

**AN EXAMINATION OF THE FACTORS INFLUENCING EARNINGS
MANAGEMENT PRACTICES AMONG COMPANIES LISTED IN THE
NAIROBI SECURITIES EXCHANGE**

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Abstract

This study aimed at examining the factors influencing earnings management among companies listed in the Nairobi Securities Exchange. The prevalence of Earnings Management (EM) in most organizations has been a matter of concern to many players in the accounting sector around the globe. In the Kenyan context, listed companies have been experiencing poor management practices attributed to EM. Whereas other studies assessed in this research did not focus on the extent to which earnings management is practised in the Kenyan environment, this study bridges the knowledge gap and provides an in-depth review on the subject. The thesis adopted both explanatory and descriptive research designs. Both secondary and primary data were analyzed and presented using descriptive statistics, non-parametric analysis, univariate analysis and multivariate analysis. The thesis upholds that the extent to which EM was practised fluctuated from 36.13% (in 2010) to 29.55% (in 2014), with the highest being in 2013 (47.32%). The main techniques used in perpetrating the practice were found to be manipulation of: revenue amount, cash flow amount, and accounts receivable. Controlling the outcome of inventory valuation was also found to be a major technique. The main factors that influenced the extent to which EM was practised included; free cash flow, size of debt in a company, management bonus and dividend paid. The study contributes to the knowledge on the extent to which EM is practised in the listed firms and provides a basis for other scholars seeking to undertake research on earnings management. The study also gives pertinent recommendations to key stakeholders in the accounting profession on how to identify and mitigate instances of EM. External and internal auditors are advised to be more sceptical in analysing financial statements and lay more emphasis on financial statement items that are prone to manipulation. Since the study used the Yoon's model to determine the presence of EM, the findings on extent of EM were limited to this model.

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List of abbreviations and acronyms

NSE	Nairobi Securities Market
EM	Earnings Management
PAT	Positive Accounting Theory
IAS	International Accounting Standards
IFRS	International Financial Reporting Standards
CMA	Capital Markets Authority
ICPAK	Institute of Certified Public Accountants of Kenya
CFO	Chief Financial Officer

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Dedication

This thesis is dedicated to my family members. Thank you for always believing in me and supporting me in all situations. May God always take care of you and always bless the work of your hands.

CHAPTER ONE: INTRODUCTION OF THE STUDY

1.1 Background of the study

Earnings management (EM) has long been acknowledged as a pertinent ethical issue in the accounting profession, and has been explored by several accounting researchers in the past. There has been a rising pressure to reduce cases of EM as evidenced by the formulation of stringent laws, commissioning of reports as well as putting more emphasis on adherence to proper accounting standards. However, it is pertinent to note that such measures are still not effective in deterring earnings management since the practice is still prevalent in most firms (Lev, 2003; Beaudoin, Cianci & Tsakumis, 2015). Similarly, Madan (2015) points out that although relevant accounting standards exist, at times it is difficult to curb the manipulative behaviors portrayed by those charged with the responsibility to prepare financial statements due to the fact that there is an information gap between managers and the shareholders. Managers enjoy the privilege of making independent decisions, free from third party influence and as such, they may be instigated by selfish interests. The practice of EM should be deterred in order to increase the quality of financial statements and restore the forgone confidence of the financial statement users. It is worth noting that over the years, investors' confidence in the financial statements has been affected by the ever increasing collapse of large companies like Enron, Tyco, Xerox, Satyam and Lehman Brothers, just to mention a few (Kaminski, Wetzel & Guan, 2004). The collapse of such companies was attributed to accounting scandals and the practice of earnings management by the managers.

It has been difficult to define the concept of earnings management and draw a conclusion on the ethical aspect of the practice, based on the different views opined by accounting academics as well as practitioners and regulators. The practitioners and regulators perceive earnings management as pervasive and challenging, and as such, they recommend that the behaviour should be investigated and measures put in place to mitigate it. Benish (2001) and Jooste (2011), claim that there are two main perspectives of earnings management-the opportunistic perspective and the information perspective. The opportunistic perspective holds that managers seek to mislead investors whereas the

information perspective stipulates that managerial discretion is a means for managers to reveal to investors their private expectation about the firm's future cash flow.

It is worth noting that most researchers define earnings management, which is also termed as creative accounting, based on the opportunistic perspective. Earnings management is perceived as a strategy used by management for their personal benefits. They manipulate reports or accounting numbers within the flexible range of generally accepted accounting principles (GAAP) to exaggerate the corporate's operation performance so that such reports may conform to the expectations of corporate earnings (Schipper, 1989). In this regard, investors are cautioned to consider the possibility of earnings management in their attempt to make investment decisions relating to a company especially for those displaying weak accounting practices.

Similarly, Healy and Wahlen (1999) define earnings management as the use of judgment in financial reporting and in structuring transactions to alter financial reports. The altered financial reports are aimed at either misleading some stakeholders about the underlying economic performance of the company or influencing the contractual outcomes which depends on reported accounting numbers. Additionally, the Securities and Exchange Commission (SEC) takes a broad view of earnings management and opines that the violation of GAAP is both in the form of financial fraud and earnings management (Dechow & Skinner, 2000).

Earnings management has been a subject of interest to regulators, practitioners, and scholars. Several studies have been conducted on earnings management and the factors leading to its occurrence. However, there are inconsistencies in the studies conducted as well as discrepancies to the way different scholars understand the term (Sun & Sun 2002). Additionally, (Beneish, 2001) explains that lack of consensus in the definition of earnings management implies the differing interpretation of empirical evidence in the studies that seek to understand the problem associated with the concept. This study interpreted earnings management as the manipulation of the financial statements for the benefit of managers.

Furthermore, the inconsistencies in findings may have been attributed to the fact that the studies were conducted in different geographical settings, different timings, and differing economic conditions. Nassir, Salehi and Alaei (2012) carried out their study on 114 listed companies on the Tehran stock exchange for the period of 2006 to 2010. They found a significant inverse relationship between the size of debt in a company and earnings management and a positive significant inverse relationship between earnings management and firm size. However, the authors did not find any relationship between bonus and earnings management. On the other hand, Nurdiniah and Herlina (2015) carried out their study on 12 manufacturing Indonesia stock exchange companies for the period of 2011 to 2013. Their findings were that there is insignificant relationship between earnings management and size, as well as bonus and debt. Acar (2013) carried out his study to find discretionary accrual behaviours of Turkish listed firms and underlying factors of these behaviours in the 2008 crisis. His finding revealed that there was an inverse relationship between the size of the firm and the practice of earnings management.

The inconsistencies may also be explained by the methodology adopted in determining the factors leading to earnings management. Some researchers conduct single factor studies as exemplified by Jelinek (2007), Benish (2001), and Healy and Wahlen (1999) while others conduct multiple factor studies as emphasised by Zmijewski and Hagerman, (1981), Nassir et al. (2012), and Nurdiniah et al. (2015). A single factor study occurs when a researcher considers only one factor that might lead to earnings management and ignores other factors. Jelinek (2007) shows the effect of increased debt on earnings management. Additionally, Healy and Wahlen (1999) demonstrate the effect of bonus contract and earnings management. By conducting a single factor study, researchers are able to get insight on the effect of the independent factor on the dependent factor. On the other hand, multiple factor studies are better since they demonstrate not only the relationship between the dependent variable and the independent but also how the independent factor affects earnings management in the presence of other factors

The inconsistencies could also have been as a result of the different models used in determining the dependent variable. While Nurdiniah et al. (2015) uses the Jones model of 1991, Nassir et al. (2012) used the modified Jones model in determining discretionary accrual and Noor, Sanusia, Heang, Iskandar and Isa (2015) used the performance matching model developed by Kothari. The findings of Nassir et al. (2012) and Noor et al. (2015) concur. Therefore, as one adopts an improved version of the model, the results tend to be similar as the misspecification in the model is reduced. The Jones model is more popular than other models. However, according to other scholars, it has misspecification and tends to reject the null hypothesis of “no earnings management” too often (Kothari, 2005). Hence, there is the need to use better, improved models.

Based on the analysis of the works of authors reviewed in this chapter, it is worth noting that earnings management has become a matter of concern in both social and economic facets of the world. Scholars from different countries have made attempts to determine the factors that lead to earnings management and they have concluded on specific factors which are applicable in specific countries. According to Jooste (2011), more corporate organisations are involved in earnings management. The extent of earnings management in different countries varies with the motive of the manager engaging in the activity. A study conducted in 2011 by the Global Economic Crime Survey indicated that 18% of the cases of accounting fraud practice were perpetrated by senior executives, 41% by middle-level managers, 39% by junior staff members and lastly, 2% by other employees. These percentages indicate that the middle-level management and senior executives are the major perpetrators of accounting crimes (Global Economic Crime survey, 2011). Accounting fraud includes but not limited to: accounting manipulation, Creative accounting practices, fraudulent borrowing, unauthorised transactions and rogue trading. In a similar study conducted by the Global Economic Crime Survey in 2014, there was an anticipated increase in the cases of accounting fraud from 14% in 2011 survey to 16% in 2014 survey. The survey conducted in 2014 also revealed that cases of the accounting fraud in Africa were 35%, while globally, they were rated at 22% (Global Economic Crime Survey, 2014).

Capital markets mostly use financial statement information to establish the price of the listed securities (Madan, 2015). Additionally, investors rely on financial statement information in order to substantiate their decisions to buy, sell, or keep these securities. Therefore, market efficiency depends on the flow of financial information in the capital markets. In cases where the information is biased, the markets cannot determine the exact price of securities. For example, 40 US companies went public in 2014 and reported losses under traditional accounting rules, but claimed profits under their own tailored creative accounting (Browne, 2015). Similarly, in a report prepared by India Ratings (a credit assessor) in July 2014, there was an emphasis on the poor quality of the financial statements prepared by the publicly-listed companies in India, with a significant likelihood that companies in the top100 of Bombay Stock Exchange (BSE) could be involved in Creative Accounting (CA) practices (Livemint, 2015).

In the Kenyan perspective, information from the Capital Markets Authority (CMA) indicates that companies affected by this practice included CMC Motors and Uchumi Ltd (Waiguru, 2013). Kenyan companies have also experienced problems relating to agency relationships. The Capital Markets Authority, in consultation with the NSE, suspended some companies from trading their shares and some of the companies included: Uchumi Limited, Carbacid Kenya and East African Portland Cement. The companies were suspended due to cases of fraud, creative accounting practices, conflicts of interest amongst board members as well as non-compliance with the reporting obligations/listing agreements, inconsistencies in corporate governance structure, insider trading, and management wrangles/board room wars causing panic in the Capital Markets (Mutuku, 2013). This meant that listed companies in Kenya are also involved in earnings management.

In conclusion, it is evident that the different studies highlight the conflicts in the interpretation of earnings management and the factors leading to its occurrence. This research aimed at determining the extent of earnings management in listed firms, the techniques used in perpetrating the practice and the major factors that contribute to its occurrence in a Kenyan perspective.

1.2 Problem Statement

The extent and factors leading to earnings management have important implications for regulators, academics and practitioners (Kothari, Leone, & Wasley, 2005; Beneish, 2001). The collapse of major Companies like Enron, in the past, has led to an increasing tendency to mitigate cases of earnings management through the formulation of laws and regulations that deter the practice (Lev, 2003). Kenya adopted the International Financial Reporting Standards with effective from January 1999 (Riro & Waweru, 2013). Even with the adoption of such standards, companies in Kenya are still involved in earnings management. Managers, like in other countries, have the discretion to choose the accounting standards that suit their financial needs. One of the major financial scandals that caused the performance of listed firms to deteriorate within the period, 2000 to 2012 was the practice of earnings management. Such practices dented the investor confidence in Kenya and as such, the performance of the country dwindled from position 102 to position 106 of the most competitive economy (World Economic Forum, 2012). The deterioration in the performance was attributed to unethical behavior of firms, which was associated with continued cases of fraud and corruption and lack of integrity in the preparation of the audited financial reports (Waiguru, 2013). Moreover, the worldwide survey carried out by PriceWaterHouseCoppers in November 2011 ranked Kenya among leading countries perpetrating fraud, with creative accounting being among the major cause of the reduction in performance (Price Waterhouse Coopers, 2011). Based on this evaluation, it can be argued that the Kenyan economy is also characterised by companies practising earnings management. However, the extent of the practice occurring in listed companies is unknown and this presents a knowledge gap that prompted this study.

As evidenced in the studies conducted by Nassir et al. (2012) and Nurdiniah et al. (2015), it is evident that differences exist in findings and this may have been brought about by the understanding of EM. The studies were also conducted in different countries, during different timing and within different economic conditions. Therefore, this study aimed at determining the extent to which EM was practised in the listed companies, techniques used, as well as the factors leading to its occurrence. This was an important step in understanding the problem associated with EM in Kenya.

1.3 Research Objectives

1.3.1 Main Objective

The main objective of this research was to investigate the factors determining earnings management among companies listed in the Nairobi Securities Exchange.

1.3.2 Specific Objectives

1. To determine the extent to which earnings management is practised among the listed firms.
2. To determine the techniques used in conducting earnings management in the listed firms.
3. To assess the significance of the factors determining earnings management in the listed firms.

1.4 Research Question

1. To what extent does earnings management exist in Kenyan listed companies?
2. What techniques are used to perpetrate earnings management in the listed firms in Kenya?
3. What factors lead to the occurrence of earnings management in the listed companies in Kenya?

1.5 Scope of the study

The research focused on 54 out of 65 companies listed in the Nairobi Securities Exchange from the year 2010 to 2014; the scope of the study was over these five years. This was in line with the NSE strategic objectives of the year 2010 to 2014, where one of the aims was to grow the brand through increasing investor confidence (Mwangi, 2010). Investor confidence over the period has been affected by the different cases of listed companies conducting creative accounting. Fifty four (54) companies were chosen since they were present for the full 5 year period in which the study was undertaken. This study also focused on CFOs, external auditors, internal auditors and finance managers for primary data.

1.6 Significance of the study

The study is useful in providing significant information to shareholders of companies to enable them understand causes of malpractices such as earnings management and

devise effective and efficient methods of identifying and mitigating instances of such vices. Additionally, since auditors are mandated by shareholders to give an opinion of whether financial statements are true and fair, the information in this study is useful to ICPAK in formulating and implementing strict audit requirements that auditors are expected to comply with in order to identify cases of earnings management which may affect the audit opinion. Furthermore, this research provides a spectrum of ideas which is useful to other scholars in their attempt to carry out studies related to earnings management.

1.7 Chapter Summary

Chapter one focused on the importance of undertaking the study. It explained the main goal that warrants the investigation of the extent in which earnings management is practised, techniques used and the factors leading to its occurrence in a Kenyan perspective. Additionally, the chapter gave the background of the study and this builds the case for the research. The chapter also highlights the research problem, and also developed the objectives and research questions of the study. Chapter one also outlined the scope of the study, significance of the study and the organization of the thesis.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter reviews literature relevant to the study. Additionally, the chapter describes the empirical review of various scholars, theoretical framework and hypotheses development. The chapter is also guided by the research objectives outlined in chapter one and as such, the reviewed studies are aligned with the research objectives.

2.2 Earnings management

Over the years, Earnings Management has been of great concern to the practitioners and regulators. Furthermore, researchers have not unanimously consented on a solution to the predicament associated with the practice. The occurrence of Earnings management is partly attributed to agency problems that arise due to the conflicts of interest that exist between managers and owners of companies. As argued by Wu, Chen, and Lee (2015), Iturriaga and Hoffmann (2005) and Xie, Davidson and DaDalt (2003), managers window dress the financial statements with the aim of improving their position, obscuring facts that stakeholders ought to know (Loomis 1999), or influencing contractual outcomes that depend on reported accounting numbers (Schipper, 1989) and (Dechow and Skinner, 2000).

It is an apt undertaking to give cognisance to the fact that Financial Statements, which in certain instances are manipulated by managers, serve as a major source of information to the stakeholders of an organisation as they endeavour to make key investment decisions (Nurdiniah & Herlina, 2015). The agency relationship allows managers to practise their discretion with regard to financial reporting and as such, they are tempted to choose methods that suit their own interest, contrary to stakeholders' expectations (Al-Khabash & Al-Thuneibat, 2009; Othman & Zeghal, 2006). For example in stock valuation, accounting standards give managers a leeway to choose from using Last in First Out, First in First Out and Weighted Average methods. Although managers are not constrained as to the choice of the method applied, the motive behind their action should be ethical and aim at reporting a true financial position of the organisation. With the collapse of many large companies as a result of manipulation of financial statements,

most investors have lost confidence in published company accounts and this is a worrying trend (Ding, Zhang, & Zhang, 2007).

2.2.1 The Kenyan context on earnings management

Kenya adopted the International Financial Reporting Standards with effect from January 1999 (Riro & Waweru, 2013). Even with the adoption of such standards, companies in Kenya are still involved in Earnings management. Managers, like in other countries, have the discretion to choose the accounting standards that suit their financial needs. Kamau, Mutiso and Ngui (2012) established that tax avoidance and evasion are one of the major motives that instigate the practice of creative accounting.

In the Kenyan perspective, information from the Capital Market Authority (CMA) bespeaks that companies affected by this practice include CMC Motors and Uchumi (Waiguru, 2013). CMC Motors was accused of “substandard financial statements” which misled investors and led to the investigation of its external auditors, Deloitte (BD Reporter, 2012). Additionally, Uchumi supermarkets manipulated financial books in order to portray a different picture to the stakeholders (Guguyu, 2015).

Kenyan companies have also experienced problems relating to agency relationship. The Capital Markets Authority, in consultation with the NSE, suspended some companies from trading their shares and some of the companies included; Uchumi Limited, Carbacid Kenya and East African Portlands Cement. The companies were suspended due to cases of fraud, creative accounting practices, conflicts of interest amongst board members as well as non-compliance with the reporting obligations/listing agreements, inconsistencies in corporate governance structure, insider trading, and management wrangles/board wars causing panic in the Capital Market (Mutuku, 2013). This was an implication that listed companies in Kenya were also involved in earnings management.

2.2.2 Evidence of earnings management

Managers have the discretion to be flexible and judgmental in selecting the most appropriate reporting methods, estimates, and disclosure that match the underlying economics. The use of judgment, however, provides the opportunity for managers to achieve a desired earning level (Sun & Sun, 2002; Parfet 2000). Two possible explanations for earnings management put forth by Warfield, Wild and Wild (1995) are

that managers engage in earnings management behaviour either to circumvent accounting – based contracts designed to mitigate agency problems or to reduce information asymmetry.

According to Mătiș, Vladu, Negrea, & Sucala (2010), when a business generates profits with negative cash flows, it is an indicator of earnings management practice and in such a case, investors should be sceptical enough when analysing the financial information. Similarly, in case the company reports a net profit whereas the books of accounts indicate a negative cash flow then it is a clear indication of creative accounting (Schilit, 2002) and (Smith, 1996). Moreover, earnings manipulation may occur upwards when the bonus plan of the company is at minimum (Holthausen, Lacker, & Sloan, 1993; Brown & Higgins, 2001). However, Healy (1985) predicates that managers manipulate earnings downwards. Contrary to Healy's claims, Holthausen et al. (1993) argue that there is no evidence to connote that managers manipulate their earnings downwards when earnings are below the minimum required necessary to receive a bonus. They demonstrate that Healy's study is likely to have been influenced by methodology.

On the other hand, analysts anticipate earnings management in order to avoid minor losses as stipulated by (Burgstahler & Eames, 2003; Burgstahler & Dichev, 1997). Their findings by these authors depict that, analysts overestimate the extent of earnings management to avoid minor losses early in the years and tend to correctly estimate the general extent of earnings management in the late years to avoid such losses. Significant decline in stock prices associated with minor negative earnings surprises encourage the practice of earnings management as demonstrated by (Skinner & Sloan, 2001; Kinney, Burgstahler & Martin, 2002). Similarly, according to Graham et al. (2005) as quoted in Alghamdi (2012), managers are concerned with meeting earnings benchmarks and engaging in earnings management to maintain or increase share prices, and to enhance managers' reputations as well as to secure future growth prospects. Moreover (Burgstahler & Eames, 2006; Bartov, Givoly & Hayn, 2002; Defond & Park, 2000; Kaszink & McNichols, 2000; Lopez & Rees, 2000) demonstrate evidence of positive market responses to meeting analyst earnings forecast.

For firms subjected to persistent warnings problems, extant theory predicts that managers' accounting choice will be to systematically increase income (DeAngelo & DeAngelo & Skinner, 1992). This is pertinent for the fact that a number of managers in this situation have incentives to increase reported earnings in an attempt to secure their jobs and also to reduce intervention by a firm's board of directors and /or regulatory agencies (DeAngelo, 1988; Weibach, 1988; Moyer, 1990; Petroni, 1992). Furthermore, managers of a troubled firm that are prone to a debt covenant violation may be obliged to take income increasing actions to avoid or deter the cost of a breach which may be as a result of reported losses (Watts & Zimmerman, 1968; Healy & Palepu, 1990; Sweeney, 1991; Defond & Jiambalvo, 1994). Likewise managers who predict an existence of continuous poor earnings are faced with an immediate threat of job loss (Weibach, 1988; Gilson. 1989; Gilson & Vetsuypens, 1993). This implies that for troubled firms, managers are more instigated to perform earnings management compared to other firms. On the contrary, managers of organisation whose income temporarily fall below the amount necessary to earn a bonus have incentive to report lower income (Healy, 1985; Dye, 1991).

Earnings management has been considered as one of the most crucial ethical financial issues which accountants confront in everyday practices around the world (Armstrong, 1993). Geiger et al. (2006) argue that the practice of earnings management is not perceived similarly in all countries due to differences in culture and the way rules and regulations are implemented in different countries around the world. Dimitras, Kyriakou, & Iatridis (2015) connote that financially distressed firms audited by the big four Audit firms in Greece, Spain, Portuguese, Ireland and Italy practice earnings management. On the other hand, Noronha et al (2008) studies demonstrate that public companies in China have a strong motive to manipulate their earnings than in other firms. Earnings management is shown to occur in different situations, hence the need for a study to understand the extent and factors that lead to earnings management in a Kenyan context.

2.2.3 Methods used in perpetrating earnings management

Earning management encompasses both measures that increase current earnings without decreasing future earnings and measures that increase current earnings at the expense of future earnings (Burgstaller et al., 2006). Both forms contribute significantly to changes

in the reported income. Whereas the former is referred to as business management, the latter refers to reporting management.

Components of Financial statements such as cash flows from operation, and changes in working capital are mostly subjected to manipulation (Burgsthaler et al., 1997). Similarly, Burgsthaler et al. (2006) demonstrate that both ‘real’ operating actions reflected in cash from operations, and actions of a ‘bookkeeping’ nature reflected in discretionary accruals contribute to earnings management to achieve zero earnings surprises. Managers are sometimes known to engage in contractual renegotiation with lenders, unions and government to manage their earnings. Managers are also willing to take write-offs and reduce dividends to convince lenders about streamlined operation. Losses and dividends reduction help unions to accept wage concessions (DeAngelo, et al., 1992).

Several strategies have been used to ensure income smoothing and protagonists of such strategies include; depreciation changes supported by Archibald (1967), extraordinary items by Barnea, Ronen, and Sadan (1976), Cost vs. equity methods supported by Barefield and Comisket (1972) loan and loan accruals supported by Pérez, Salas-Fumás, & Saurina (2008); Hasan and Wall (2004); Lobo and Yang (2001). Additionally, security gains and losses (SGL) has been researched by (Shrieves & Dahl, 2003; Beatty & Harris (1999; Collins, Shackelford & Wahlen, 1995). Finally country specific expenses has been acknowledged by (Bornemann, Kick, Memmel & Pngsten, 2012)

The analysis above is a clear indication that different components of financial statements such as cash flow from operations, changes in working capital, government renegotiations, extra ordinary items, and depreciation changes can be used by managers of a firm to perpetrate earnings management. For a specific item to be used there is need to consider the overall goal of firm involved in earnings management.

2.2.4 Factors leading to earnings management

This section looks at the inconsistencies that exist on the findings of different factors.

2.2.4.1 Understanding of the term earnings management

There is no clear definition of Earnings management as a concept and as such, it would be subjective to decide on whether the practice is an appropriate accounting treatment which reflects the true performance of the corporation and the organisation's underlying economy or whether earnings management is the intention of managers to achieve a desired level of performance (Sun et al., 2002). Similarly Beneish (2001) explains that lack of consensus definition of earnings management implies differing interpretation of empirical evidence in studies that seek to understand the concept of earnings management. However, some scholars agree that the term may include but not limited to; creative accounting (Catherine & Orial, 2005; Tiina & Linh, 2002; Schilit, 2000), fraudulent financial reporting (Pravean & Nisen, 2009; Lawrence, 2009), discretionary accounting (Matis, Vladu, Negrea & Sucala, 2010; Kothari, Leone & Wasley, 2005; Jones, 1991) and corporate fraud (Copeland, 1968; Pravean, 2009). Although there is a minor difference between earnings management and fraud, there is need to identify and explain such a difference between the two. Brown (1999) and Erickson, Hanlon & Maydew (2006) argue that earnings management is normally within the scope of GAAP. In contrast, fraud occurs outside the GAAP boundaries. However, the two matters share the same objective but with different understanding of the same term, earnings management. As such, there arise differences in the interpretation of findings and analysis.

2.2.4.2 Methodologies used by other scholars in determining the factors

Some researchers conduct single factor studies (Jelinek, 2007; Benish, 2001; Healy and Wahlen, 1999) while others undertake the multiple factor studies (Zmijewski et al., 1981; Nassir et al., 2012; Nurdiniah et al., 2015). For the single factor study, a researcher considers one factor and determines its effect on earnings management while ignoring other factors. In case one compares the results from the single factor study with that of the multiple factor study while holding other factors constant, the results realized would be different. Jelinek (2007) contributes on the effect of increased debt and earnings management. The author illustrates that leverage is associated with a reduction in the earnings management and different levels of debt affect earnings management in different ways. Similarly, Noor et al. (2015) connote a significant negative relationship

between increased debt and earnings management. Contrary to this, (Nurdiniah et al, 2015; Beneish 2001) claim that there is no significant effect of debt on earnings management.

In the case of multiple factor studies, different or similar factors may be combined and still lead to different findings. The effects of bonus and debt ratio on earnings were found to be significant by (Zmijewski et al., 1981; Zimmerman & Watts, 1986; Moses, 1987). However, Nurdiniah et al. (2015) found no significant effect of the two factors on earnings management. Through incorporating firm size as an extra factor, a positive effect was observed by Nurdiniah et al (2015). Conclusively, it is worth noting that when more factors are studied, the researcher stands a better chance of comprehending the main factors that lead to earnings management in a specific country. Additionally, the presence of noise in research may also affect the interpretation of the different results.

2.2.4.3 Models for measuring earnings management

Different models have been used in measuring earnings management and such models include but not limited to; Jones Model, Modified Jones Model, Performance Matching Model, Benish Model and Financial Structure Model. The use of these models present conflicting results worth further investigation. Nurdiniah et al. (2015) used the Jones model developed in 1991 in determining earnings management. The results of this model indicated that debt to equity ratio do not have a significant effect on earnings management, while size of the firm has a positive but no significant effect on earnings management. Nassir et al. (2012) used the modified Jones model developed in 1995 to analyse the effect of factors on earnings management, and results indicated a significant and inverse relationship between debt-equity ratio and earnings management. Additionally, there was a significant and positive relationship between firm size and earnings management. Moreover, Noor et al. (2015) found a significant relationship between debt and earnings management, although they applied Kothari's model which was developed in 2005 in determining the effects of debt on earnings management. This is an indication that with the improvement in the models, the findings tend to be similar among researchers. However, the Jones model has attracted popularity among researchers since the time it was developed, although it has certain misspecifications as

argued by (Dechow et al, 1995; Guay et al, 1996; Kothari, 2005). Therefore, in order for researchers to have consensus in their studies they should adopt the most current and improved models in determining the extent of earnings management.

2.2.4.4 Theories and their diversity

Earnings management may be explained through the adoption of different theories and therefore, basing, a study on one theoretical stance may give different results. There is evidence that companies perform upward earnings manipulation when their bonus plan is at its minimum as claimed by (Holthausen, Lacke, Fand & Sloan, 1993; Brown & Higgins, 2001). These authors base their studies on the agency theory. On the other hand, Healy (1985) argues that managers manipulate their earnings downwards when earnings are below the minimum required level. This finding is based on the big bath theory. Thus, researchers should use multi theoretical perspective in order to align their findings.

2.3 Theoretical framework

A multi- theoretical framework was adopted in this research. More than one theory was applied to explain earnings management and investigate the factors that lead to its occurrence.

2.3.1 Agency theory

Agency theory states that for earnings management to occur the cost of undoing earnings management must exceed the cost of managing earnings (Watts & Zimmerman, 1986). The theory therefore predicts that earnings management is most viable in cases where the cost of undoing the earnings management is high. Such a situation is typical when the users of accounting information are uninformed or unsophisticated (Erickson & Wang, 1999).

An agency relationship occurs when the principal(s) hires the agent(s) in order to delegate responsibilities to them so that they can perform services or duties on their behalf (Jensen & Meckling, 1976). Baiman (1990) adds that the responsibilities of the agent and principal are based on mutual agreement. The theory is therefore based on the hypothesis that the principal and agent act rationally and that they will use their contracting terms to maximize their wealth (Watts & Zimmerman, 1986; Michael, 1994;

Eccles, 2001; Patten & Trompeter, 2003). In corporations, there is a partition between the people making decisions, known as managers, and people bearing the wealth known as shareholders (David & Harveston, 1999).

Agency theory is mainly used to explain certain accounting issues such as problems relating to incentives, conflict of interest and mechanisms for controlling the incentives problems (Bukit & Iskandar, 2009; Lambert, 2001). In an agency relationship, individuals are assumed to be motivated mainly by self-interest. Since managers have been empowered to make decisions on behalf of the shareholders, a conflict may arise when the managers opt to act in ways that consider their interests, without considering the shareholders' value. Moreover, the agency problem is more evident when both the managers and shareholders are utility maximisers. In this case, it is presumed that managers may not act in the best interest of the shareholders (Jensen & Meckling, 1976). For example, managers may be involved in earnings management in order to earn more bonuses when they are not able to meet the expected threshold, rather than maximize the wealth of the shareholders. On the other hand, due to the agency theory, separation of ownership and control gives managers the incentive to select and apply accounting methods and estimates that increase their own wealth. This issue has become of more concern in recent years as more firms are listed on the stock exchanges as public firms (Ali, Salleh & Hassan, 2008; Pourciau, 1993).

Managers are accountable to use resources in firms and maximize the wealth of the owners (firm value or performance). However when managers are unable to do this, they use earnings management to report accounting profits. Earnings are managed, for example, to increase management bonus (Healy, 1985), before management buyouts (DeAngelo, 1986; Perry and Williams, 1994), prior to equity offers (Teoh, Siew Hong, Ivo Welch & Wong, 1998a), and to meet analysts' forecast (Kaszink, 1999). However, when a manager's stake in the firm increases with an increase in share ownership, the conflicts between managers and shareholders reduces. Results presented by Warfield et al. (1995) study suggest that there is a systematic relationship between agency conflict and the level of managerial ownership. The study shows that as the level of managerial ownership increases, discretionary accruals decreases and the firm's return increase.

In overall, earnings management is viewed as a type of agency cost. For instance, when managers release financial information and reports that do not present the accurate economic dynamics of an organisation, shareholders make non-optimal investment decisions as a result of relying on the information. Therefore, earnings management is related to agency theory because the former can create or exacerbate agency cost (Xie, & Davidson, & DaDalt, 2003).

This theory illustrates that managers have the discretion of being involved in earnings management. Additionally, the theory illustrates ways that can be applied to reduce the occurrence of earnings management. Since the study involved identifying the main factors that lead to earnings management, this theory is adopted as it helps in understanding the reasons why managers engage in earnings management.

2.3.2 Big Bath theory

The big bath theory states that when operating performance is extremely poor, firms often opt for income-decreasing strategies rather than income-increasing ones (Kinney & Tezevant, 1997). For example, years where there is low earnings, managers may choose to report additional bad news so as to create a situation in which the next period's results are improved. The existence of the big bath has been borne out in literature. The study of discretionary write-offs supported the theory Elliott and Shaw's (1988) and this concurs with Healy's (1985) study of management bonuses. Firms may also undertake income-decreasing earnings management to maximize future financial reserves (Abarbanell & Lehavy, 2003).

Firms with unusual low current year earnings, in relation to prior years are likely to take discretionary losses, while companies with unusual high current earnings prefer to recognize large discretionary gains as extraordinary items (Kirschenheiter & Melumad, 2002; Walsh, Craig & Clarke, 1991). Findings on the evidence of positive changes in profitability for dividend omitting firms in the year of omission supports the big bath theory, whereby firms sink all the bad news into the year of dividend omission thus making it easier to report better performance in the coming years (Gwilym, Seaton & Thomas, 2005; Bernatzi et al., 1997; Healy & Palepu, 1988)

Alternatively, suggestions by McNichols and Wilson (1988) show that some companies purposefully report bad news in years associated with extremely good earnings so as to smooth out the earnings stream over time. Additionally, when earnings are not sufficiently low in the current period, corporate management do not opt for a big bath but rather act in order to smooth earnings (Rusmin, Scully & Tower, 2013).

Companies also practice earnings management through “clearing the decks”, which is a part of big bath theory. Clearing the deck gives companies greater opportunities to favour impairment later in the future. Managers in most cases make the necessary impairment, thus lowering their cost and hence increasing their earnings (Johansson & Wiklund, 2013; Byrnes, Melcher & Sparks, 1998).

Big bath indicator ratios; return on assets and return on stocks as shown by Gounaris (2005) show the presence of earnings management for the overall sample chosen in the study, but once the sample is segregated into size, it appears that smaller firms profitability ratios decreased more than larger firms. This theory was applicable in order to understand the factors that influence managers’ choice in taking a big bath without caring about the aftermath of the situation.

2.3.3 Positive Accounting Theory

Positive accounting theory (PAT), which was first introduced by Watts and Zimmerman in 1986, attempts to explain and predict particular actions concerning firms’ choices on accounting policies and practices. The theory explains and predicts the type of firms that will use a particular method and those that will not. However, the theory does not explain the criteria used in choosing the method that a firm uses (Kabir, 2010). Under an earnings management scenario, PAT is used to explain the rationale behind particular accounting choices (Malmi & Granlund, 2009). PAT theory is further expounded through the analysis of three key hypotheses.

The bonus plan hypothesis states that managers of firms with bonus plans are more likely to use accounting methods that increase or maximize current period reported income. Such selection will presumably increase the present value of bonuses if the compensation committee of the board of directors does not adjust for the method chosen (Watts & Zimmerman, 1990). This hypothesis thus refers to management compensation

and its association with the applied accounting choices, since managers performance is often based on certain accounting numbers. Therefore, managers have incentives to select accounting methods and exercise discretion over accounting estimates to improve their compensation (Xiong, 2006). The higher the ratio of bonus payment by a company, the better the subsequent financial performance of the company compared to other companies (Gerhart & Milkovich, 1990).

The debt hypothesis on the other hand predicts that the higher the firm's debt, the more likely it is that the managers will use accounting methods that increase income. The higher the debt as shown by the debt/equity ratio, the closer it is that the firm is to the constraints in the debt covenant. Therefore, managers exercise discretion by choosing income increasing accounting methods that relax debt constraints and reduce the cost of technical default (Watts et al., 1990). Hence, in order to avoid unfavourable results and increased constraints arising from debt covenant violation, firms may apply earnings management practices to increase the reported income.

The political cost hypothesis predicts that large firms rather than small firms are more likely to use accounting choices that reduce reported profits. Size is a proxy variable for political attention. Underlying this hypothesis is the assumption that it is costly for individuals to be informed about whether accounting profits really represent monopoly profits and to contract with other firms in the political process to enact laws and regulation that enhance their welfare (Milne, 2002). Consequently, rational individuals are less than fully informed. The political process is not different from the market process in that respect. Given the cost of information and monitoring, managers have incentive to exercise discretion over accounting profits and the parties in the political process settle for a rational amount of ex post opportunism (Watts et al., 1990). Under the political cost hypothesis, large firms would apply earnings management practices to reduce the reported profit due to increased public attention. This hypothesis introduces the size criterion in earnings management.

The positive accounting theory therefore attributes opportunistic managers based on the maximization of their benefits and subsequently firms' performance, as reflected on the corresponding financial statements. This behaviour can additionally be reflected on

earnings management practices since these particular choices would be assigned also on private gains.

2.4 Measurement of earnings management

Studies on earnings management require the separation of discretionary accruals from total accruals. Total accrual includes both discretionary as well as non-discretionary components (Jones, 1991; Healy, 1985). Therefore, an improper separation of discretionary component of accrual will lead to improper inferences. If non-discretionary components are treated as discretionary or vice versa, it will be difficult to discern the degree of earnings management appropriately.

There are numerous models suggested for the separation of the discretionary accruals from total accruals. Early studies on earnings management used the random walk model that used the change in earnings between two adjacent periods when separating out the discretionary component of accruals. Jones (1991) proposed a decomposition of accrual into current components and noncurrent components. She uses the changes in revenues as a proxy for the current component and property, plant and equipment as a proxy for the noncurrent components. This is called the Jones model and has attracted a lot of attention from researchers.

Following a similar path as Jones, Dechow et al. (1995) slightly modified the Jones model by replacing the changes in revenue with the changes in cash- accompanying revenue as a proxy for the current accruals. This revised model attracted even more popularity from researchers. The prevailing popularity of the Jones model and modified Jones model has rarely been challenged by researchers even though some studies questioned the validity and proposed alternative models (Kothari, Leone & Wasley, 2005; Yoon & Miller 2002; Jeter & Shivakumar, 1999; Kang & Sivaramkrishnan, 1995)

The modified Jones model and also the Jones model tend to reject the null hypothesis of no earnings management too often and that those models fail to generate mean – zero discretionary accruals (Yoon, Kim & Woodruff, 2012; Kothari et al, 2005). Taking into account the drawbacks of the modified Jones model, Yoon's Study proposed a new model which is sound, logical validity and shows much higher explanatory powers than the modified Jones Model (Yoon et al., 2012).

However, other studies on earnings management avoid using the separation of discretionary accruals from total accruals. For example, using a scatter plot or other types of graph approach Burgstahler et al. (1997) or using a specific accrual approach McNichols and Wilson (1988) or measuring total accrual using the cash flow statement (Collins & Hribar, 2002).

2.5 Determinant variables and hypothesis development

Positive accounting theory has three hypotheses that form part of the basis of factors that affect earnings management. The hypotheses include: bonus plan hypothesis, debt contract hypothesis and political costs hypothesis (Nurdiniah & Herlina, 2015). Other factors that were considered in the hypothesis development include; Dividend paid, free cash flows and percentage of publicly held shares.

2.5.1 Relationship between management bonus and earnings management

The bonus plan hypothesis states that managers are motivated to increase earnings up to a certain extent to be able to earn a bonus. Managers alter reported earnings in order to increase their compensation (Gaver et al., 1999; Holthausen, Larker & Sloan, 1995). Similarly, (Khoshtinat & Khani, 2003; Poorheidari & Hemati, 2004) in their findings indicated that managers are willing to exert earnings management so as to increase their bonus. In most scenarios the owners of the company promise manager that they will receive a bonus if the performance of the company reaches a certain amount (Nurdiniah & Herlina, 2015). On the other hand (Healy, 1985; Dye, 1991) finds evidence that managers manipulate their earnings downwards when earnings are below the minimum required level. This finding is based on the big bath theory. Thus, there is a conflict on whether the managers are motivated to increase or reduce earnings for bonus purposes. Hence, the hypothesis developed was as follows;

H₁: There is a significant relationship between the management bonus and earnings management.

2.5.2 Relationship between debt and earnings management

Managers sometimes conduct aggressive earnings management to prevent violation of the debt contract. Companies have to maintain acceptable corporate responsibility on their borrowing and repaying of debt. Financial institutions may request the financial

information of organisation to assess them before giving a loan so as to determine whether they are able to repay it before maturity. The impact of debt financing on earnings management is an empirical controversy. On the one hand, evidence suggest that firms with high leverage are more likely to aggressively manage their earnings (Gu et al., 2005; Becker & Defond, 1998; Watts & Mohrman, 1996; Sweeney, 1994; Defond & Jambalvo, 1994; Press & Weintrop, 1990). Their evidence provides that high leveraged firms are positively associated with the likelihood of violating debt covenant. Firms employ income-increasing accounting strategies in order to delay the default.

On the other hand, a completely opposite view is found in literature that adopts the control hypothesis by Jensen (1986), which suggests that debt creation reduces managers' opportunistic behaviour. Managers' ability to manipulate income increasing accruals due to high leverage is reduced, since management opportunism and earnings management are found to be negatively associated (Ke, 2001; Christie & Zimmerman, 1994). In a study that compares firms of high accruals with firms of low accruals, Dechow and Richardson (2000) document that firms with high accruals are characterized by low leverage. Similarly, managers of highly leveraged firms are assumed to have few motives to manage earnings because their creditors are interested in debt services rather than accounting information. This means that financial statements have less relevant information content (Jelinek, 2007; Iturriaga & Hoffmann, 2005). Both sides of the argument are supported by theory and evidence in favour, but neither of them has delivered a compelling definitive answer. Therefore, the hypothesis developed was;

H₂: There is a significant relationship between the size of debt in a company and earnings management.

2.5.3 Relationship between size of the firm and earnings management

Political cost affects the size of an organisation; larger companies will do more policies that will lead to decreased profits for the purpose of reducing the political effect. Firms size is a scale in which large and small companies can be classified (Nurdiniah et al., 2015). Research results on the relationship between the size of a company and earnings management are inconsistent in literature. While (Jambalvo, Rajgopal &

Venkatachalam, 2002; Monem, 2003) results show that large companies are motivated to use accruals to balance between gain and losses and to avoid earnings fall other scholars believe that the size of a company and earnings management are negatively correlated (Klein, 2002). Additionally, (Moses, 1987; Michaelson, James & Charles, 1995; Hang & Wang, 1998) in their study provide evidence that large firms smooth earnings more than small firms. In contrast, (Lee & Choi, 2002; Albrecht & Richardson, 1990) show that smaller firms practice earnings management more compared to large firms in order to avoid losses. In the case of large firms, the practice is minimal due to the fact that they are closely monitored by analysts. Thus, the hypothesis developed was;

H₃: There is a significant relationship between the size of the firm and earnings management.

2.5.4 Relationship between percentage of publicly held shares and earnings management

Previous literature suggests that different ownership structures imply different incentives to control and monitor firms' performance (Morck, Shleifer & Vishny, 1988; Shleifer & Vishny 1986). According to some authors, ownership could have a negative effect on earnings management (Warfield et al., 1995) or a positive effect due to entrenchment or expropriation effects (Cheng & Warfield, 2005). On the contrary, (Nassir et al., 2012) show that there is no significant relationship between ownership and earnings management. Ownership is proxied through the percentage of publicly held shares. Thus, the hypothesis developed was;

H₄: There is a significant relationship between the percentage of publicly held shares and earnings management.

2.5.5 Relationship between dividend paid and earnings management

Dividend as a concept has been researched widely since the work of Modigliani & Miller in 1958 and 1961. Dividend paid to shareholders pressure corporate insiders to expel cash (La Porta et al., 2000). Their findings are consistent with the agency theory which suggests that unless profits are paid to shareholders, the profits may be diverted by the insiders for personal use or may be committed to unprofitable projects that provide private benefits for the insiders. Likewise, dividends reduce free cash flows that

managers may otherwise divert for personal use to fund unprofitable projects (Jensen, 1986). This evidence is consistent with the notion that dividends are paid when firms have excess cash flows in order to reduce potential over investment by management. Easterbrook (1984) and Rozeff (1982) suggested that higher dividends reduce agency costs by forcing management to seek for external financing and these results in closer market scrutiny. Daniel et al. (2007) indicates that firms employ earnings management to meet expected dividends levels. The hypothesis developed was;

H₅: There is a significant relationship between the dividend paid and earnings management.

2.5.6 Relationship between free cash flow and earnings management

A manager may choose to invest in an unprofitable project due to his or her self-interest. As a result, the company may be in the position of low growth. In the absence of effective monitoring actions by independent stakeholders, managers are likely to conceal the information on the activities by providing minimal disclosure or by manipulating accounting numbers (Noor et al., 2015). If an organisation is also not paying dividends from the free cash flows, it could give managers a leeway to invest the cash in projects that favour their own interests (Jensen, 1986). In the presence of debt, free cash flow may be used to reduce agency costs as it is used to repay the debt as explained by (Myers, 1977; Jensen and Meckling, 1986). Further, due to information asymmetry, managers may not provide adequate information on the projects in which they have invested cash (Chung, Firth & Kim, 2005). Free cash flow is thus an incentive for manager to manipulate and thus a factor of earnings management. Thus the hypothesis developed was;

H₆: There is a significant relationship between free cash flow and earnings management.

2.5.7 Control variables

The importance of controlling for the effect of firm performance in test of earnings management has been recognized in some prior studies (Teoh et al., 1998; Welch, Teoh and Wong, 1998b). The importance of controlling firm performance is also evident from the simple model of earnings, cash flows and accruals in Dechow, Kothari and Watts' studies.

Growing companies are assumed to have the incentives to control losses through earnings manipulation in order to maintain a balance in the market reflected earnings (Wu, Chen & Lee, 2015; Skinner & Sloan, 2002). Other scholars, (McNichols, 2000; Beaver, Kettler & Scholes 1970) point out that it is important to control for expected growth using an aggregated accrual approach. This research thus aimed at controlling firms' performance and firms' growth.

2.6 Conceptual Framework

The conceptual framework explains the relationship between the variables. The dependent variable is earnings management. The independent variables include; management bonus, debt, size of the firm, percentage of publicly held shares, dividend paid and free cash flow. The control variables were firms' performance and firms' growth.

2.7 Chapter Summary

This chapter focused on the empirical findings of studies relating to earnings management. The chapter was introduced with an overview on earnings management, followed by the contextual setting of earnings management in Kenya. Additionally, evidence of earnings management was discussed as brought out by other scholars. The understanding of conflicts existing in determining factors leading to earnings management was also expounded. Moreover, there was a clear description of the theoretical framework. The agency theory, big bath theory and positive accounting theory were also explained in details. The chapter also covered the formulation of hypothesis to answer the second specific research objective and finally there was a description of the conceptual framework.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

Whereas chapter two incorporated the review of literature relevant to this study and was based on the developed objectives of the study. Chapter three covers the research methodology which entails; philosophical assumptions, research design, target population, data collection, data analysis, validity of research instrument, reliability of research instrument and finally ethical issues.

3.2 Philosophical assumptions

Based on philosophy, most scholars make the assertion of what knowledge is (ontology), how the knowledge is known (epistemology) and the process of studying the knowledge (methodology). These ideas have been put across by Creswell (1994). Methodology of analysis is dependent upon the philosophical stances a researcher has taken. In this study, a pragmatic approach of knowledge claim was adopted as brought by (Cresswell, 2003). Pragmatism is derived from the work of Cherryholmes (1992), Rorty (1990), Murphy (1990) and Patton (1990) as quoted by (Cresswell, 2003). According to the above authors, there are many forms of pragmatism. For them, knowledge claims arise out of action, situation and consequences.

Instead of methods being important, the problem is the most important, and the researcher uses all approaches to understand the problem (Rossman & Wilson, 1985). In this research, the main problem was earnings management and in order to understand the concept, the researcher needs to understand the main factors that lead to the practice, in order to be able to offer recommended solutions to the problem.

The main philosophical assumptions under the pragmatic approach as brought out by the study conducted by Cresswell (2003), Cherryholmes (1992), Rorty (1990), Murphy (1990) and Patton (1990) included; Pragmatism does not commit itself to any system of philosophy and reality. It thus gives the researcher a leeway to draw conclusions liberally from both quantitative and qualitative assumptions during research. Individual researchers have the freedom to choose the most appropriate methods, techniques and procedure to use in the research based on their research needs. It is important to note that the current instance is not based on a strict dualism between the mind and a reality

completely independent of the mind, hence the use of mixed method research. It is worth noting that pragmatism is research based on the intended consequence. The research emphasizes on the “what” and “how” questions of research. For instance, the research aims at answering the question, “what are the factors that determine earnings management?” The protagonists of pragmatism theory believe that research always occurs in social, historical and political context. Thus, the mixed method studies may include a postmodern turn, a theoretical lens that is reflexive of social justice and political aims. Thus, this research takes a pragmatic approach of research to be able to answer its main objective.

3.3 Research design

An explanatory research design was adopted in order to achieve the main objective which was to determine the factors that lead to the occurrence of earnings management. The main aim of an explanatory research is to identify any causal links between the factors or variables that pertain to the research problem. Through the use of explanatory research, the researcher tries to identify the reasons why an event took place (Kothari, 2004; Nachmias & Nachmias, 1996). Explanatory design looks at the causes and reason for the occurrence of a subject matter. The research also sought to describe the extent of earnings management in companies listed on the NSE, the techniques used in carrying out the practice, as well as the relationship between earnings management and the different factors. Hence, the research incorporated a descriptive design. A descriptive design was adopted in order to ascertain and be able to describe the characteristics of the variables of interest. It also offered ideas for further probe and analysis (Sekaran & Bougie, 2010). Hypothesis testing provided an understanding of the relationships that exist between variables.

3.4 Target population

Only 54 companies had been listed over a five year period under review. This population was small, sampling was not done. Therefore, the study focused on the 54 companies listed in the NSE to answer the specific objectives of the study. A target population referred to the entire group that the researcher wishes to investigate (Sekaran et al., 2010). The reason for choosing 54 companies was because they were within the period

of study, contrary to the rest. This is illustrated in appendix II. The period of study for this research was five years, from 2010 to 2014.

3.5 Data collection

With regard to both objective one and three, the extent of EM and factors leading to EM respectively, the secondary data and primary data sources were used to obtain relevant information. On the other hand, in answering objective two on techniques used to perpetrate EM, primary data was collected. Secondary data (financial statements and annual reports) were obtained from the companies' websites and the African Market website. Secondary data refers to research findings based on data collected from existing sources (Nachmias et al., 1996). Secondary data is advantageous as it is likely to be available in a convenient way and is affordable to access (Kombo, 2006).

Questionnaires were administered to the players in the industry to be able to get more insight on earnings management, how it is carried out and the factors leading to its occurrence. The questionnaires were administered to audit managers (Deloitte & Touche, Pricewaterhouse Coopers, Ernst & Young and KPMG), Chief Financial Officers of the listed firms, internal auditors and finance managers of the 54 listed companies selected. The big four audit firms were selected because they audit almost 90% of the companies listed on the NSE (Appendix III).

Through inquiry, the researcher found that audit managers and supervisors in the respective audit firms were as follows; Deloitte & Touche (23), Pricewaterhouse Coopers (34), Ernst & Young (21) and KPMG (20). Auditors, CFO and finance managers were chosen since they have a financial background of the organizations and are in a better position to give more insights on the issue of EM. The questionnaire, which is attached at appendix I, contained information with regards to the three specific objectives of the study. The questionnaire was used to complement secondary data collected for objective one and three. For specific objective two, the questionnaire was the main source of data. The questionnaire was adopted from the work of Alghamdi (2012). Some modifications were made for the questionnaire to suit the purpose of the study. The study used close ended questions where the respondent were offered a set of answers and asked to choose the one that closely represent their view (Kothari, 2004). A

likert scale was designed for the close ended questions. However, the researcher included an open ended question at the end to allow the respondent to comment. The questions were structured using simple and clear wording, avoiding jargons that could easily confuse the respondent. Additionally, the questions were brief and arranged in a sequential and logical order.

In literature, triangulation entails the use of different methods to test the same findings (Babbie, 2004). In fact, the usage of several methods offers a complementary measure of concepts and comparison yielding more accurate set of measures (Payne & Payne, 2004).“ To minimize the degree of specificity of certain methods to particular body of knowledge, a researcher can use two or more methods of data collection to test hypotheses and measure variables. This is the essence of triangulation,” (Nachmias et al., 1996). This research adopted triangulation by using secondary and primary methods of data collection. The logic of triangulation is based on the premise that no single method adequately solves the problem of rival explanation (Cohen, Manion & Morrison, 2007; Ngulube, 2005). The use of multiple methods of data collection and analysis provide the gist to the research.

3.6 Data analysis and measurement

The data was analyzed based on the research problem. Data obtained from the questionnaires were coded to ease analysis of the information contained. After coding, the data was cleaned to check and correct any error (Sekaran et al., 2010). Descriptive analysis was carried out on the coded data. Non parametric and parametric tests (Field, 2012) were carried out to determine the differences in the responses of the different respondent groups.

For the secondary data, univariate and multivariate statistical techniques were employed. Multivariate statistical techniques are used when the researcher is interested in the relationship between many variables (Sekaran et al., 2010).

For the secondary data, descriptive statistics was used to test for the normality of the data at the initial stages of data analysis. In cases where the data was found not to be normal, different statistical methods were used to normalize the data (Templeton, 2011).

Correlation analysis was carried out to determine the significance of the variables and the models adopted.

A multiple regression was also adopted to show the relationship between the dependent variable (earnings management) and the independent variables (corporate characteristics). A multiple regression forms a linear composite of explanatory variables in such a way that it has maximum correlation with a criterion variable (Kothari, 2004). The tolerance value and the variance inflation factor was used to test for multicollinearity (relationship between independent variables) in our regression model and necessary measures undertaken to reduce it in case it was higher than normal. A normal cut off value is a tolerance value of 0.10, which corresponds to a variance inflation factor of 10 (Sekaran et al., 2010).

This study used the financial structure model which is a current modification of the modified Jones model to detect the extent of earnings management. The model shows that it achieves far superior estimation performance than industry approach in terms of coefficient stability and the robustness of discretionary accruals (Yoon et al., 2012)

Financial structure model

$$TA/At-1 = \beta_0 + \beta_1 \Delta REV/At-1 + \beta_2 \Delta NREC/At-1 + \beta_3 PPEt-1/At-1 + \beta_4 INTGt-1/At-1 + \varepsilon$$

Total accruals (TA) = pre-tax income - current income taxes - operating cash flows

TA, At-1, REV, NREC, PPE and INTG represent total accruals, lagged total asset, revenue, net receivable, and property, plant and equipment and lagged intangible asset respectively. Lagged totals assets are used to control of heteroscedasticity.

A multiple linear regression was adopted to explain the relationship between corporate characteristics and earnings management. Multiple regression analysis explains the influence of several independent variables to the dependent variable (Nurdiniah et al., 2015). The following regression equation determines the relationship between corporate characteristics and earning management

$$EM = \gamma_0 + \gamma_1 BON + \gamma_2 DEB + \gamma_3 SIZ + \gamma_4 OWN + \gamma_5 DIV + \gamma_6 CAS + \gamma_7 PER + \gamma_8 GRW + \varepsilon$$

Where BON,DEB,SIZ,OWN,DIV,CAS,PER,GRW respectively represents, management bonus, Debt, Size of the firm, Percentage of shares publicly held, dividend paid, free cash flow, firm performance and firm growth.

3.7 Operationalisation of variables

3.7.1 Independent Variables

Managers' bonus: the sum of bonus paid to the managers of an organisation. Return on asset was used as a proxy to measure management bonus (Nurdiniah et al., 2015)

$$ROA = EBIT / \text{Total Asset}$$

Debt was measured through leverage ratio, which is a ratio of total liability of the firm to total asset indicating the level of percentage of liability used by the firm to finance its asset (Nurdiniah et al., 2015).

$$\text{Leverage} = \text{Total Debt} / \text{Total Asset}$$

Firm size is considered as total annual sales of the firm or the natural logarithm of total assets (Nurdiniah et al., 2015).

$$\text{Company size (Size)} = \text{Total annual sales of the firm}$$

Operating free cash flow is cash directly available to the companies' shareholders and debt holders directly attributable to daily operation of a company. Operating free cash flow is measured by operating income before depreciation minus expenses such as tax expense, interest expense and dividend (Lehn & Poulsen, 1989) as quoted by (Noor et al., 2015).

The operating free cash flow model is defined as $C_t = \text{Operating free Cash flow at time } t$

Whereby, $C_t = EBIT - \text{taxes} + \text{Dep \& Amort} + (\Delta \text{Fixed assets} + \text{Inc. def}) - \text{Working Capital investment}$

Where:

EBIT – Earnings before interest and taxes

Taxes – Taxes on operating income (EBIT * tax rate)

Dep & Amort – Depreciation and amortization

Δ Fixed assets – change in fixed asset (purchase of fixed assets)

Inc.def – Increase in deferred charges (if any)

Working capital investment = Changes in working capital;

Δ working capital = (inventories + account receivable from customers – accounts payable to suppliers) * (sales/365)

Cash flow model adopted from (Noor et al., 2015).

Dividend paid

Dividend was measured through the dividend yield. This is the amount of dividend per share attributable to shareholders relative to the market price per share of a company (La Porta et al., 2000).

Dividend yield = Dividend per share/ Market price per share

Percentage of publicly held shares was measured through number of share held by the public as a percentage of total shares issued and fully paid up (Cheng & Warfield, 2005).

%of publicly held shares= number of shares held by the public / total number of share issued and fully paid up

3.7.2 Dependent variable

The extent of earnings management is shown through the extent or spread of discretionary accrual. Most researchers studying the factors affecting earnings management have adopted the Jones or Modified Jones model in the analysis of discretionary accrual. This study used the financial structure model which is an improved version of the modified Jones model (Yoon et al, 2012).

In determining the extent of earnings management, this study applied the concepts presented by Burgstahler and Dichev (1997) as well as Burgstahler and Eames (2003),

who showed that the distribution of annual earnings is associated with unusually high frequency of zero and minor positive surprises as well an unusually low frequency of minor negative surprises. The researchers' proxies the range within which earnings management was presumed to occur. They had specific intervals to proxy whether EM occurred or not. Additionally, in a study carried out by Axenbrant and Håkansson (2015), the authors proxied that companies engaging in EM lied within a specific interval. In this study, companies that had zero to less than 0.05 or -0.05 were assumed not to engage in earnings management while the rest above the set interval were assumed to engage in either negative earnings management which was not within 0 to -0.05 or positive earnings management not within 0 to 0.05 (Axenbrant et al., 2015).

3.7.3 Control Variables

The control variables are:

Firm's performance; this is the overall performance of an organisation shown through profitability of an organisation (Kothari et al., 2005).

Firm's performance= Profit after tax/Sales

Firm's growth; this shows how well the company is doing in terms of expanding (Wu et al, 2015). It was be determined as Market to Book value

3.8 Validity of research instrument

Validity is the degree in which a test measures what it is supposed to measure. It is a qualifying check or measure for research (Kothari, 2004). This is crucial to establish accuracy and trustfulness of the research. The aim of research is usually to arrive at certain conclusion that is true. The validity of the instrument of research must therefore be realized. The researcher attended to validity by consulting an experienced researcher who assisted to improve the research instruments. Correlation analysis was also carried out to determine validity (Sekaran et al., 2010).

Additionally, the validity of research was observed to increase by contrast of the methods used, hence the greater the contrast in methods used the stronger the validity of the research findings (Cohen et al., 2007; Nachimas et al., 1996).

3.9 Reliability of the research instrument

For a test to be valid it must be reliable. Reliability is the extent in which results are consistent over a period of time (Kothari, 2004). If the results of a study can be reproduced under similar methodology, then the research instrument is considered to be reliable. To obtain this, a pilot study was undertaken where convenience sampling was used. Convenience sampling is a non-probability design used at times to get quick information for the variables of interest (Sekaran et al., 2010). Well formulated investigative questions and the researcher's prompt response to the pre- testing enhanced reliable information and equally accrued a resource that was of high quality and comprehensiveness. Reliability of the research instrument was also tested using the Cronbach's alpha analysis. Cronbach's alpha analysis is carried out to determine the internal efficiency in the use of the different items in a questionnaire (Cortina, 1993).

Triangulation, which is used in data collection above, bridges the issue of reliability as shown by previous research (Leedy & Ormrod, 2005; Payne & Payne, 2004; Babbie & Mouton 2001; Hammersley, 1999).

3.10 Ethical Considerations

Ethics is a way of conducting oneself in accordance to the principles of conduct that are considered correct, especially those in a certain profession or group (Kumar, 2005). Ethical issues concerning research subjects are confidentiality and privacy, anonymity, voluntary and informed consent. The researcher obtained informed consent of research participants by getting them to sign informed consent forms (Bryman, 2012).

A researcher provides anonymity by separating the identity of individuals from the information they give (Nachmia et al., 1996). Therefore, in this research, there was no collection of personal information such as names. The information collected was regarded with high privacy and no disclosure was made beyond using the information in the research.

3.11 Chapter summary

This chapter focused on explaining the research methodology that was adopted in carrying out the research. The research designs adopted were explanatory and descriptive. The target population entailed all companies listed on the NSE within the

period of 2010 to 2014. Both secondary and primary data was collected for analysis. Methods of analysing the data collected have also been expounded in this chapter. The validity and reliability of data collection instrument as well as ethical considerations have also been explained in the chapter.

CHAPTER FOUR: PRESENTATION OF FINDINGS

4.1 Introduction

The chapter aimed at interpreting and analysing the results against existing theories and previous research. The main objective of the research was to investigate factors leading to the occurrence of earnings management among companies listed in the Nairobi Securities Exchange. The chapter presents the findings in tabulated and narrative forms. In addressing specific objective one on the extent of earnings management, results from secondary data and questionnaires were analyzed and presented in tables. In addressing specific objective two on methods used in perpetrating EM, results from the questionnaires were analysed and presented in tables. In addressing specific objective three on factors leading to earnings management, univariate, multivariate and questionnaire analysis was carried out.

Section 4.2 addresses the response rate, the reliability of the research instrument and also presents the general information from the questionnaire findings. Section 4.3 presents results on the extent of earnings management. Section 4.4 presents results on techniques used to perpetrate EM. Additionally, section 4.5 illustrates results on the factors leading to earnings management. Finally, the main conclusion of the chapter is summarized in section 4.5.

4.2 Response Rate

The initial data consisted of 54 companies selected from the Nairobi Securities Exchange for a period of 5 years from 2010 to 2014. The raw data was collected from company websites and African market website. Initial population gave a total of 270 observations in 5 years (54 companies by 5 years). 50 observations, (10 firms in 5 years) had insufficient information and were therefore eliminated from the study. Consequently, the results were based on (270-50) 220 observations in 5 years.

Three questionnaires were issued to each of the selected companies to get the different perception of the different respondent groups on the extent of EM, techniques used in perpetrating EM and factors leading to earnings management. The questionnaires were addressed to the finance department and internal audit department of listed firms. The respondents for this research were; Chief Financial Officers, internal auditors and any

other relevant officers (managers in the finance department) of the listed companies. Out of the 162 (54 by 3) questionnaires issued to the listed companies, 96 responded, giving a response rate of 59.26%. For the external auditors, the response rate was low considering the fact that the period of January to May, when the questionnaires were issued was the peak season during which the external audit is done before companies file their annual returns by 30th June every year. Out of 98 questionnaires issued to external auditors, 36 responded, giving a response rate of 36.73%. Therefore, out of a total of 260 questionnaires issued to listed firms and external auditors, a total of 132 responded, giving a total response rate of 50.77%. The response rate in the study was almost similar to studies conducted by other scholars. Alghamdi (2012) study used questionnaires where the response rate was 44.2% while in Waiguru (2013), the response rate was 59%. Hence, the information collected from the questionnaires was sufficient enough for data analysis. No sampling was done since the population was small.

4.2.2 Test for reliability

Cronbach's alpha analysis was carried out to determine the reliability of the questionnaire. Cronbach's alpha analysis is carried out to determine the internal efficiency in the use of the different items in a questionnaire (Cortina, 1993).

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.912	.907	18

A Cronbach's alpha of 0.912 for 18 items indicate a high level of internal consistency for the scale.

4.2.3 General information from the questionnaire findings

The questionnaires issued to the respondents contained two general questions. The questions were to capture issues on; the position of the respondents and the years of experience in a particular position. From the analysis on the position held, 69.69% of the

respondents were composed of CFOs, internal auditors and external auditors. Finance managers, (other officers) were the highest percentage of respondents with 30.31%. The results are consistent with the expectations of the study as most managers are stationed within the organisation and thus easy to get their responses. The responses from internal auditors were least at 18.18% due to the fact that not all companies had internal auditors. The information was used to test whether there were any significant differences between the responses of the different respondents' groups. With regard to years of experience, most of the respondents had 11 to 15 years of experience. The finding was consistent with the expectation of the study because the questionnaires were addressed to individuals in senior positions.

Table 4.1: Position held in the organisation

Position Held	Frequency	Percentage
Chief Financial Officer	32	24.24%
Internal Auditor	24	18.18%
External Auditor	36	27.27%
Others (managers)	40	30.31%
Total	132	100%

4.3 Extent of Earnings management

The research set out to determine the extent of earnings management on listed companies over the years 2010 to 2014. The results were meant to answer the specific objective one. Objective one was achieved by analysing the number of firms that practise EM and the level of EM per year.

4.3.1 Extent of Earnings management based on financials

Discretionary accruals were calculated using the Yoons' model as illustrated below to determine the presence of EM in listed firms.

$$TA/At-1 = \beta_0 + \beta_1 \Delta REV/At-1 + \beta_2 \Delta NREC/At-1 + \beta_3 PPE_{t-1}/At-1 + \beta_4 INTG_{t-1}/At-1 + \epsilon$$

TA, At-1, REV, NREC, PPE and INTG represent total accruals, lagged total asset, revenue, net receivable, and property, plant and equipment and lagged intangible asset respectively. Lagged totals assets are used to control of heteroscedasticity.

Calculating the presence of EM was a first step in determining the extent of EM. Secondly, percentages of companies involved in the practice and the level of EM in terms of percentages were used to show the extent of the practice. The study focused on both income-increasing and income-decreasing EM in determining the extent of the practice (Burgstahler & Eames, 2006). The direction of the value of mean of EM was used to determine the method mostly adopted. A negative mean showed income-decreasing EM while a positive one showed income-increasing EM.

Table 4.2: Extent of earnings management

Descriptive Statistics					
YEARS	Mean of EM	Std. Deviation of EM	Companies Practising EM	Percentage of EM per year (N= 44)	Level of EM practised
EM 2010	0.09	0.2911	16	36.36%	36.13%
EM 2011	-0.059	0.1303	18	40.91%	26.64%
EM 2012	-0.065	0.1043	20	45.45%	32.61%
EM 2013	-0.082	0.1533	23	52.73%	47.32%
EM 2014	-0.062	0.0974	19	43.18%	29.55%

The results show that EM was practised in Kenya in the period under review. EM in Kenya was shown to be increasing among the listed firms. The growth in EM was brought about by different factors expounded later in the study. In the year 2010, as shown by a positive mean, most of the companies practised income-increasing EM with the extent being at 36.13%. This implies that companies practised EM to increase their

income or reduce the losses they had incurred during the year. This may be explained by the fact that since there was an improvement in the economy by a growth rate of 5.6% from 2.6% in 2009, more investors were attracted in the Kenyan market (Central Bank of Kenya, 2010). In order to maintain this industry trend, managers may have opted to engage in income-increasing earnings management. From the year 2011 to 2014, companies practised income decreasing EM. This implies that most companies engaged in the practice to smooth out their income stream over time or to create a situation in which the next period results would almost certainly be an improvement. This might have been brought about by the fact that in 2011, foreign investors may have been reducing their investment portfolio due to the fear that post-election violence might re-occur. In order to avoid reporting a drastic change in profit, managers may have been involved in income smoothing during period 2011 to 2013. Additionally, the Kenyan growth rate reduced in 2011, which might have affected company performance. This is in tandem with the big bath theory which stipulates that when operating performance is extremely poor, firms often opt for income - decreasing strategies rather than income – increasing ones (McNichols & Wilson, 1988). The extent of EM was highest in 2013 at 47.32% after the election period in Kenya. This may have been as a result of change in government as well as companies trying to recover from the election period. In 2014, the extent of EM reduced significantly to 29.55%. This may have been due to more scrutiny on listed firms by the CMA due to the collapse of major companies.

4.3.2 Perception of respondents on earnings management

The extent of EM was also scrutinised by asking the players in the industry to give their opinion to what extent they agreed with; stock price decrease leading to a high EM; whether trouble firms practised more EM than other firms, if pressure to meet shareholders needs led to high EM and whether pressure to report high profit led to high EM. A likert scale was used to measure the degree of responses given to each statement where: Very High =5, High = 4, Not used=3, Low = 2, Very low = 1. The mode of the responses was useful as it gave the most occurring response to each of the statement while median showed the middle responses. Findings with a score greater than 3 implied more earnings management while scores less than 3 implied EM was not practised.

Table 4.3 : Perceptions of respondents on earnings management in Kenya

Descriptive Statistics				
Statement	Mean	Median	Mode	Std. Dev
Decrease in stocks price movement leads to more earnings management	2.72	2.00	2	1.114
Troubled firms are more involved in earnings management than other firms.	3.54	4.00	4	1.298
Pressure to meet shareholders needs lead to high level of earnings management	3.66	4.00	4	1.158
Pressure to report high profits leads to earnings management	4.11	4.00	5	1.058

The decrease in stock price had a median and a mode of 2 respectively, implying that decrease in stock price influenced earnings management at a low rate. Therefore, decrease in stock price does not lead to high EM. The finding conflicts with Alghamdi (2012) who found that stock price movement in Thailand led to high EM with a mean value of 4.1 compared to a mean value of 2.72. The finding of stock price decreases in Kenya implies that EM does not increase with the changes in stock price. This may be because changes in stock price movement are controlled by forces of demand and supply in the trading market.

Troubled firms engaged in EM more than other firms. The finding of this study imply that managers of troubled firms like Uchumi limited engage in earnings management to protect their job and avoid further scrutiny by regulatory bodies. The finding of the study concur with DeAngelo (1988); Weibach (1988); Moyer (1990) and Petroni (1992) who predicate that managers engage in EM when firms are troubled in order for them not to lose their jobs. Additionally, the managers engage in such practices in order to reduce the burden of agency regulation as well as preclude chances of being subjected to strict monitoring.

Pressure to meet shareholders need as well as pressure to report high profit also lead to high earnings management. The above findings imply that where managers have been

given unrealistic targets by companies, they opt to engage more in earnings management. Companies are faced with the pressure to maintain high profit to be able to run the company comfortably as well as pay company dividends. In situations where a company does not pay shareholders' dividend or re-invest any cash, shareholders move away from the company. In order to keep the shareholder, managers engage in EM. The finding relating to the pressure to maintain high profits differs with that of Alghamdi (2012) whose mean was 3.4. This implies that high profit did not lead to EM in Thailand. On the other hand, Alghamdi (2012) agree with the finding relating to the pressure to meet shareholders' needs with a mean of 3.75.

Additionally, Kruskal-Wallis tests as displayed in table 4.5 were used to determine the differences in perceptions of the different respondent groups on the different statements.

Table 4.4: Kruskal-Wallis test on perceptions of different respondents' groups on EM in the listed firms

	Kruskal-Wallis		One-way ANOVA	
Statement	P. value Sig		P.value Sig	
Decrease in stocks price movement leads to more earnings management	NS	0.335	NS	0.321
Troubled firms are more involved in earnings management than other firms.	NS	0.379	NS	0.507
Pressure to meet shareholders needs lead to high level of earnings management	NS	0.421	NS	0.582
Pressure to report high profits leads to earnings management	NS	0.568	NS	0.652
	NS= NOT SIGNIFICANT (p>0.05)			
One-way ANOVA is an additional or secondary test to verify the results				

Kruskal-Wallis analysis of respondents' perceptions revealed that there were no significant differences in the responses between the CFOs, internal auditors, finance managers and external auditors regarding the statements. The finding contradicts with the research done by Alghamdi (2012) where he found the perception of auditors differing with other stakeholders on the issue of decrease in stock price. Stock prices in

Kenya are controlled by the forces of demand and supply and also other macroeconomic variables.

Conclusively, the results above shows that the extent of EM increased mostly due to pressure to report high profits, pressure to meet shareholders' needs and in the cases of troubled firms. Moreover, a decrease in stock price does not lead to increase in earnings management. Finally, there were no significant differences in opinion between the different respondent groups.

4.4 Techniques used in conducting earnings management

The study sought to answer the second objective of the study by determining the methods used in perpetrating the practice of earnings management in Kenya. Questionnaires were issued to respondents with the different methods that had been drawn from literature.

4.4.1 Perceptions of respondents on methods used leading to EM

Different methods drawn from literature were used. A likert scale was used to measure the degree of responses given to each statement where: Very High =5, High = 4, Not used=3, Low = 2, Very low = 1. The mode of the responses was useful as it gave the most occurring response to each of the methods while median showed the middle responses. For findings with a score greater than 3, the subject method was considered to be used in perpetrating EM while for scores less than 3, it was considered that the method was not used.

Table 4.5: Techniques used in conducting earnings management

		Ranking	Mean	Median	Mode	Std. Dev
Q	Statement					
1	Manipulation of accounts receivable.	4	3.5	4	4	1.19
2	Manipulation of depreciation amount.	7	2.79	3	3	1.05
3	Manipulation of Various Expenses.	6	3.17	3	4	0.77
4	Manipulation of loan interest.	8	2.25	2	3	0.77
5	Manipulation of revenue amount.	1	3.73	4	5	1.31
6	Manipulation of cash flow amount.	2	3.58	4	3	1.06
7	Capitalization rather than expensing expenditure.	5	3.35	3	4	1.18
8	Controlling the outcome of inventory valuation.	3	3.54	4	4	1.04
Key: Very High =5, High = 4, Not used=3, Low = 2, Very low = 1						

The explanation below provides an overview of each method highlighted above based on the results in table 4.5

4.4.1.1 Manipulation of accounts receivable through altering bad debt expense

Manipulation of bad debt was shown to be highly used by a median and a mode of 4 respectively. The mean of the method was at 3.50, implying the method was used to perpetrate EM. The result implies that managers find it easy to use accounts receivable to conduct earnings management. These findings concur with the findings of Alghamdi, (2012) where he arrives at a mean of 4.04.

4.4.1.2 Manipulation of depreciation amount

Manipulation of depreciation amount was found to have a mode of 3; this implies that the method was not used in perpetrating EM in a Kenyan context. The findings contradict with the findings of (Alghamdi, 2012) who found that depreciation is a significant tool with a mean value of 4.1. The study's mean was 2.79, thus depreciation was not an important technique.

4.4.1.3 Manipulation of Various Expenses (Research and Development cost, maintenance expense)

Manipulation of various expenses had a mean response of 3.17 and a median of 3. The findings showed that the respondents were indifferent on the use of this method to

influence earnings management. From the findings, it may be implied that Research and development cost are subjective costs. In Kenya, organisations may decide what to recognise under the research and development cost and document it as a policy. Additionally, auditors guide organisations on what to recognize as research and development cost. The study conducted by Alghamdi (2012) indicated that the method was used in Thailand with a mean value of 4.

4.4.1.4 Manipulation of loan interest by adjusting the amount

The results on manipulation of loan interest illustrated that the method was used, although, at a very low rate of 2 as median and 2.25 as the mean. Therefore, the method was not important. The results implied that loan interest manipulation in the books of accounts was done moderately. From the results it may be implied that for a loan, more emphasis is put on the fact that payment is done without default to the lender.

4.4.1.5 Manipulation of revenue amount

Manipulation of revenue amount was shown to be high, with a mean value of 3.73, a median of 4 and a mode of 5. Hence, the method was used in perpetrating EM. The findings are in line with the literature review and the expectation of the research. Revenue amount is one of the most important items in financial statements. Manipulating revenue would lead to a company reporting a different financial position from the true picture. The findings are consistent with Alghamdi (2012) whose mean was 3.76.

4.4.1.6 Manipulation of cash flow amount to avoid situation of deficit

Manipulation of cash flow amount to avoid situation of deficit was shown to occur with a mean response of 3.58 and a median value of 4. Therefore, the method was used in perpetrating EM. These findings imply that managers manipulate cash flow thereby increasing EM. In situations where companies need cash for example, from loan providers, managers manipulate cash flows to avoid deficits. Companies with negative cash flows over a period of time find it difficult to borrow money from loan providers, thus managers tend to manipulate the books to avoid such cases. The findings are in agreement with the findings of Alghamdi (2012) whose mean score of the respondents was 3.8.

4.4.1.7 Capitalization rather than expensing expenditure

Capitalization rather than expensing expenditure was found not to be used with a mean score of 3.35 and a median of 3. From the results it may be implied that the method was not used since it is a one-off method based on the situation of the asset or expense incurred. The findings contradict with Alghamdi (2012) in which capitalization was used rather than expensing in Thailand with a mean of 4.2.

4.4.1.8 Controlling the outcome of inventory valuation

Managers are guided by the accounting standards (IAS 2) on the valuation of inventory. The standard only gives the method to use but does not stipulate the best method. Managers thus have the discretion to change from one method of stock valuation to another, for example, shifting from First In First Out to Last In First Out. Therefore, the mean score of 3.54 and a median of 4 of the responses were expected. Hence, the technique was used in practising EM.

4.4.2 Non- parametric tests on techniques used to carry out earnings management

Significance tests (Kruskal-Wallis analysis and ANOVA) were carried out on the responses from the different respondent groups as displayed in table 4.6.

Table 4.6 : Kruskal-Wallis test on the perceptions of the different respondents' groups on the techniques used in conducting EM

		Kruskal-Wallis		One-way ANOVA	
Q	Statement	P. value Sig (P<0.05)			
1	Manipulation of accounts receivable.	NS	0.4490	NS	0.5140
2	Manipulation of depreciation amount.	S	0.0437	S	0.0338
3	Manipulation of Various Expenses.	NS	0.7900	NS	0.8110
4	Manipulation of loan interest.	S	0.0145	S	0.0221
5	Manipulation of revenue amount.	NS	0.5890	NS	0.6930
6	Manipulation of cash flow amount.	NS	0.4120	NS	0.4210
7	Capitalization rather than expensing expenditure.	S	0.0361	S	0.0496
8	Controlling the outcome of inventory valuation.	NS	0.1860	NS	0.2080
One-way ANOVA is an additional test to verify the results		NS = NOT SIGNIFICANT			
		S= SIGNIFICANT			

There were significant differences in the response of the different groups on the following methods; manipulation of depreciation amount, manipulation of loan interest

by adjusting the amount and capitalization rather than expensing expenditure even in situations where expensing is the correct treatment.

From the results obtained (Kruskal-Wallis analysis and ANOVA), further analysis was done to determine which groups differed in their perceptions on the methods used. The Mann – Whitney test was carried out to show the differences in perceptions between the different groups (Field, 2005). The results of the Mann-Whitney test revealed that on the manipulation of depreciation amount, internal auditors and external auditors seem to agree while the CFO and managers offer a different opinion. Auditors seem to agree that manipulation of depreciation amount is not used in Kenya. According to the managers and CFO, it was implied that manipulation of depreciation was used though at a lower rate. The findings on manager and CFO implied that it was easy to change internal policies. Both internal and external auditors agreed with manipulation of loan interest being used at a lower rate. Their opinion was different from that of the CFO and finance managers. The difference in opinion may have been brought about by auditors having more knowledge through experience of loan interest manipulation while carrying out audits. The CFO and managers can be implied to believe that loan payment is more important than the recognition in the financial books as expected from literature. According to external auditors and CFO, the use of capitalization rather than expensing expenditure was immaterial in earnings management. CFO and external auditors may have been more conversant with the guidelines of capitalization rather than expensing expenditure. On the other hand, internal auditors and managers believed it was used at a high rate since the guidelines are subjective in nature.

The findings on perceptions were different from the study conducted by Alghamdi (2012). He found that manipulation of inventory, manipulation of revenue and manipulation of cash flow have significant differences in perceptions between the different respondent groups. The deviation of the results may be brought about by the groups of respondents in question since the two studies used different respondents' groups. Whereas Alghamdi (2012) used board of directors, sub committees, academicians and auditors as the respondents, this study used CFOs, external auditor, internal auditor and finance managers.

Conclusively, the methods used to perpetrate earnings management were found to include; manipulation of revenue amount, manipulation of cash flow to avoid a situation of deficit, manipulation of accounts receivables and controlling the outcome of inventory valuation. The methods that were not used, therefore insignificant included; manipulation of various expenses, capitalization rather than expensing expenditure even when expensing was the right way and manipulation of depreciation amount. Finally, manipulation of loan interest was used at a low rate.

4.5 Factors determining earnings management

In determining the factors leading to earnings management, secondary data was analyzed using univariate as well as multivariate analysis. Primary data from the experts in the industry was collected to complement the secondary data. Normality test was carried out and the data was found to be almost normally distributed, hence regressions were used to analyse the relationship between EM and the different factors. Analysis on the information collected using the questionnaires was done using descriptive statistics and later ranking of the factors was done using the mean. Non parametric and parametric statistics were carried out to determine the different perceptions on the statements as presented in the questionnaires sent to different response groups.

To examine the relationship between earnings management and factors leading to its occurrence, the following equation was used:

$$EM = \gamma_0 + \gamma_1BON + \gamma_2DEB + \gamma_3SIZ + \gamma_4OWN + \gamma_5DIV + \gamma_6CAS + \gamma_7PER + \gamma_8GRW + \varepsilon$$

Where BON,DEB,SIZ,OWN,DIV,CAS,PER,GRW and ε represent, management bonus, Debt, Size of the firm, Percentage of shares publicly held, dividend paid, free cash flow, firm performance, firm growth and the error term respectively.

The data collected for each variable were tested for normality and the results were found as presented in table below.

Table 4.7: Test of Normality

Tests of Normality				
	Kolmogorov-Smirnov ^a		Shapiro-Wilk	
	Statistic	Sig.	Statistic	Sig.
EM	.024	.200 [*]	.996	1.00
DEBT	.121	.199	.953	1.00
BONUS	.024	.200 [*]	.996	1.00
SIZE	.024	.200 [*]	.996	1.00
OWN	.169	.896	.926	0.99
DIV	.046	.200 [*]	.986	0.97
CASH	.024	.200 [*]	.996	1.00
PER	.024	.200 [*]	.996	1.00
GROWTH	.034	.200 [*]	.995	1.00

Since the sig of all the factors using either the Kolmogorov-Smirnov^a or Shapiro-Wilk was above 0.05, normality was assumed (Sekaran et al., 2010). Multi-collinearity tests were carried out and the VIF was found to be less than 10 (Myers, 1990) and the Tolerance value above 0.2 (Menard, 1995).

Based on the above model, when using pooled data, Noor et al. (2015) (table 4.8) in determining the earnings management and its factors, the F test was found to be 2.432 with a sig level of 0.037 which is less than 0.05. Hence, the model is also significant, and the standard error of estimation is 0.0939 while the R squared is 0.393. This implies that 39.3% of the variation in earnings management is determined by the change in the above factors.

Table 4.8: Model summary

Model Summary								
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			Durbin-Watson
					R Square Change	F Change	Sig. F Change	
1	.627 ^a	.393	.232	.0939	.393	2.432	.037	2.407

a. Predictors: (Constant), GRW, OWN, CASH, DIV, SIZE, DEBT, PER, BON

b. Dependent Variable: EM

To test the hypotheses developed in the research, univariate and multivariate analysis of all the factors was done. The analysis was based on pooled data from 2010 to 2014. The hypothesis to be tested included;

H1₁: There is a significant relationship between the management bonus and earnings management.

H2₁: There is a significant relationship between the size of debt in a company and earnings management.

H3₁: There is a significant relationship between the size of the firm and earnings management.

H4₁: There is a significant relationship between the percentage of publicly held shares and earnings management.

H5₁: There is a significant relationship between the dividend paid and earnings management.

H6₁: There is a significant relationship between free cash flow and earnings management.

4.5.1 Univariate analysis on factors leading to earnings management

Univariate analysis was carried out to show the significance of each factor with regard to earnings management. The findings also show the direction of the factor with earnings management.

Table 4.9: Univariate analysis on factors leading to earnings management.

HYPOTHESIS	Significance test of Linear regression Coefficients				
	Unstandardized Coefficients		T	Sig.	Test
	B	Std. Error			
H1₁	0.244	0.159	-1.531	0.013	Accepted
H2₁	-0.227	0.167	-1.36	0.018	Accepted
H3₁	-0.502	0.142	-3.53	0.001	Accepted
H4₁	0.329	0.167	1.973	0.056	Rejected
H5₁	0.01	0.166	0.007	0.994	Rejected
H6₁	-0.157	0.162	0.969	0.034	Accepted

As illustrated in the results above, four factors were found to be significant in determining earnings management using simple linear regression. The factors included; the bonus management (**H1₁**), the size of debt in a company (**H2₁**), the size of the firm (**H3₁**) and Cash Flow (**H6₁**). Hence, the four hypotheses developed for each factor in this study were accepted based on the results of simple linear regression. The findings implied that managers engage in earnings management to be able to meet the specific targets so as to earn a bonus. The positive sign on the bonus management implies that when the bonus is high, there are more instances of earnings management practice. Managers also engage in earnings management to avoid violating debt covenants and in cases where they need to borrow more loans. The relationship between earnings management and debt was negative, implying that when the level of debt was more, earnings management was less. This may have been attributed to the fact that loan providers may be more interested in the payment rather than the amount recognised in the books. The relationship between size of the firm and earnings management was negative implying that as a company increases in size, it is less involved in earnings management. The results connote that when firms are closely monitored, the rate of EM

practice reduces. The findings on the four factors were similar to the findings of Poorheidari and Hemati (2004), Richardson et al (2000), and Monem, (2003). The findings on management bonus and debt were supported by the positive accounting theory under the two hypotheses- bonus-plan hypothesis and the debt-plan hypothesis (Watts & Zimmerman, 1990). Two factors were found to be insignificant to earnings management and such factors included; the percentage of publicly held shares (**H4₁**) and the dividend paid (**H5₁**).

4.5.2 Multivariate analysis on factors leading to earnings management

To examine the effects of the independent variables on earnings management simultaneously, multiple regression was used. The results were compared with the results on the simple linear regression.

Table 4.10: Multivariate analysis on factors leading to earnings management.

Significance test of multiple regression Coefficients					Univariate Results	
HYPOTHESIS	Unstandardized Coefficients		t	Sig.	Test	Test
	B	Std. Error				
(Constant)	-0.044	0.043	-1.026	0.313		
H1₁	0.178	0.277	0.786	0.048	Accepted	Accepted
H2₁	-0.02	0.147	-0.138	0.009	Accepted	Accepted
H3₁	6.33E-10	0	1.217	0.233	Rejected	Accepted
H4₁	0.093	0.324	0.285	0.777	Rejected	Rejected
H5₁	-0.196	0.083	-2.368	0.025	Accepted	Rejected
H6₁	-1.08E-08	0	-1.37	0.018	Accepted	Accepted
Firm Performance	0.266	0.101	2.632	0.013	Accepted	
Firm Growth	-0.023	0.015	-1.494	0.146	Rejected	

From the results on the multiple analysis, four factors were found to be significant in determining earnings management using the multiple regression. These factors included; the management bonus (**H1₁**), the size of debt in a company (**H2₁**), the dividend paid (**H5₁**), free cash flows (**H6₁**) and the firm performance. The findings which contradicted

with simple linear regression where the size of the firm (**H3₁**) was found to be significant and the dividend paid (**H5₁**) was found to be insignificant.

H1₁: There is a significant relationship between the management bonus and earnings management.

In the above results, management bonus was found to be significant and positively related to earnings management in both the multivariate and the univariate analysis. The findings imply that earnings management increased with an increase in the management bonus. This can further be explained by the agency theory, where managers are in conflict with the shareholder and in cases where they have not achieved the shareholders' motive, they manipulate the books to portray success. Hence **H1₁** is accepted. The findings are similar to (Khoshtinat et al., 2003; Poorheidari et al., 2004) who argued that managers increase earnings so as to increase their compensation.

H2₁: There is a significant relationship between the size of debt in a company and earnings management.

In both the multivariate and univariate analysis, debt had a negative significant relationship with earnings management. The findings imply that as debt increased, earnings management reduced. From the findings, it can be deduced that managers reduce cases of EM due to high level of debt. From the results it can be implied for the loan provide, of importance to them is not the amount recognised in the financial statement but the amount they are paid. These findings concur with the results of (Ke, 2001) who affirmed that since managers are opportunistic, earnings management is found to be negatively associated with debt. Similarly, (Richardson et al, 2000) found that high leverage levels imply lower accruals. Hence, hypothesis **H2₁** was accepted.

H3₁: There is a significant relationship between the size of the firm and earnings management.

Findings on the multivariate analysis conflict with findings on the univariate analysis. Whereas **H3₁** was rejected when using multivariate analysis, the hypothesis was

accepted in the case of the univariate analysis. There is a need for further analysis on this factor to investigate on the difference in the findings. Since the multivariate analysis is more superior to the univariate analysis, **H3₁** is rejected. The findings imply that the size of the firm has no significant effect on earnings management in Kenya. These findings contradict with (Monem, 2003) result which showed that large companies are motivated to use accruals to balance between gain and losses and to avoid fall in earnings.

H4₁: There is a significant relationship between the percentage of publicly held shares and earnings management.

Based on the results from both the multivariate and univariate analysis, **H4₁** was rejected. This implies that there is no significant relationship between the percentage of publicly held shares and earnings management. The findings imply that ownership of a company has no effect on earnings management. The findings are similar to Nassir et al, (2012) who found that there is no significant relationship between ownership and earnings management.

H5₁: There is a significant relationship between the dividend paid and earnings management

Results from the multivariate analysis contradict those for the univariate analysis. The multivariate analysis accepts **H5₁** while the univariate analysis rejects the hypothesis. Due to this factor, there is a need for further research to determine the cause of the difference. Since the multivariate analysis is superior, the study accepts that there is a significant relationship between the dividend paid and earnings management. Earnings management increases with an increase in the dividend paid. The results from the two regression models were mixed but each supported by a theory. The finding in the multivariate analysis concur with Daniel et al. (2007) who opines that firms employ earnings management to meet expected levels of dividend. This finding shows that there is a relationship between EM and dividend paid. On the other hand, in the univariate analysis the finding concur with the finding of La Porta et al. (2000) who illustrates that dividend paid is dependent on cash flow rather than EM.

H6₁: There is a significant relationship between free cash flow and earnings management.

Findings from both the multivariate and univariate analysis show that there is a significant negative relationship between free cash flow and earnings management. The findings imply that as cash flow of a firm reduces, earnings management increases. An increase in the cash deficit increases earnings management in an organisation. The finding is in congruent with literature review as presented by Chung et al. (2005) who found that due to information asymmetry, managers may not provide adequate information on the projects in which they have invested. Therefore, they are involved in more EM.

The control variable, which is firm performance, shows that there is a significant positive relationship with earnings management, hence the need to control it in the model. On the other hand, growth rate had no significant effect on earnings management; hence there was no need to control it. Conclusively, the factors that were found to influence earnings management included; the management bonus, the size of debt in a company, the dividend paid and free cash flow. The size of the firm and the percentage of publicly held shares were found to be insignificant, thus did not lead to earnings management.

4.5.3 Analysis of questionnaires on factors leading to earnings management

Data collected from the questionnaires on factors leading to EM was used to complement quantitative data. Questionnaires were used to capture the following statements. Each statement represented a specific hypothesis as illustrated below;

1. The urge to receive management bonus as a result of improved performance induces managers to misreport financial performance, (**H1₁**).
2. Poor financial performance will negatively affect the debt covenants that currently exist with loan providers, (**H2₁**).
3. To reduce the political cost and attention associated with a firm being large in size, managers understate their revenues, (**H3₁**).
4. To reduce dilution of ownership by having few public shareholders owning the company, companies engage in earnings management (**H4₁**).

5. Pressure from the shareholder to retain stable dividends payable to them cause managers to engage in earnings management, (**H5₁**).
6. To maintain positive free cash flow in an organization, managers alter cash flow from operations, (**H6₁**).

A likert scale was used to measure the degree of responses given to each statement where: Strongly Agree =5, Agree = 4, Neutral=3, Disagree = 2, Strongly Disagree = 1. The mode of the responses was useful as it gave the most occurring responses to each of the statement while median showed the middle responses. For findings with a score greater than 3, the subject factor was considered to lead to EM while scores which were less than 3 implied that the factor did not lead to EM.

Table 4.11 : Questionnaire analysis on factors leading to earnings management

	Ranking value	Mean	Median	Mode	Std. Dev	Kruskal- Wallis		ANOVA one way		Quantitative Analysis		Overall Decision
						P. value Sig (P<0.05)				Multivariate	Univariate	
H1 ₁	3	3.79	4	4	1.230	NS	0.498	NS	0.549	Accepted	Accepted	Accepted
H2 ₁	2	3.95	4	5	1.025	NS	0.667	NS	0.718	Accepted	Accepted	Accepted
H3 ₁	6	2.73	3	3	1.092	S	0.030	S	0.035	Rejected	Accepted	Rejected **
H4 ₁	5	3.23	3	3	1.276	NS	0.572	NS	0.656	Rejected	Rejected	Rejected
H5 ₁	4	3.38	4	4	1.251	S	0.044	S	0.043	Accepted	Rejected	Accepted**
H6 ₁	1	4.12	4	4	1.330	NS	0.537	NS	0.572	Accepted	Accepted	Accepted
Key: Strongly Agree =5, Agree = 4, Neutral=3, Disagree = 2, Strongly Disagree = 1												
One-way ANOVA is an additional or secondary test to verify the results												
S= SIGNIFICANT NS = NOT SIGNIFICANT												

The overall decision indicated that there was a significant relationship between the management bonus and earnings management. The mode of management bonus was 4, showing that it was a contributing factor to earnings management. The findings agreed with the findings in secondary data both for the univariate and the multivariate analysis. There was no significant difference in the opinions of the respondents on the factor as shown by the Kruskal- Wallis test and One-way ANOVA. In this study, it is believed that the management bonus is among the most important incentives for managers to

engage in EM. From the agency theory, managers are agents of the shareholders and the two have different interests. Managers may therefore, use EM to fulfil their interest, for example, by manipulating financial books in order to increase their bonus. From the results above, size of debt in a company led to earnings management with a mean of 3.95 and a mode of 5. This is evident that the respondents agreed it was also a possible factor leading to earnings management. The findings of the univariate analysis and multivariate analysis are in tandem with the above findings. Additionally, there was no significant difference in the opinions of respondents on size of debt in a company leading to earnings management as illustrated by the finding of the Kruskal- Wallis test and the One-way ANOVA. These findings are similar to Jelinek (2007) who claims that loan providers are more interested in the payment rather than the financial status of the firm.

The above results show that H_{4_1} was rejected. The findings indicate that there is no significant relationship between publicly held shares and earnings management. Additionally, there was no significant difference in the respondents' opinions as shown by the findings of the Kruskal- Wallis test and the One-way ANOVA. Effect of cash flow on earnings management was seen to be uniform among the three analyses. The results imply that deficit in cash flow causes earnings management with a response mean of 4.12 and a mode of 4. Additionally, there was no significant difference between the responses from the different respondent groups.

The result of the different respondents had significant differences in their opinions on the size of a firm leading to EM as illustrated from the Kruskal- Wallis test and the One-way ANOVA. The Mann-Witney test was carried out to determine the differences between the respondent groups in that internal and external auditors concur while their perception differed from that of CFOs and finance managers. According to the internal and external auditors, the size of a firm does not affect earnings management. The findings may imply that since internal auditors and external auditors have experience in auditing both large and small firm they did not see any difference on EM due to size. On the other hand, CFO and Finance managers believe that the size of the firm affects earnings management. When a large organisation is about to collapse, managers prefer

to undertake earnings management. Since the findings analysed from the questionnaires and the multivariate analysis agree that no relationship existed between the size of the firm and earnings management. The overall decision is the size of a firm does not lead to earnings management in Kenya.

From the Kruskal- Wallis test and the One-way ANOVA there were significant differences in the perception of respondents on the dividend paid leading to EM. The Mann-Witney test was used to determine which group of respondents agreed and which differed. According to CFO and finance managers, pressure from shareholders to retain stable dividends was evident as they experienced it. For the internal and external auditors, pressure from shareholder was not a major determinant of earnings management. Dividends were announced based on a company's performance and some companies preferred to retain the earnings rather than issue dividends. Since pressure to maintain stable dividend was accepted on the multivariate analysis and the mode of the response was 4, the pressure to maintain stable dividend led to earnings management. These findings imply that where Board of directors agree that shareholders should be paid dividend, it ignites pressure and managers tend to overstate income where the income threshold does not meet the expectations of the shareholders.

Conclusively, four factors out of six were responsible for EM in Kenya using the model developed. They include the fact that; companies performed earnings management to maintain positive cash flow, to avoid poor financial performance that negatively affected the size of debt in a company, to maintain management bonus which is based on company performance and pressure from shareholder to maintain stable dividends. Dilution of ownership and the size of a firm were not considered as a main factor.

From the regression model in table 4.8, the R squared was 0.393 to imply that 39.3% of the variation in earnings management is determined by the change in the above factors. From the primary data, other factors that lead to EM occurring included: potential acquisition of the company in the near future, subjective interpretation of the International Financial Reporting Standards (IFRSs), significant one-off exceptional transactions, incomplete recognition of expenses (cut off) and transfer pricing.

4.6 Conclusion

To sum up objective one, listed companies in Kenya engage in earnings management, just like in other countries like Sweden (Axenbrant et al., 2015). Noronha et al. (2008) study show that public companies in China have a strong motive to manipulate their earnings than in other firms. The extent to which EM was practised by the listed firms was shown to change from year to year within the five year period of study. Additionally, the extent of EM was increased due to pressure to maintain high profits, pressure to meet shareholders needs and the extent of EM was higher in troubled firms. The present findings seem to be consistent with prior studies such as Burgstahler et al. (1997), Burgstahler et al. (2006) and Alghamdi (2012). The methods mostly used by managers who practice EM in Kenya include; manipulation of revenue amount, manipulation of cash flow to avoid situation of deficit, manipulation of accounts receivables and controlling the outcome of inventory valuation.

For objective two, the main factors that lead to EM in Kenya include; free cash flow, the size of debt in a company, the management bonus and the dividend paid. The size of a firm and the percentage of publicly held shares are not part of the main factors. Other factors that were analysed from the primary data collected include: potential acquisition of the company in the near future; subjective interpretation of the International Financial Reporting Standards (IFRSs); significant one off exceptional transactions; incomplete recognition of expenses (cut off) and transfer pricing.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the study and highlights the main objective and methods used in analyzing the specific objectives. Additionally, the chapter offers a summary of the findings and implications drawn from the conclusions of the study. Lastly it explores the various limitations of the study and gives ideas for further research.

5.2 Summary of the study

The study sets out to determine the extent of earnings management, techniques used and factors leading to its occurrence. The research objectives were developed to guide the study from which research questions and hypotheses were drawn. The first objective was to determine the extent to which earnings management was practised in the listed companies while the second one was to assess the method used in perpetrating earnings management in Kenyan listed firms. Finally, the third objective was to determine the significance of factors leading to earnings management.

Accordingly, this thesis has provided a comprehensive review of prior studies that have discussed earnings management, techniques used and factors leading to its occurrence. The thesis also reviewed theories and provided a conceptual framework on the relationship between earnings management and factors leading to its occurrence. Agency theory, big bath theory and positive accounting theory were adopted for this study.

With regard to methodology, explanatory and descriptive research designs were adopted. The research applied both qualitative and quantitative methods of data collection. The extent of earnings management was determined using the Yoons' model and descriptive statistics used to explain the findings. For objective two, primary data was collected to determine the methods influencing the occurrence of earnings management. Descriptive statistic and non-parametric test were used to present the findings. For objective three, various factors were explored using both primary and secondary data. Descriptive statistics and regression analyses were used in presenting findings for objective three. Non parametric and parametric tests were carried out to determine the differences in the perceptions of the different respondents' groups.

5.3 Summary of findings

Based on the first objective which was to determine the extent of earnings management in Kenyan listed companies over a period of 5 years, it was established that earnings management was present among the companies. The extent of EM was shown to vary within the different years of study. Consequently, companies in different industries practised both income-increasing as well as income-decreasing earnings management. The extent of the practice varied among the companies as well as the number of years. The studies by Burgstahler and Dichev (1997) and Burgstahler and Eames (2003) used earnings changes to measure the extent of earnings management. With reference to the works of these authors, this study used changes in discretionary accrual to determine the extent to which earnings management was practised. The findings in this thesis concur with the previous studies that earnings management occurs in companies and to different extents (Jooste, 2011).

Moreover, the first objective was interpreted from the primary data where respondents were asked to rank the effect of different factors on EM. Pressure to report high profits and pressure to meet shareholders' needs contributed to high earnings management. These findings concur with Alghamdi (2012) who found that managers engage in EM to maintain stable profits and avoid losses. Additionally, there was more earnings management in the case of troubled firms. These findings concur with the research conducted by DeAngelo (1988), Weibach (1988), Moyer (1990) and Petroni (1992) who found that managers engage in EM when firms are troubled in order to avoid loss of jobs, and to reduce the extent of agency regulation that they are subjected to. Additionally, the managers may undertake earnings management in order to avoid more cases of monitoring from the board of directors. Based on the decrease in stock prices, most of the respondents suggested that stock price decreases did not lead to high EM in the listed firms in Kenya. These results contradict the results of Alghamdi (2012), where most of the respondents believed that a reduction in share price led to an increase in EM in Thailand. The findings could be different due to the fact that the studies were conducted in different settings as well as the fact that data was different in nature.

From this study, it is evident that the practice of EM is achieved by several methods that the managers use when presenting accounts. The analysis of these different methods led

to the achievement of objective two. The major methods that were used to perpetrate earnings management include: manipulation of the revenue amount, manipulation of cash flow amount aimed at preventing a situation of deficit, manipulation of accounts receivables, and controlling the outcome of inventory by altering the accounting methods used. In the Kenyan set up, revenue is among one of the major items used in measuring performance. On the other hand, cash flow provides an indication of whether the company has enough money to run the business. Therefore, for companies facing financial challenges, managers are likely to engage in the practice of earnings management in order to portray a better image to the shareholders as well as the lenders.

Based on the analysis of methods such as capitalizing rather than expensing expenditure, manipulation of various expenses, and manipulation of the depreciation amount, the responses received from the respondents implied that the methods were not used in perpetrating EM in listed firms in Kenya. Lastly, the manipulation of loan interest had a low effect on earnings management. A study by Alghamdi (2012) found that manipulation of the revenue amount and manipulation of the cash flow amount were used moderately in Thailand. On the other hand, controlling the outcome of inventory by altering the accounting methods used, manipulation of the accounts receivables, capitalizing rather than expensing expenditure, manipulation of various expenses and the manipulation of the depreciation amounts were found to be used more often in Thailand.

In the case of the third objective, the univariate analysis, multivariate analysis and questionnaires were used to demonstrate several factors that have a significant relationship with EM and thus leading to the practice. The management bonus had a positive significant relationship with earnings management in both the univariate and multivariate analysis. The management bonus was also ranked third among the factors that led to earnings management. Management bonus also had a mode of 4, meaning that most of the respondents agreed it was a factor that leads to earnings management. Thus, the hypothesis H₁ was accepted. The hypothesis stated that there is a significant relationship between the management bonus and earnings management. There were also no differences in the perceptions of the different groups of respondents on the factor. This implies the external auditors, internal auditors, CFOs and finance managers were of

the same opinion that the management bonus lead to earnings management. These findings are similar to Khoshtinat et al. (2003) and Poorheidari et al. (2004) who found that managers increase earnings so as to increase their compensation and bonuses.

This thesis also reports that there was a significant negative relationship between the size of debt in a company and earnings management, a finding that concurs with the results of Ke (2001) who found that since managers are opportunistic, earnings management is found to be negatively associated with debt. Debt was ranked as the second factor leading to earnings management; hence the hypothesis H2₁ was accepted. The hypothesis stated that there is a significant relationship between the size of debt in a company and earnings management. Additionally, there were no significant differences in the perceptions of the different groups of respondents. The findings implied that external auditors, internal auditors, CFOs and finance managers were of the same opinion that the size of debt in a company had an effect on EM.

The thesis shows that a significant negative relationship between earnings management and dividend paid exists in the multivariate analysis. This finding implies that there is a relationship between EM and dividend paid. The finding concur with the research done by Daniel et al. (2007), who found that firms employ earnings management to meet expected dividends levels. However, on the univariate analysis, the predictor was insignificant and thus did not lead to EM. Scholars such as La Porta et al. (2000) support the univariate results. They found that the dividend paid is based on cash flow rather than earnings management. Hence there should be no significant relationship between EM and dividend paid. Dividend paid was ranked fourth as a factor leading to EM, based on results from the multivariate analysis and the analysis of the questionnaires. The hypothesis H5₁ was accepted. The hypothesis stated that there is a significant relationship between the dividend paid and earnings management. There were differences in perceptions of the different respondents' groups shown by the Kruskal-Wallis test, One-way ANOVA and Mann-Witney test where CFOs and finance managers were of the same opinion while internal and external auditors were of a different opinion. These findings may imply that the CFOs and the finance managers may experience pressure from shareholders to retain stable dividends. While for the

internal and external auditors, pressure from shareholder to maintain stable dividend was not a major determinant of earnings management. Dividends were announced based on a company's performance and some companies preferred to retain the earnings rather than issue dividends.

Using multiple regression, the size of the firm had no significant relationship with earnings management. On the other hand, with linear regression, the predictor value was significant and thus a relationship existed with the dependent value. The size of a firm was also ranked last on factors leading to EM and most of the respondents responded that there was no relationship between the size of a firm and EM. Thus, using the multivariate analysis and analysis of the questionnaires, the hypothesis H3₁ was rejected. The hypothesis stated that there is a significant relationship between the size of the firm and earnings management. There were significant differences in the perceptions of the different respondents' groups as illustrated by the Kruskal-Wallis test, One-way ANOVA and Mann-Witney test. The findings from the differences in the respondents' groups implied that from their experience in audits, the internal and the external auditors believed that the size of a firm was not a determining factor as any company, small or large, could be involved in the practice. However, the CFOs and finance managers believed that the size of a firm was a determining factor.

The percentage of publicly held shares had no significant relationship with earnings management in the multivariate analysis as well as the univariate analysis. Additionally, information from respondents showed that there was no relationship between the percentage of publicly held shares and EM. Hence, the hypothesis H4₁ was rejected. The hypothesis stated there is a significant relationship between the percentage of publicly held share and earnings management. These findings are similar to the findings of Nassir et al. (2012) who found that there is no significant relationship between ownership and earnings management.

Cash flow was found to have a significant relationship with earnings management in both the univariate and multivariate analysis. Cash flow was ranked first among the factors leading to earnings management. Hence, the hypothesis H6₁ was accepted. The hypothesis stated that there is a significant relationship between free cash flow and

earnings management. These findings are consistent with the research by Alghamdi (2012) who affirmed that in order to maintain a positive cash flow, organisations alter cash flow from operations.

From the regression model, the R squared was 0.393, implying that 39.3% of the variation in earnings management is determined by the change in the above factors. From the analysis of the primary data, other factors that led to EM occurring included: potential acquisition of the company in the near future; subjective interpretation of the International Financial Reporting Standards (IFRSs); significant one-off exceptional transactions; incomplete recognition of expenses (cut off) and transfer pricing.

5.4 Conclusions

Conclusively, the results of the study point out that the extent of earnings management among listed companies fluctuated within the five years under study. The extent of EM is attributed to pressure of managers to maintain high profits or to meet shareholders' needs. Additionally, the extent of EM was higher in troubled firms (the firms that faced financial challenges). The methods that were used to perpetrate EM were: the manipulation of the revenue amount; the manipulation of cash flow to avoid the situation of a deficit; the manipulation of accounts receivables and controlling the outcome of inventory valuation.

The results of the study also indicated that the factors that were more likely to be responsible for EM included: free cash flow, the size of debt in a company, the management bonus and the dividend paid. The size of a firm and the percentage of publicly held shares were not considered as the main factors. Other factors that require further investigation include: potential acquisition of the company in the near future; subjective interpretation of the International Financial Reporting Standards (IFRSs); significant one-off exceptional transactions; incomplete recognition of expenses (cut off) and transfer pricing.

5.5 Implications of the study

The aims of this thesis is to advance the earnings management practices research agenda by describing the extent of earnings management, the techniques used in perpetrating the practice and the factors leading to the practice in the context of Kenyan listed firms.

Fundamentally, the current study provides new evidence from a developing country that contributes to the existing literature in EM. This section attempts to discuss the implications of the main findings for the different groups.

5.5.1 Implication for regulator body

ICPAK as a regulatory body should make the detection of EM practice as a mandatory requirement of audit, which external auditors should comply with. In the same way fraud occurs in most companies, EM has been prevalent due to the fact that it is not the responsibility of the auditor to detect its occurrence. Therefore, making this as a key requirement of audit and including it as part of audit scope will be a pertinent undertaking in mitigating the practice.

5.5.2 Implication for auditors

External and internal auditors should be more sceptical in analysing financial statements and lay more emphasis on financial statement items that are prone to manipulation. Additionally, audit firms should acknowledge their legal responsibilities towards shareholders and increase the skills and abilities of their audit teams to detect earnings management practices.

5.5.3 Implications for shareholders

Shareholders are also advised to avoid subjecting managers to unnecessary pressure, which as evidenced in this study, prompts managers to be involved in EM practice.

5.6 Limitations

Although the questionnaires employed in the study were not long, using a questionnaire may sometimes make respondents bored and as such, some of them may provide random answers to complete the exercise quickly rather than giving a critical thought to their responses.

Additionally, although the study used the whole population, some companies were excluded from the study for a number of reasons. Such reasons include but not limited: lack of information for the period under review (2010 to 2014); some companies were no longer in existence or they had already been delisted. Additionally, and due to internal control issues that limited the respondents from giving out information in their

respective capacities, some companies did not cooperate in responding to the questionnaires.

Since the study used the Yoon's model to determine the presence of EM, the findings on extent of EM are limited to this model.

5.7 Suggestions for further research

This study makes a considerable contribution to the investigation of earnings management practices in Kenya .However, there are several areas that have not been covered by this research which may be useful for further study in Kenya. Some of the possible avenues include:

Since this study focused on listed firms, further research on EM can be carried out on non-listed companies.

Other researches can also focus on studies of EM based on a specific industry in the listed firms, for example, the banking industry.

In this study, discretionary accrual using the Yoons' model (financial structure model) was used to measure earnings management. Therefore, it is recommended for researchers to use other accrual models in order to be assured of the extent of earnings management in listed firms.

Since the study applied questionnaires to collect primary data to complement the secondary data, other researchers should use interviews to get more insight on the matter instead of questionnaires.

Moreover, since the study focused on a five year period of analysis, other studies can focus on different time period like one year.

Additionally, other researcher can focus on further analysis of the other factors that were presented from primary data collection.

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APPENDIX 1: QUESTIONNAIRES

(This questionnaire is designed to gather information on earnings management. Your responses will be held confidential and it will not be shared with anyone other than in analyzed form.)

Part I: General Information

This section aims to collect general information about the respondent. The general information will be used to classify different responses and identify common patterns.

1. Position held in the organisation

Chief Financial Officer.....

Internal Auditor.....

External Auditor
(Manager/Supervisor).....

Others (Specify).....

2. Years of experience in the particular position

Between 1 – 5 years

Between 6 - 10 years.....

Between 11 – 15 years.....

Between 16 – 20 Years.....

Above 20 years

Part II: Determining the extent of earnings management

The purpose of this section is to determine the extent of earnings management on listed companies.

1. Based on your experience, to what extent do you agree with the following statements? Choose the most appropriate opinion on the five point scale:

Key: Strongly Agree =5, Agree= 4, Neutral=3, Disagree= 2, Strongly Disagree = 1

Statement	1	2	3	4	5
Decrease in stocks price movement leads to more earnings management					
Troubled firms are more involved in earnings management than other firms.					
Pressure to meet shareholders needs lead to high level of earnings management					
Pressure to report high profits leads to earnings management					

2. Indicate through ticking, to what extent the following major financial reporting alterations are used in conducting earnings management.

Key: Very High =5, High = 4, Not used=3, Low = 2, Very low = 1

Statement	1	2	3	4	5
Manipulation of accounts receivable or Debtors through the provision for bad debts or bad debt expense.					
Manipulation of depreciation amount through changing the depreciation method used when necessary.					
Manipulation of Various Expenses (Research and Development cost, maintenance expense)					
Manipulation of loan interest by adjusting the amount.					
Manipulation of revenue amount by understating or overstating it.					

Manipulation of cash flow amount to avoid situation of deficit.					
Capitalization rather than expensing expenditure even in situations where expensing is the correct treatment.					
Controlling the outcome of inventory valuation by alternating accounting methods.(FIFO to LIFO)					
Other (s), please specify					

Part III: Factor determining earnings management

This section gives an outline of questions that will help to answer the factors that determine earnings management. Please indicate by choosing the appropriate number.

1. Numerous attempts have been made in accounting literature to detect the reasons why companies tend to engage in earnings management. Several factors are given below. In relation to the Kenyan business environment, please indicate for each of the following statements the extent to which you agree or disagree by choosing the appropriate number.

Key: Strongly Agree =5, Agree= 4, Neutral=3, Disagree= 2, Strongly Disagree = 1

Statement	1	2	3	4	5
Management bonus based on company performance induces managers to misreport financial performance.					
Poor financial performance will negatively affect the debt covenants that currently exist with loan providers.					
To reduce the political cost and attention associated with a firm being large in size they understate their revenues.					
Pressure from the shareholder to retain stable					

dividends payable to them by overstating earnings attributable to shareholders.					
To reduce dilution of ownership by having few public shareholders owning the company.					
To maintain positive free cash flow in an organisation by altering cash flows from operations.					
other factors leading to earnings management (Specify and rank them)					

Thank you very much for your responses

APPENDIX II: List of Companies listed on the NSE

	COMPANY	YEAR OF LISTING	ISSUED SHARES
1	Atlas Development & Support Services (GEMS)	2014	39,139,827
2	Flame Tree Group Holdings Limited (GEMS)	2014	161,866,804
3	Kurwitu Ventures Limited (GEMS)	2014	102,272
4	Nairobi Securities Exchange Limited	2014	194,625,000
5	Home Afrika Limited	2013	405,255,320
6	I&M Holdings Limited	2013	392,362,039
7	CIC Insurance Group Limited	2012	2,615,538,528
8	Umeme Limited	2012	1,623,878,005
9	British-American Investments Co.(Kenya) Limited	2011	1,938,415,838
10	Trans-Century Limited	2011	280,284,476
11	Co-operative Bank of Kenya Limited	2008	4,889,316,295
12	Safaricom Limited	2008	40,065,428,000
13	AccessKenya Group Limited	2007	218,467,081
14	Liberty Kenya Holdings Limited	2007	535,707,499
15	Kenya Reinsurance Corporation Limited	2007	699,949,068
16	Equity Group Holdings Limited	2006	3,702,777,020
17	Eveready East Africa Limited	2006	210,000,000
18	KenGen Company Limited	2006	2,198,361,456
19	Scangroup Limited	2006	378,865,102
20	Mumias Sugar Co. Limited	2001	1,530,000,000
21	ARM Cement Limited	1997	495,275,000
22	TPS Eastern Africa Limited	1997	182,174,108
23	Kenya Airways Limited	1996	1,496,469,035
24	Rea Vipingo Plantations Limited	1996	60,000,000
25	Sameer Africa Limited	1994	278,342,393
26	National Bank of Kenya Limited	1994	280,000,000
27	Longhorn Kenya Limited	1993	58,500,000
28	Crown Paints Kenya Limited	1992	23,727,000
29	Housing Finance Co.Kenya Limited	1992	235,750,000
30	Uchumi Supermarket Limited	1992	265,424,636
31	Kenya Commercial Bank Limited	1989	2,984,227,692
32	Standard Chartered Bank Kenya Limited	1988	309,159,514
33	Total Kenya Limited	1988	175,028,706
34	Barclays Bank of Kenya Limited	1986	5,431,536,000
35	Jubilee Holdings Limited	1984	59,895,000
36	Express Kenya Limited	1978	35,403,790
37	Olympia Capital Holdings Limited	1974	40,000,000

38	East African Cables Limited	1973	253,125,000
39	Nation Media Group Limited	1973	188,542,286
40	Carbacid Investments Limited	1972	254,851,988
41	Diamond Trust Bank Kenya Limited	1972	242,110,105
42	East African Breweries Limited	1972	790,774,356
43	Eaagads Limited	1972	32,157,000
44	Kapchorua Tea Company Limited	1972	3,912,000
45	Kenya Power & Lighting Co Limited	1972	1,951,467,045
46	Williamson Tea Kenya Limited	1972	8,756,320
47	NIC Bank Limited	1971	597,282,563
48	Unga Group Limited	1971	75,708,873
49	Bamburi Cement Limited	1970	362,959,275
50	CFC Stanbic of Kenya Holdings Limited	1970	395,321,638
51	British American Tobacco Kenya Limited	1969	100,000,000
52	B.O.C Kenya Limited	1969	19,525,446
53	Marshall's East Africa Limited	1969	14,393,106
54	Centum Investment Co Limited	1967	665,441,775
55	Limuru Tea Company Limited	1967	1,200,000
56	Sasini Limited	1965	228,055,500
57	Pan Africa Insurance Holdings Limited	1963	96,000,000
58	Kenya Orchards Limited	1959	12,868,124
59	Standard Group Limited	1954	81,731,808
60	Kakuzi Limited	1951	19,599,999
61	A.Baumann & Co Limited	1948	3,840,066
62	Car & General (K) Limited	1940	40,103,308
63	Hutchings Biemer Limited	0	360,000
64	KenolKobil Limited	0	1,471,761,200
65	East African Portland Cement Co. Limited	0	90,000,000

Table extracted from

<https://www.african-markets.com/en/stock-markets/nse/listed-companies> **on**

27/11/2015

APPENDIX III: Sample of Companies Audited by the Big Four

COMPANY	AUDITOR
Co-operative Bank of Kenya Limited	Ernst & Young
Safaricom Limited	PWC
Acess Kenya Group	Deloitte & Touche
Liberty Kenya Holding	KPMG
Kenya Reinsurance Corporation Ltd	Audit Controller
Equity Group Holding	Ernst & Young
Kengen Limited	Deloitte & Touche
Mumias Sugar	Deloitte & Touche
ARM cement Limited	Deloitte & Touche
Rea Vipingo Ltd	Deloitte & Touche
Sameer Group	KPMG
National Bank of Kenya	Deloitte & Touche
Longhorn Kenya Ltd	Deloitte & Touche
Crown paint Kenya	Ernst & Young
Housing Finance co	Deloitte & Touche
Uchumi Supermarket	Ernst & Young
Kenya Commercial Bank	KPMG
Standard Chartered bank	KPMG
Total Kenya Limited	Ernst & Young
Barclays bank of kenya	PWC & Ernst & Young
Jubilee Holding	KPMG
Express Kenya	PKF
East Africa Cables Ltd	KPMG
Carbacid Investment Limited	Deloitte & Touche
East Africa Breweries	KPMG
Eaagads	deloitte & Touche
Kapchorua Tea Company Limited	Deloitte & Touche
Williamson	Deloitte & Touche
NIC bank	PWC
Unga Limited	PWC
Bamburi Cement	Ernst & Young
CfC stanbic	PWC
British American Tobacco	PWC
B.O.C kenya Ltd	KPMG

Centum	PWC
Sasini Ltd	KPMG
Pan African Insurance	Ernst & Young
Kakuzi Ltd	PWC
Baumann & co	Deloitte & Touche
Scan Group	Deloitte & Touche
Tps East Africa Ltd	PWC
Kenya Airways	PWC
Kenya power and lighting	Auditor General
Marshall East Africa	PKF
Kenya power and lighting	Auditor General
Marshall East Africa	PKF
Standard Group	KPMG

The table has been generated from information gathered through the respective company website and www.NSE.co.ke accessed on 08/12/2015