.

#### **3.3 Population and Sample**

Target population in statistics is the specific population about which information is desired. According to Mugenda and Mugenda (2003), a population is a well-defined set of people, services, elements, and events, group of things or households that are being investigated. Although there are 61 currently quoted companies at the NSE, the target population consisted of the 49 companies that had been continuously and actively trading at the NSE between January 2010 and December 2012. The study adopted a census study approach due to the small population selected. (Appendix I)

#### **3.4 Data Collection Method and Instruments**

The study used secondary quantitative data to analyze the relationship between corporate governance and earnings management. Secondary data was obtained by abstraction method from corporate governance statements and financial statements for the 49 companies covered as they were published by NSE. This data covered the period 2010 to 2012. The data was collected from the published results of the selected companies and included the number of directors, number of meetings held in each study year, major shareholders' composition, proposition of executive and non executive directors in the board and CEO duality status while financial data included total assets, net revenue, accounts receivables, cash flow from operations and property, plant and equipment.

#### **3.5 Data Analysis**

Descriptive analysis was used (means scores and percentages) to analyse the extent of board independence. The data collected was analyzed using linear regression and correlation analysis to test the relationship between the dependent variable Discretionary Accruals as an earnings management tool and specific corporate governance variables assumed to fit the NSE. The regression results were interpreted based on the Pearson correlation, R-squared, adjusted R-squared, Test of significance using F statistic through the Analysis of Variance (ANOVA), coefficients of the independent variables and their p-values.

The measure of discretionary accrual (Earnings Management tool) used in my research was as applied previously by Jesus and Emma (2013) based on the Dechow et al. (1995) modification of the cross-sectional Jones discretionary accruals model as

follows:-

# Equation 1: Total Accrual (TA) using the Cash flow approach.

 $TA = EBXA_t - OC_t$ 

Where TA = Total accruals, =  $EBXA_t = Earnings$  before extraordinary and abnormal items in year t,  $OC_t = Operating$  cash flow in year t

#### Equation 2: Cross – sectional Jones (1991) non-discretionary accruals model

 $TA_{j,g}\!/A_{j,g} = \alpha 0 \ (1/A_{j,g}) + \alpha 1 \ (\Delta REV_{j,g}\!/ A_{j,g}) + \alpha 2 \ (PPE_{j,g}\!/A_{j,g})$ 

Where TA = Total accruals A = Beginning of year total assets  $\Delta REV = Change$  in net revenue PPE = Property, plant, and equipment j = denote firm from g industry group g = denote industry group

# Equation 3: Dechow et al. (1995) modification of the cross-sectional Jones nondiscretionary accruals model

 $TA_{j,g}/A_{j,g} = \gamma 0 (1/A_{j,g}) + \gamma 1 ((\Delta REV_{j,g} - \Delta REC_{j,g})/A_{j,g}) + \gamma 2 (PPE_{j,g}/A_{j,g})$  where  $\Delta REC$  is the change in accounts receivables.

Equation 4: Dechow et al. (1995) modification of the cross-sectional Jones discretionary accruals model

$$EM_j = TA_j/A_j - [\gamma^0 (1/A_j) + \gamma^1 ((\Delta REV_j - \Delta REC_j)/A_j) + \gamma^2 (PPE_j/A_j)]$$
 where  $\gamma^0$ ,  
 $\gamma^1$ , and  $\gamma^2$  are the fitted coefficients from equation (2) and  $EM_j$  = Discretionary  
Accrual (Earnings Management).

#### The Regression equation was modeled as follows;

E.M= $\beta 0 + \beta 1 (X_1) + \beta 2 (X_2) + \beta 3 (X_3) + \beta 4 (X_4) + \beta 5 (X_5) + \epsilon$ 

Where-:

E.M is the discretionary accrual variable representing Earnings Management.

 $\beta$  represents the parameters for each variable.

 $\beta$  1 (X<sub>1</sub>) : Ownership Concentration is measured by proportion of ownership held by the main shareholder of institutional nature of the quoted company.

 $\beta$  2 (X<sub>2</sub>) : Board Size is measured by the total number of directors in the board.

 $\beta$  3 (X<sub>3</sub>) : Board Independence is measured by the proportion of non executive directors inside the board (non executive directors / total directors).

 $\beta$  4 (X4) : Board Activity is measured by number of board meetings held during the year.

 $\beta$  5 (X<sub>5</sub>) : CEO Duality is measured by a dummy value of 1 of the company CEO also pairs up as the Board Chair and 0 if otherwise.

 $\boldsymbol{\epsilon}$ : Standard Error term.

The Statistical Package for Social Sciences (SPSS) 20<sup>th</sup> version aided in the analysis.

# CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

# **4.1 Introduction**

This chapter presents analysis and findings of the research. The objective of this study was to establish the relationship between corporate governance practices and earnings management for companies quoted at the NSE. The data sources included financial statements, annual statements for a period of 3 years (2010-2012) as well as internet resources, and publications.

# **4.2** Analysis and interpretations

# 4.2.1 Descriptive statistics analysis and interpretations

	2010	2011		2012		
	Mean	Std. Deviatio n	Mean	Std. Deviatio n	Mean	Std. Deviation
Earnings management	.18145	1.244	.1891	1.17358	.1971	1.72544
Ownership Concentration	.7386	.31873	.7886	.32125	.7545	.43310
Board Size	6.1721	1.902	6.3108	1.0827	6.5435	1. 973
Board Independence	.8499	.12384	.8327	.13366	.8204	.13789
Board Activity	.1019	.10288	.0936	.08447	.1060	.15033
CEO Duality	.1823	.25012	.18790	.24907	.1982	.27673

# Table 4.1: Descriptive statistics

Source: Research, (2013)

From the findings in table 4.1, averages for earnings management for the 49 responding companies was extracted from the financial and annual statements reflects an upward increase over the 3year period, with the highest being 0.1971 in 2012. In addition, the

means of board size show that larger boards are associated with low magnitudes of Earnings management.

#### **Table 4.2: Normality test results**

	Tests of Normality <sup>b</sup>							
	Kolmogor	rov-Smirno	va <sup>a</sup>	Shapiro-Wilk				
	Statistic	df	Sig.	Statistic	df	Sig.		
Earnings Management (E.M)	.385	3	.200*	.750	3	.599		

# Source: Research, (2013)

a. Lilliefors significance correction

\* This is a lower bound of the true significance

b. Ownership Concentration (proportion of ownership), Board Size (number of directors), Board Independence (proportion of non executive directors), Board Activity (number of board meetings held), CEO Duality

From the findings in table 4.2, the Shapiro-Wilk test is analyzing the normality of Earnings Management on the data of independent variables (Ownership Concentration, Board Size, Board Independence, Board Activity, CEO Duality). As the **Sig.** value under the Shapiro-Wilk column is greater than 0.05 we conclude that Earnings Management for this set of variable is normally distributed.

#### **Figure 4.1 Normality test results**





Source: Research, (2013)

The same data from the variables are also analyzed to produce a Normal Q-Q Plot above. From the graph in figure 4.1 above we can conclude that the data appears to be normally distributed as it follows the diagonal line closely and does not appear to have a non-linear pattern.

	Ownership Concentration	Board Size	Board Independence	Board Activity	<b>CEO Duality</b>	Earnings Management
Ownership Concentration						
p-Values	1					
Board Size						
p-Values	.35**	1				
Board Independence <b>p-Values</b>	.34**	0.31	1			
Board Activity						
p-Values	.46**	0.64	0.5	1		
CEO Duality						
p-Values	.43**	0.46	0.5	0.47	1	
Earnings Management						
p-Values	.35**	.38**	.40**	.42**	.56**	1

#### Table 4.3: Correlation and the coefficient of determination

#### Source: Research, (2013)

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

From the findings in table 4.3, it is clear that there is a positive correlation between Ownership Concentration and Earnings Management as shown by a correlation figure of 0.35 (P-value < 0.05), it was also clear that there was a positive correlation between Board Size and Earnings Management with a correlation figure of 0.38 (P-value < 0.05), it was also clear that there was also a positive correlation between Board Independence and Earnings Management with a correlation value of 0.40 (P-value < 0.05), between Board Activity and Earnings Management with a correlation value of 0.42 (P-value < 0.05), it was also clear that there was also a positive correlation value of between CEO Duality and Earnings Management with a correlation value of 0.56 (Pvalue < 0.05). This shows that the predictor variables Ownership Concentration, Board Size, Board Independence, Board Activity and CEO Duality positively influence Earnings Management.

# **4.3 Regression Analysis**

Regression analysis is the statistical technique that identifies the relationship between two or more quantitative variables: a dependent variable, whose value is to be predicted, and an independent or explanatory variable (or variables), about which knowledge is available. The technique is used to find the equation that represents the relationship between the variables. Multiple regressions provide an equation that predicts one variable from two or more independent variables.

Regression analysis is used to understand the statistical dependence of one variable on other variables. The technique can show what proportion of variance between variables is due to the dependent variable, and what proportion is due to the independent variables. The relation between the variables can be illustrated graphically, or more usually using an equation. The study adopted simple regression guided by the following model:

$$Y = \beta 0 + \beta 1 (X_1) + \beta 2 (X_2) + \beta 3 (X_3) + \beta 4 (X_4) + \beta 5 (X_5) + ε$$

Where:-

Y= is the dependent variable representing Earnings Management (EM).

 $(X_1)$ : Ownership Concentration is measured by proportion of ownership held by the main shareholder of institutional nature of the quoted company.

 $(X_2)$ : Board Size is measured by the total number of directors in the board.

(X<sub>3</sub>): Board Independence is measured by the proportion of non-executive directors inside the board (non-executive directors / total directors).

(X4): Board Activity is measured by number of board meetings held during the year.

 $(X_5)$ : CEO Duality is measured by a dummy value of 1 of the company CEO also pairs up as the Board Chair and 0 if otherwise.

ε: Standard Error term.

**Table 4.4 Model Summary** 

Model				Std. Error of the
	R	R Square	Adjusted R Square	Estimate
1	.837 <sup>a</sup>	.7005	.667	.23655

Source: Research, (2013)

a. Predictors: Ownership Concentration, Board Size, Board Independence, Board Activity and CEO Duality

From table 4.4, the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R Square equals 0.7, that is, aggregate Earnings Management explain 70 percent of Ownership Concentration, Board Size, Board Independence, Board Activity and CEO Duality.

# Table 4.5: ANOVA

Model		Sum of		Mean		
		Squares	df	Square	F	Sig.
1	Regression	3	5	.331	5.911	.003 <sup>a</sup>
	Residual	49	40	.056		
	Total	52	45			

# Source: Research, (2013)

a. Predictors: (Constant), Ownership Concentration, Board Size, Board Independence, Board Activity and CEO Duality

b. Dependent Variable: Earnings Management

In table 4.5, the significance value of the F statistic is 0.003 indicating the predictor variable (Aggregate Earnings Management) explains a variation in Ownership Concentration, Board Size, Board Independence, Board Activity and CEO Duality and that the overall model is significant.

#### **Table 4.6: Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	-5.08	-5.23		-6.16	0.048
1	Ownership Concentration	-5.53	.010	.140	-5.53	.002
	Board Size	42	.075	.091	517	0.01
	Board Independence	-6.94	1.027	.110	-7.37	.000
	Board Activity	.020	.060	.051	.321	.004
	CEO Duality	2.98	.476	.039	2.33	.001

Source: Research, (2013)

# $Y{=}-5.08{-}5.53X_{1}{-}0.42\ X_{2}{-}6.94\ X_{3}{+}0.020\ X_{4}{+}2.98\ X_{5}$

where Y= Earnings Management

B0= intercept (defines value of Earnings Management without inclusion of predictor

variables)

X1= Ownership Concentration

X2= Board Size

X3= Board Independence

X4= Board Activity

X5= CEO Duality

Table 4.6 present results of the simple linear regression of Aggregate Earnings Management on Ownership Concentration, Board Size, Board Independence, Board Activity and CEO Duality. From the findings, the coefficients of aggregate Earnings Management is negative and significant, indicating that holding Ownership Concentration, Board Size, Board Independence, Board Activity and CEO Duality constant Earnings Management will be -5.08. The study also found that a unit increase in ownership concentration will cause a 5.53 decrease in earnings management, further a unit increase in board size will lead to a decrease in earnings management by 0.42, a unit increase in board independence will lead to an decrease in earnings management by a factor of 6.94, a unit increase in board activity will lead to an increase in earnings management by a factor of 0.020 and a unit increase in CEO Duality will further lead to an increase in earnings management by a factor of 2.98.

#### **4.4 Discussion of the Findings**

From the findings, averages for earnings management for the 49 responding companies was extracted from the financial and annual statements reflects an upward increase over the 3year period, with the highest being 0.1971 in 2012. From the findings, it is clear that there is a positive correlation between Ownership Concentration and Earnings Management as shown by a correlation figure of 0.35 (P-value < 0.05), it was also clear that there was a positive correlation between Board Size and Earnings Management with a correlation figure of 0.38 (P-value < 0.05), there was also a positive correlation between Board Independence and Earnings Management with a correlation value of 0.40 (P-value < 0.05), between Board Activity and Earnings Management with a correlation value of 0.42 (P-value < 0.05), there was also a positive correlation between CEO Duality and Earnings Management with a correlation value of 0.56 (P-value < 0.05). This shows that the predictor variables Ownership Concentration, Board Size, Board Independence, Board Activity and CEO Duality positively influence Earnings Management. The findings are in line with Guay et al. (2006) suggests that only the Jones and modified Jones models

produce abnormal accruals that are distinguishable from a random decomposition of earnings and thus consistent with abnormal accruals resulting from managerial decisions to increase and /or smooth income. Moreover, Bernard and Skinner (2006) argue that Jones – type Model abnormal accruals systematically misclassify normal accruals as abnormal. Thus, current evidence suggests that accrual variables poorly measure the discretion managers' exercise to manage earnings. According to our findings, duality is the other corporate governance index that is significantly related to the earnings management. That is, if the CEO is a board chair, the likelihood will be that earnings management will increase.

The findings suggest that the presence of block holders could effectively monitor the management to avoid opportunistic behaviour of the management including earnings management, the study result are consistent with the findings of Demsetz and Lehn, (1985) Stiglitz, (1985).

The findings show that board independence is negatively related to earnings management. That is, adding outside directors to the board may improve in governance practices and they are helpful to the board in monitoring the firm's management of earnings consistent with the findings of Beasley's (2006), Peasnell et al. (2000), Klein (2002), Kao and Chen (2004).

The study finds a positive and significant relation between CEO dominance and earnings management consistent with the findings of Dechow et al. (2006), Finkelstein and D'Aveni (2003) and Anderson et al. (2003).

The negative association between board size and the empirical indicator of earnings management is similar to the findings of Xie et al. (2003) and Chtourou et al. (2001).

They found that larger boards are strongly associated with lower levels of earnings management. The findings of the study support John and Senbet's (2007) argument that an increase in board size increases the board's monitoring capacity.

The current study supports the view that the significance of corporate governance is not appreciated unless shareholders react to it. If shareholders respond to corporate governance's improvement to the reliability of earnings, then corporate governance should improve the earnings response coefficients.

# CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### **5.1 Introduction**

From the analysis and data collected, the following discussions, conclusions and recommendations were made. The responses were based on the objectives of the study.

# **5.2 Summary of Findings**

From the findings, the study found that averages for earnings management for the 49 responding companies reflected an upward increase over the 3 year period, with the highest being 0.1971 in 2012. In addition, the means of board size showed that larger boards are associated with low magnitudes of earnings management. The study also conducted a normality test and from the findings, the data appeared to be normally distributed as it followed the diagonal line closely and did not appear to have a non-linear pattern.

From the findings, the study found that there was a positive correlation between ownership concentration and earnings management as it had a correlation figure of 0.35 (P-value < 0.05). The study also found that there was a positive correlation between board size and earnings management as it had a correlation figure of 0.38 (Pvalue < 0.05), it was also clear that there was also a positive correlation between board independence and earnings management with a correlation value of 0.40 (Pvalue < 0.05), between board activity and earnings management with a correlation value of 0.42 (P-value < 0.05), it was also clear that there was also a positive correlation between CEO duality and earnings management with a correlation value of 0.56 (P-value < 0.05). This shows that the predictor variables ownership concentration, board size, board independence, board activity and CEO duality positively influence earnings management.

The study found the following regression equation that relate to earnings management to ownership concentration, board size, board independence, board activity and CEO duality.

#### $Y = -5.08 - 5.53 X_1 - 0.42 X_2 - 6.94 X_3 + 0.020 X_4 + 2.98 X_5$

From the above equation the coefficients of aggregate earnings management is negative and significant, indicating that holding ownership concentration, board size, board independence, board activity and CEO duality constant earnings management will be -5.08, the study also found that a unit increase in ownership concentration will cause a 5.53 decrease in earnings management, further a unit increase in board size will lead to a decrease in earnings management by 0.42, a unit increase in board independence will lead to an decrease in earnings management by a factor of 6.94, a unit increase in board activity will lead to an increase in earnings management by a factor of 0.020 and a unit increase in CEO duality will further lead to an increase in earnings management by a factor of 2.98.

The significance value of the F statistic in the study was 0.003 indicating the predictor variable (Aggregate Earnings Management) explains a variation in Ownership Concentration, Board Size, Board Independence, Board Activity and CEO Duality and that the overall model is significant.

# **5.3 Conclusions**

From the findings, the study concluded that holding ownership concentration, board size, board independence, board activity and CEO duality constant earnings management will be -5.08. Further conclusions were that a unit increase in ownership concentration will cause a decrease in earnings management, a unit increase in board size will lead to a decrease in earnings management, a unit increase in board independence will lead to a decrease in earnings management, a unit increase in board activity will lead to an increase in earnings management and a unit increase in CEO duality will further lead to an increase in earnings management.

The study concluded that earnings management is negatively related to ownership concentration. The study also concluded, that board independence is negatively related to earnings management. In addition the study also concluded that adding outside directors to the board may improve in governance practices and may be helpful to the board in monitoring the firm's management of earnings which implies that investors will rely on the information revealed in the financial statements when there are more outside directors in the board. The study further concluded that CEO duality is the other corporate governance index that is significantly related to the earnings management. That is, if the CEO is board chair, the likelihood of earnings management will increase. This is because CEO duality may reduce the effectiveness of the board and may create a conflict between management and board that may reduce earnings management.

The study concluded that the predictor variable (Aggregate Earnings Management) explained a variation in Ownership Concentration, Board Size, Board Independence, Board Activity and CEO Duality and that the overall model was significant as the value of the F statistic in the study was 0.003.

#### **5.4 Limitation of the Study**

The model may misestimate accruals, because it assumes that all changes in credit sales are the result of an earnings management activity. It also may provide bias accruals, because it omits expenses. Dechow et al. (1995) explain that a weakness of the Jones (1991) model lies in its inability to capture the impact of sales-based manipulations, because Jones (1991) assumes changes in sales are associate with non-discretionary accruals.

The proposed indicators of earnings reliability (i.e. corporate governance and earnings management) may have some limitations. Whilst their use can be theoretically justified, neither construct can be accurately measured empirically.

The literature indicates a high level of measurement error in the accrual models commonly used to detect earnings management. One of the limitations is that earnings management is assumed to be opportunistic rather than informative. Discretionary accruals may reflect either opportunistic behaviour or managerial discretion in providing information that is more relevant. Currently, no clear method exists by which to make this distinction.

If other corporate governance attributes contribute to the integrity of the financial reporting process, then parameter estimates may be biased.

Given that the model is tested using archival data, the data are likely to contain the influences of several factors that are not accounted for in the model. Isolating the impact of the constructs on the market's reaction may prove difficult.

The model applies only to large firms where there is a clear separation between ownership and management.

# **5.5 Recommendations**

#### **5.5.1 Policy Recommendations**

From the findings and conclusions, the study recommends the need for effective corporate governance practices at senior managerial level of quoted companies in Kenya to contribute to reduced earnings management and hence improve on actual firm liquidity and avert possible collapse of public organizations in Kenya.

# 5.5.2 Recommendation for Further Studies

The researcher recommends future researchers to explore earnings management for non-listed companies in Kenya and large family ran private companies in Kenya. The findings would be very useful to the tax authorities in their pursuit to net more taxes and widen the tax base.

Further studies should incorporate several control variables such as firm size and leverage to consider systematic risk affecting the study population.

An opportunity arises for further research in the development of an experiment that would identify how average investors measure earnings management. This is because it is unclear whether investors use abnormal accruals, as measured by aggregate accruals approach, as a representation of earnings management. The complexity of such models suggests that the average investor is unlikely to use this measure.

Further research should be conducted on government ran parastatals and companies that have offered their shares to the public through IPOs or private placements to determine if they have manipulated earnings to attract potential investors.

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# APPENDICES

# **APPENDIX I: INTRODUCTION LETTER**

#### **APPENDIX II: QUOTED COMPANIES IN NAIROBI SECURITIES 2010-2012**

- 1. Kakuzi Limited
- 2. Kapchorua Tea Limited
- 3. Limuru Tea Limited Company
- 4. Rea Vipingo Plantations Limited
- 5. Sasini Limited
- 6. Williamson Tea Kenya
- 7. Car & General Kenya Limited
- 8. CMC Holding Limited
- 9. Marshalls E.A Limited
- 10. Sameer Africa Limited
- 11. Barclays Bank of Kenya Limited
- 12. CFC Stanbic of Kenya Holding Limited
- 13. Diamond Trust Bank
- 14. Equity Bank Limited
- 15. Housing Finance Company Limited
- 16. Kenya Commercial Bank Limited
- 17. National Bank of Kenya
- 18. NIC Bank Limited
- 19. Standard Chartered Bank Limited
- 20. Co-op Bank of Kenya Limited
- 21. Express Limited
- 22. Hutchings Biemer Limited
- 23. Kenya Airways Limited

- 24. Nation Media Group Limited
- 25. ScanGroup Limited
- 26. Standard Group Limited
- 27. TPS EA (Serena) Limited
- 28. Uchumi Supermarket Limited
- 29. Athi River Mining Limited
- 30. Bamburi Cement Limited
- 31. Crown Paints Kenya Limited
- 32. East Africa Cables Limited
- 33. East Africa Portland cement
- 34. KenGen Limited
- 35. KenolKobil Limited
- 36. Kenya Power & Lightning Company
- 37. Total Kenya Limited
- 38. Jubilee Holdings Limited
- 39. Kenya Re Corporation Limited
- 40. Pan Africa Insurance
- 41. Centum Investment Company
- 42. City Trust Limited
- 43. Olympia Capital Holdings Limited
- 44. B.O.C Kenya
- 45. BAT Kenya Limited
- 46. Carbacid Investments Limited
- 47. East African Breweries Limited
- 48. Eveready East Africa Limited

- 49. Kenya Orchards Limited
- 50. Mumias Sugar Company
- 51. Unga Group Limited
- 52. Access Kenya Group Limited
- 53. Safaricom Limited

(Source: Nairobi Securities Exchange website, 2013)

Independent Variables	X1- % Share capital held by the largest shareholder		X2-Total number of directors			X3-Proportion of non executive to total directors			
Independent variables	2010	2011	2012	2010	2011	2012	2010	2011	2012
LISTED COMPANIES									
			20.05	6.00	£ 0.0	<i>c</i> 00	0.45	0.67	0.47
Kakuzi Limited	26.06	26.06	20.06	6.00	6.00	6.00	0.67	0.67	0.67
Limuru Tea Limited Company	52.00	52.00	52.00	3.00	3.00	3.00	0.67	0.67	0.67
Sasini Limited	41.84	41.84	41.84	9.00	9.00	9.00	0.89	0.89	0.89
Williamson Tea Kenya	51.46	51.46	51.46	7.00	7.00	7.00	0.43	0.43	0.43
Car & General Kenya Limited	32.50	32.50	32.50	7.00	7.00	7.00	0.71	0.71	0.71
CMC Holding Limited	68.25	68.25	68.25	8.00	8.00	8.00	0.88	0.88	0.88
Marshalls E.A Limited	65.57	65.57	65.57	8.00	8.00	8.00	0.88	0.88	0.88
Sameer Africa Limited	57.24	57.24	57.24	7.00	7.00	7.00	0.86	0.86	0.86
Barclays Bank of Kenya	68 50	68 50	68 50	8.00	10.00	10.00	0.63	0.70	0.60
CFC Stanbic of Kenya	00.50	00.50	00.50	0.00	10.00	10.00	0.05	0.70	0.00
Holding Limited	41.41	41.41	41.41	7.00	10.00	10.00	0.86	0.80	0.40
Diamond Trust Bank	17.32	17.32	17.32	10.00	10.00	9.00	0.90	0.90	0.89
Equity Bank Limited	24.45	24.45	24.45	12.00	14.00	14.00	0.83	0.79	0.71
Company Limited	24.85	24.85	24.85	7.00	7.00	7.00	0.86	0.86	0.86
Kenya Commercial Bank	17.75	17.64	17.02	11.00	11.00	11.00	0.92	0.92	0.02
Limited	17.75	17.64	17.63	11.00	11.00	11.00	0.82	0.82	0.82
National Bank of Kenya	48.05	48.05	48.05	10.00	10.00	10.00	0.70	0.70	0.70
NIC Bank Limited	15.84	15.84	15.84	10.00	10.00	10.00	0.80	0.80	0.80
Standard Chartered Bank Limited	73.87	73.87	73.87	10.00	10.00	10.00	0.50	0.50	0.50
Co-op Bank of Kenya Limited	64.56	64.56	64.56	12.00	12.00	12.00	0.92	0.92	0.92
Express Limited	24.90	60.43	60.43	9.00	9.00	9.00	0.89	0.89	0.89
Kenya Airways Limited	26.00	26.00	26.00	11.00	12.00	11.00	0.82	0.75	0.82
Nation Media Group Limited	44.66	44.66	44.66	16.00	16.00	16.00	0.94	0.94	0.94
ScanGroup Limited	25.87	29.08	29.08	7.00	7.00	7.00	0.71	0.71	0.71
Standard Group Limited	69.22	69.03	69.03	8.00	8.00	6.00	0.50	0.50	0.50
TPS EA (Serena) Limited	37.23	32.44	32.44	12.00	12.00	12.00	0.83	0.83	0.83
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Uchumi Supermarket									
Limited	7.00	7.00	7.00	7.00	7.00	7.00	0.86	0.86	0.86
Athi River Mining Limited	45.87	28.00	28.00	10.00	10.00	10.00	0.70	0.70	0.70
Bamburi Cement Limited	29.30	29.30	29.30	10.00	11.00	11.00	0.70	0.64	0.64
Crown Paints Kenya Limited	48.06	48.06	48.06	5.00	5.00	5.00	0.40	0.40	0.40
East Africa Cables Limited	67.33	68.38	68.38	7.00	6.00	6.00	0.71	0.67	0.67
East Africa Portland									
cement	27.00	27.00	27.00	7.00	7.00	7.00	0.71	0.71	0.71
KenGen Limited	70.00	70.00	70.00	11.00	11.00	11.00	0.91	0.91	0.91
KenolKobil Limited	24.91	24.91	24.91	6.00	6.00	6.00	0.67	0.67	0.67
Kenya Power & Lightning Company	40.42	50.08	50.09	10.00	10.00	10.00	0.90	0.90	0.90
Total Kenya Limited	83.67	42.31	20.07	8.00	8.00	9.00	0.38	0.38	0.33
Jubilee Holdings Limited	37.98	37.98	37.98	9.00	9.00	9.00	0.89	0.89	0.89
Kenya Re Corporation Limited	60.00	60.00	60.00	10.00	10.00	11.00	0.90	0.90	0.91
Pan Africa Insurance	50.00	50.00	50.00	9.00	9.00	10.00	1.00	0.89	0.80
Centum Investment Company	23.51	23.51	23.51	8.00	10.00	9.00	0.88	0.90	0.89
City Trust Limited	49.98	49.98	49.98	4.00	4.00	4.00	0.50	0.50	0.50
Olympia Capital Holdings									
Limited	18.40	18.40	18.60	7.00	7.00	7.00	0.86	0.86	0.86
B.O.C Kenya	65.38	65.38	65.40	7.00	7.00	8.00	0.86	0.71	0.75
BAT Kenya Limited	60.00	60.00	60.00	13.00	9.00	13.00	0.62	0.78	0.62
Carbacid Investments	20.80	15.00	15.00	4.00	4.00	4.00	0.25	0.25	0.25
East African Breweries	20.89	13.00	13.00	4.00	4.00	4.00	0.23	0.23	0.23
Limited	42.82	42.82	42.82	12.00	12.00	11.00	0.75	0.75	0.82
Eveready East Africa									
Limited	34.96	34.96	34.96	8.00	9.00	9.00	0.25	0.22	0.22
Mumias Sugar Company	20.00	20.00	20.00	11.00	11.00	14.00	0.91	0.91	0.71
Unga Group Limited	50.93	50.93	50.93	8.00	8.00	6.00	0.88	0.88	0.67
Access Kenya Group Limited	14.50	17.00	17.00	6.00	6.00	6.00	0.83	0.83	0.83
Safaricom Limited	40.00	40.00	40.00	10.00	10.00	12.00	0.50	0.50	0.42

(Source: Annual Reports and Financial Statements, 2010-2012)

	Independent Variables	X4	-Number Meetir	X5-CEO Duality 1 =Chair / CEO, 0=CEO only			
	LISTED COMPANIES	2010	2011	2012	2010	2011	2012
1	Kakuzi Limited	4.00	4.00	4.00	-	-	-
2	Limuru Tea Limited Company	4.00	4.00	4.00	1.00	1.00	1.00
3	Sasini Limited	4.00	4.00	4.00	-	-	-
4	Williamson Tea Kenya	4.00	4.00	4.00	-	-	-
5	Car & General Kenya Limited	4.00	4.00	4.00	-	_	_
6	CMC Holding Limited	6.00	6.00	6.00	-	-	-
7	Marshalls E.A Limited	4.00	4.00	4.00	-	_	_
8	Sameer Africa Limited	4.00	4.00	5.00	-	_	_
9	Barclays Bank of Kenya Limited	8.00	8.00	7.00	_	_	_
10	CFC Stanbic of Kenya Holding Limited	4.00	4.00	4.00	-	_	_
11	Diamond Trust Bank	4.00	4.00	4.00	-	_	_
12	Equity Bank Limited	7.00	7.00	5.00	-	_	_
13	Housing Finance Company Limited	4.00	5.00	4.00	-	_	_
14	Kenya Commercial Bank Limited	16.00	20.00	17.00	-	_	_
15	National Bank of Kenya	4.00	4.00	4.00	-	_	_
16	NIC Bank Limited	4.00	4.00	4.00	-	_	_
17	Standard Chartered Bank Limited	5.00	5.00	5.00	1.00	1.00	1.00
18	Co-op Bank of Kenya Limited	6.00	6.00	6.00	-	-	-
19	Express Limited	7.00	7.00	7.00	-	-	
20	Kenya Airways Limited	5.00	5.00	5.00	-	_	_
21	Nation Media Group Limited	2.00	2.00	2.00	_	_	_
22	ScanGroup Limited	4.00	4.00	4.00	-	_	_
23	Standard Group Limited	4.00	4.00	4.00	-	_	_
24	TPS EA (Serena) Limited	3.00	7.00	3.00	-	-	-

ĺ	Uchumi Supermarket Limited						
25		4.00	4.00	4.00	-	-	-
26	Athi River Mining Limited	4.00	4.00	4.00	-	-	-
27	Bamburi Cement Limited	4.00	4.00	4.00	-	-	-
28	Crown Paints Kenya Limited	3.00	3.00	3.00	1.00	1.00	1.00
29	East Africa Cables Limited	3.00	3.00	3.00	_	_	_
30	East Africa Portland cement	4.00	4.00	4.00			
30	KenGen Limited	4.00	4.00	4.00	-	-	-
31	KenolKobil Limited	12.00	9.00	9.00	-	-	-
32	Konya Dowar & Lightning Company	4.00	4.00	4.00	1.00	1.00	1.00
33		14.00	14.00	12.00	-	-	-
34	Total Kenya Limited	5.00	5.00	5.00	1.00	1.00	1.00
35	Jubilee Holdings Limited	4.00	3.00	3.00	1.00	1.00	1.00
36	Kenya Re Corporation Limited	10.00	11.00	10.00	-	-	-
37	Pan Africa Insurance	4.00	4.00	4.00	-	-	-
38	Centum Investment Company	9.00	9.00	6.00			
20	City Trust Limited	1.00	1.00	4.00	1.00	1.00	1.00
39	Olympia Capital Holdings Limited	4.00	4.00	4.00	1.00	1.00	1.00
40	B O C Kenva	4.00	4.00	4.00	-	-	-
41	b.o.e Kenya	4.00	4.00	4.00	1.00	1.00	1.00
42	BAT Kenya Limited	9.00	9.00	9.00	1.0	-	-
43	Carbacid Investments Limited	5.00	5.00	5.00	-	-	1.00
44	East African Breweries Limited	4.00	4 00	4.00	_	_	_
45	Eveready East Africa Limited	4.00	4.00	4.00			
45	Mumias Sugar Company	4.00	4.00	4.00	-	-	-
46	Ungo Crown Limited	4.00	4.00	7.00	-	-	-
47	Unga Group Limited	4.00	4.00	4.00	-	-	-
48	Access Kenya Group Limited	5.00	5.00	5.00	-	-	-
49	Safaricom Limited	5.00	5.00	5.00	-	_	_

(Source: Annual Reports and Financial Statements, 2010-2012)

		EM 2010	EM 2011	EM 2012
	LISTED COMPANIES			
1	Kakuzi Limited	0.340063	0.656364	0.08083
2	Limuru Tea Limited Company	0.13649	0.1656	0.17436
3	Sasini Limited	6.40139	1.46252	3.29136
4	Williamson Tea Kenya	2.43214	0.54703	0.026294
5	Car & General Kenya Limited	0.35114	0.40146	0.000942
6	CMC Holding Limited	0.17904	0.27014	0.136
7	Marshalls E.A Limited	1.592117	0.136	0.136
8	Sameer Africa Limited	0.124951	0.41262	0.00777
9	Barclays Bank of Kenya Limited	0.43009	0.0905	0.000632
10	CFC Stanbic of Kenya Holding ltd	0.33251	0.19863	0.00181
11	Diamond Trust Bank	0.12212	0.225393	0.0085
12	Equity Bank Limited	1.741907	0.245419	0.04924
13	Housing Finance Company Limited	2.48229	0.86135	0.1214
14	Kenya Commercial Bank Limited	0.37271	0.07808	0.00746
15	National Bank of Kenya	1.15669	0.40735	0.02366
16	NIC Bank Limited	0.04527	0.37768	0.000552
17	Standard Chartered Bank Limited	0.720135	0.02345	0.052688
18	Co-op Bank of Kenya Limited	0.238424	0.51664	0.00695
19	Express Limited	0.991409	1.020642	0.023623
20	Kenya Airways Limited	0.136	0.136	0.136
21	Nation Media Group Limited	0.461457	0.568892	0.01704
22	ScanGroup Limited	1.093327	0.27511	0.10161
23	Standard Group Limited	0.690919	0.63925	0.100022
24	TPS EA (Serena) Limited	0.568995	0.48195	0.04296
25	Uchumi Supermarket Limited	0.824306	0.22994	0.04888
26	Athi River Mining Limited	0.61085	0.33278	0.00662
27	Bamburi Cement Limited	0.007522	0.393675	0.000325
28	Crown Paints Kenya Limited	0.844184	0.03946	0.06949
29	East Africa Cables Limited	0.73075	0.02419	0.05294
30	East Africa Portland cement	0.384256	0.02407	0.00487
31	KenGen Limited	0.477785	0.025848	0.02312
32	KenolKobil Limited	0.02881	0.13062	4.36E05
33	Kenya Power & Lightning Company	2.89358	1.10438	0.344652
34	Total Kenya Limited	0.897947	0.953298	0.06781
35	Jubilee Holdings Limited	0.127492	0.4676	0.02674
36	Kenya Re Corporation Limited	0.15669	0.151633	0.000601
37	Pan Africa Insurance	0.103613	0.31747	0.011386

## **APPENDIX IV: EARNINGS MANAGEMENT**

38	Centum Investment Company	1.13346	0.149078	0.23214
39	City Trust Limited	0.78262	1.81144	0.08942
40	Olympia Capital Holdings Limited	0.199488	0.08655	0.011416
41	B.O.C Kenya	0.805971	0.281886	0.07177
42	BAT Kenya Limited	0.76491	0.509092	0.043635
43	Carbacid Investments Limited	0.252046	0.03128	0.02834
44	East African Breweries Limited	0.7685	0.02804	0.072211
45	Eveready East Africa Limited	0.65266	0.977868	0.0852
46	Mumias Sugar Company	0.06486	0.04939	0.00014
47	Unga Group Limited	0.646457	0.146969	0.00304
48	Access Kenya Group Limited	0.10459	0.22429	0.00794
49	Safaricom Limited	2.078346	0.557691	0.45951

(Source: Annual Reports and Financial Statements, 2010-2012)