

**THE EFFECT OF EARNINGS MANAGEMENT ON FINANCIAL
PERFORMANCE OF QUOTED COMPANIES IN KENYA**

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DECLARATION

I declare that this project is my original work and has not been submitted for an award of a degree in any other university for examination /academic purposes.

SIGNATURE..... DATE.....

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This research project has been submitted for examination with my approval as the university supervisor

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DEDICATION

This research project is dedicated to my beloved father, Joseph Ngunjiri Gathuo, my beloved mother, Judith Wanjiku, my dear wife Gladys Muthoni for love and patience and my son Elnathan Ngunjiri Gathuo that he may excel beyond my achievements.

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
BAT	British American Tobacco
CFEM	Cash Flow Earnings Management
CMA	Capital Markets Authority
EABL	East African Breweries Limited
FTSD	Financial Times Services Division
FTSE	Financial Times Stock Exchange
IPO	Initial Public Offer
ITC	International Trade Commission
LSE	London Stock Exchange
NIM	Net Interest Income Margin
NSE	Nairobi Securities Exchange
REM	Real Earnings Management
ROA	Return on Assets
ROE	Return on Equity
ROI	Return on Investment
RPT	Related Party Transaction
SIIA	Software Information Industry Association
SPSS	Statistical Package for Social Sciences
SRF	Sample Regression Function
UK	United Kingdom

ABSTRACT

The main objective of this research study was to establish the relationship between earnings management and financial performance of companies listed in Nairobi Securities Exchange. The study adopted a descriptive research design. The population of the study consisted of the 66 companies quoted in the Nairobi Securities Exchange as at 31st December 2016. The study used a census approach. Data was analyzed using regression model. The study discovered that earnings management, firm size, and market to book value ratio positively and significantly influenced financial performance of the firms listed at the Nairobi Securities Exchange. The study found that the coefficient for earnings management was 0.764, meaning that earnings management positively and significantly influenced the Stock return among companies listed at the Nairobi Securities Exchange in Kenya. The study also found that the coefficient for firm size was 0.591, meaning that Firm size positively and significantly influenced the stock return among companies listed at Nairobi Securities Exchange. The study also found that the coefficient for market to book value ratio was 0.567, meaning that market to book value ratio positively and significantly influenced the stock return among companies listed at Nairobi Securities Exchange. The study concluded that earnings management, firm size and market to book value ratio positively and significantly influenced financial performance companies listed at the Nairobi Securities Exchange in Kenya.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Earnings management is perceived as efforts by administration to impact or control detailed income by use of particular accounting strategies or quickening cost or income transactions, or use of different techniques intended to affect short-term income. The term as understood by many, is the orderly distortion of the genuine income and resources of enterprises or different associations. Earnings management mostly happens when managers decide to use reports that are judgmental in their activities and change the financial reports so as to misinform the stakeholders on the overall performance of the company which eventually influences results that depend on the accounts (Bowman & Navissi, 2013).

Earnings management generally entrails when managers change the original financial records and use judgment in the transactions so as to misinform the stakeholders about the general performance of the company or generally changing the accounting details. This leads to the management interfering with the general performance of the company from the stakeholders all other parties that advantage from the company, as recorded accounts cannot be hidden due to the financial facts of the company (Healy & Wahlen, 1999).

Following the meaning of Healy and Wahlen (1999), earnings management happens when administrators oversee financial reports by using judgment with a specific end goal to misinform the stakeholders about the basic economic performance of the organization, or to impact authoritative results that depend on the accounted earnings. This shows that the management has power to control the earnings in the motivation behind expanding the abundance of the organization as well as the manager. In this situation, the financial outcomes and position of the business won't not be exhibited precisely. This may energize misrepresentation and material misquote by the detailing

organizations. Since earnings management includes a higher level of administrative judgment, this examination focuses on the negative part of earnings management.

According to Algharaballi (2013) these definitions signifies to two basic perspectives of organization management. The principal one is that management needs to practice judgment in business operations and financial reports since GAAP obviously expects management to make astute assessments and judgments. The second view that of sharp earnings management, i.e. managers construct their judgments and choices in light of whether they will bring about individual private profits (Boubakri, Boyer and Ghaleb, 2008)

Sayari *et al* (2003) characterizes earnings management as: "Because managers can look over an arrangement of accounting strategies (for instance, GAAP), it is normal to expect that they will pick approaches to augment their own particular utility and/or the market estimation of the firm ". Likewise, Brooks, (2008) characterizes earnings management as the capacity to "control" the alternatives accessible and settle on the correct decisions with a specific end goal to accomplish the normal level of benefit.

According to Dechow and Skinner (2000) earnings management can be categorized into: Fraudulent Accounting, Accruals Management, and Cash Flow Earnings Management (CFEM) which is regularly called the Real Earnings Management (REM). Fraudulent Accounting includes accounting decisions that damage GAAP; Accruals Management includes decisions inside GAAP that attempt to "cloud" or "cover" genuine economic performance. Real Earnings Management happens when managers attempt activities that include changing a company's hidden operations with a purpose to help current period earnings. Fraudulent accounting and collections management are not experts by changing the hidden economic exercises of the firm yet through the

decision of accounting techniques used to speak to those fundamental exercises (Dechow & Skinner, 2000).

For quite a while, the reported earnings sums in financial proclamations are constantly appealing to speculators, firms, workers, financial examiners, clients and providers. Clients of financial proclamations for the most part settle on choices relying upon the information gotten from the financial articulations. Subsequently, the financial detailing needs to successfully convey financial data to untouchables in an auspicious and valid way. Although, managers are offered chances to misinform the clients of financial proclamations along these lines. In most cases, managers control earnings so as to meet particular goals (Albrecht, 2006).

For example, when the compensation or reward is identified with the financial performance, managers have more grounded impetuses to oversee earnings to meet the objective or financial examiners' desire. Once the financial articulations are controlled unreasonably, it is hard for the clients of financial explanations to assess the financial position and the working performance. In this manner, the corrective financial proclamations or financial reports may misinform the clients, and in addition causing great, even damaging outcomes (Chan *et al*, 2009). Becoming episodic and orderly proof backings the contention that earnings management is a typical practice in firms (Richardson, 2000).

1.1.1 Financial Performance

Performance of organizations can be subjectively judged by a wide range of parameters, bringing about a wide range of understandings of effective performance. Each of these viewpoints of organizational performance can be found to be remarkable (Robert, 2004). Performance management can take many structures from managing issues inside to the association to taking into account stakeholders or taking care of issues in its

condition. Adams (2004) concentrate for the most part on the performance of the protection business. The study gives a relative investigation of the determinants of financial performance for two diverse insurance agencies in Malaysia which advocates Islamic protection. The study also gives understanding into the key variables influencing the financial performance as a general sin organizations and insurance agencies.

Majority of the companies with high profits, normally use low debt due to their capability to use retained earnings to finance its activities. Higher use of debt increases the risk of insolvency of companies (Ball and Foster, 2012). Total assets are considered to positively influence the company's financial performance because it symbolizes companies' size. Generally, performance management is when the managers use both quantitative and qualitative methods and ensuring that human activities are considered (Arie, 2005). A well-constructed policy ensures that managers have a well-built system that includes planning, follow up on performance and set on target (Mohammad, 2012). Company's performance evaluation focuses mostly on efficiency and effectiveness of a company's operations. According to Elizabeth and Elliott (2014) carried a study on efficiency, customer service and financing performance among Australian financial institutions. The results showed that all financial performance measures including interest margin, return on assets, and capital adequacy are positively correlated with customer service quality scores. A company's financial performance is significantly influenced by its market position. Jensen (2006) argues that both net turnover and net profit margin influence the profitability of a company over period of time. High company turnover means better use of assets owned by the company and then better efficiency, higher profit margin means that the entity has substantial market share. The size of the company contributes to a positive effect on its financial performance because

larger firms can use this advantage to get some financial benefits in business relationships.

Performance is a logical idea related with the marvel being examined (Hassan & Ahmed, 2012). With regards to financial performance, performance is a measure of the change of the financial condition of a company, or the financial results that outcomes from management choices and the execution of those choices by individuals from the firm. Since the impression of these results is logical, the measures used to speak to performance are chosen in view of the conditions of the organization(s) being watched. The measures chosen to speak to the results accomplished, either great or terrible (Ke, 2011).

Generally, the idea of financial performance depends on the possibility that an organization is the willful relationship of beneficial resources, including human, physical, and capital assets, with the end goal of accomplishing a mutual reason (Bowman and Navissi, 2013). Those giving the benefits will just confer them to the organization if they are happy with the esteem they get in return, in respect to elective employments of the advantages. As an outcome, the embodiment of performance is the making of significant worth. In as much as the esteem made by the use of the contributed resources is equivalent to or greater than the esteem expected by those contributing the advantages, the benefits will keep on being made accessible to the organization and the organization will keep on existing (Boynton, Dobbins & Plesko, 2012).

1.1.2 Earnings Management

The role of financial statements in a market economy cannot be over emphasized. Management conveys information about the firm to its owners and other interested constituents using financial statements. This function takes on an added significance in

a publicly owned corporation where the separation of ownership and control makes it the only avenue through which owners and investors can get a glimpse of the operations of the firm. “Agency theory suggests that earnings management may occur when managers have the incentive to promote their own self-interest by compromising shareholders interest” as the result of information asymmetry (Chan *et al.*, 2010). There has been numerous research on earnings management that examines how managers manipulate certain financial statement accounts such as accruals and, or real economic activities for their own self-interest (Cohen & Zarowin, 2010). Earning is an item of the income statement that can be manipulated. Earnings is a product of cash flows and accruals so it can be managed through means such as accruals, changes in capital structure, and changing accounting methods as stated by Jones (2011). Jones uses total accruals in the study of earnings management by firms in the import business. These firms can benefit from import relief and thus will attempt to decrease earnings during import relief investigations by the United States International Trade Commission (ITC). Ronen and Yaari (2008) classified the earnings management into two categories value-enhancing earnings management and opportunistic earnings management and further defined each as Value-enhancing earnings management is a way for managers to establish rapport with owners by signaling value relevant information without getting into too many cumbersome details. Securing the goodwill of the owners is valuable while they defined the other type opportunistic earnings management is likely because of the conflict of interest between shareholders and management and because, in general, those possessing private information makes it easier to use it to the advantage of its holder at the expense of others.

1.1.3 Earnings Management and Financial Performance

Petroni, K. (2012) found that contortions in financial reports happen when there is a misalignment of motivating forces amongst directors and shareholders. This could drive the directors to practice the adaptability of collections accounting to alter earnings deftly. Therefore, accumulations earnings management is utilized in this study, and is viewed as the sharp conduct of the management.

Empirical studies inferred that there is a notable negative connection between earnings management and financial performance (Farooqi, Harris & Ngo, 2014). Hassan and Ahmed (2012) argued that collections are the most widely recognized exercises of earnings management that are performed by management to either improve or deduct revealed earnings. This shows the act of accumulations based earnings management has contrarily influenced the financial performance of an organization.

Although, Harrison and Freeman (1999) argued that the connection between earnings management and firm performance differs as per an organization's administration quality. Fernandes and Ferreira (2007) declared that accumulations based earnings management may negatively affect shareholders' precise access to the genuine financial performance of an organization. Thus, this may influence the long-term performance of the organization's reaction to shocks. For this situation, accumulations based earnings management is relied upon to have a negative relationship with the financial performance of the organization. With respect to, the estimation of genuine financial performance is stripped of the impact of pioneering earnings management rehearses by the management, which is relied upon to show the genuine estimation of the organization.

This research is most firmly connected with Bryman and Bell (2010). Both studies analyzed the connection between earnings management and information asymmetry. Arie (2005) finds a relationship between cited shutting offered solicit spread and measures from irregular collections. He inspects earnings management practices and levels of information asymmetry for a specimen of prepared value offerings in the vicinity of 1986 and 1993 and finds elevated wage increasing earnings management and more prominent information asymmetry in the occasion time frame. Chan *et al*, (2010) utilize the adjusted Jones show to gauge optional groups, and to appraise value liquidity, they used the variable found the middle value of rate spread. The observational results of their examinations show that organizations with higher earnings management endure low value liquidity.

1.1.4 Firms Listed at the Nairobi Securities Exchange

Nairobi Securities Exchange (NSE) has the mandate of providing a trading platform for listed securities and overseeing its member firms. It provides public offers and listing of securities traded at the exchange (NSE, 2013). Trading is carried out via the automated trading systems which were commissioned in 2006 and it marked the significant step in the efforts to enhance efficiency in the exchange. There are no limits to trades by foreign investors and they can acquire shares freely subject to a minimum reserve ratio of 25% for domestic investors in each listed company. NSE is regulated by the Capital Markets Authority (CMA) as established in 1989 through the Capital Markets Authority Act, Cap 485 A (the CMA Act) to regulate and oversee the orderly development of Kenya's capital markets. Currently, NSE has 66 quoted companies from different sectors of the economy. Among the listed companies two foreign companies are sin companies as at December 2013 namely East African Breweries Limited (EABL) which has different brands especially in alcohol products and British

American Tobacco (BAT) which manufactures, packages and distributes cigarette products to Kenyan market (NSE, 2013).

Since earnings of a firm are a critical factor in a firm's financial performance, Barako (2007) posits that boards should make optimal decisions regarding how they allocate both the periodically obtained earnings and the accumulated retained earnings. To this end, publicly quoted companies are obliged to publish their audited financial reports at the end of every financial year (CMA, 2011). Since the year 2008, the exchange has greatly emphasized on corporate governance with some participants punished for faulting the acceptable market regulations. Amongst NSE's recent advancements is its 2011 launch of the FTSE NSE Kenya 15 and FTSE NSE Kenya 25 Indices, as a result of extensive market consultations with local asset owners and fund managers. The launch of the indices reveals the interest of growth into the domestic investment and diversification opportunities in the East African region. Also, the exchange became a member of Financial Times Services Division (FISD) of the Software and Information Industry Association (SIIA) in March 2012. Providing the indices its website helps the investors with current information of reliable indication of the Kenyan equity market's performance during trading hours. These are reliable indicators of financial performance of these listed firms (NSE, 2013).

1.2 Research Problem

According to Algharaballi, (2013) earnings management is perceived as efforts by management to impact or control detailed earnings by utilizing particular accounting techniques or quickening cost or income exchanges, or using different strategies intended to impact short-term earnings. Earnings management happens when administrators use judgment in financial revealing in organizing exchanges to modify financial reports, to either misdirect a few stakeholders about the hidden economic

performance of the organization, or to impact authoritative results that rely upon reported accounting information (Chapman, 2008).

Reported earnings are made out of money from operations and accumulations. GAAP enables collections to relieve timing issues and to accomplish better coordinating of incomes and costs when measuring corporate performance over year-long time interims. Nonetheless, as perceived by Dechow and Skinner (2010), a potential inadequacy of accumulation accounting is that it makes open doors for earnings management.

From a microstructure point of view, an organization with lesser dependability of detailed earnings makes two issues for a liquidity supplier (advertise creators or master). To begin with, there is a more significant vulnerability of the genuine estimation of the supply of the firm that oversees earnings. These outcomes in more prominent instability of the estimation of the value of stocks held by the market producer. Second, instability about the genuine estimation of the stock raises the likelihood of misfortune while exchanging with a broker with more information (educated merchant) about the genuine estimation of stock. Faced with the potential loss, the liquidity suppliers may enlarge the offer request that spread deflect such loss (Farouk & Hassan, 2014).

Present universal pattern shows that the tension for the examination into the act of earnings move turns out to be considerably more striking after the current global pattern of corporate disappointments that have perplexed substantial organization, for example, Health South, Global Crossing, Parmalat, Hollinger, Adecco, TV Azteca, Enron, Worldcom and Tyco (Sayari *et al*, 2013). This aspect has resulted to warmed verbal confrontation among controllers, accounting experts, financial examiners and specialists to discover an answer for the phenomenal corporate disappointments. This

is especially the case in most developing economies were regardless of the different administration structures and systems built up by most states, instances of corporate acts of neglect remain common.

In spite of the fact that, the inspiration behind managing earnings may not really be as evil as in the above cases, yet earnings management decreases the dependability of the announced earnings. The expanded information risk about how well the detailed earnings speak to the genuine earnings brings about more prominent instability about the genuine estimation of the firm. Actually, the information risk about the genuine earnings of a firm is evaluated with higher cost of value and cost of obligation (Gerayli, *et al*, 2009).

Chapman (2008) made use of another view of measure of earnings quality. Their earnings quality measure depends on working parties. Their measures depend on the instinct that accumulations include evaluations of money flows, and a higher (lower) level of blunder in estimation brings about lower (higher) nature of revealed earnings. They locate that poor earnings quality is related with higher information asymmetry. They discover the effect of earnings quality on information asymmetry is fundamentally more prominent for small organizations and those with low institutional possession. They additionally find that organizations with poor earnings quality have a further decrease in showcase quality around earning declarations, a period that has especially high information asymmetry among advertise members. They utilize viable spread and the value effect of an exchange as intermediaries for information asymmetry. As opposed to the three studies above, whereby offer approach spreads to intermediary for stock liquidity was used (Ke, 2011).

Since a good financial specialist assurance condition will limit the expenses of information asymmetry, and in this way, diminish the likelihood of trade against educated dealers, liquidity suppliers will bring about moderately low expenses and thus offer smaller bid–ask spreads. On the other hand, a weaker speculator security condition with more terrible financial prospects will bring about more prominent seizure by directors, hence, higher deviated information costs (Dabor and Adeyemi, 2009). This study sought to answer the question: what is the effect of earnings management on the financial performance of quoted organizations in Kenya?

1.3 Objective of the Study

To determine the effect of earnings management on the financial performance of companies listed at Nairobi Securities Exchange.

1.4 Value of the Study

Key policy makers i.e. government, capital market may gain significantly from the findings of this study in that they will have at their disposal vital information concerning the Nairobi stock exchange and reasons behind investing in quoted companies to enable develop policies aligned with the current developments in the exchange to promote efficiency, transparency and effectiveness.

The study may assist learning institutions in providing reference and literature to future researchers seeking to carry out further research in this field or in a related area. This will aid in development of knowledge in this line of study. Since there are certain areas in this study which may not be covered exhaustively future researchers will have a point of reference from which to start and study further about sin and sin companies both locally and internationally. The result of this study is expected to benefit individual investors, institutional investors and companies as they make investment decisions. This study may also enable investors to choose between investing in companies based

on facts about the company's profitability, liquidity, financial leverage and asset capitalization and not to rely on manipulated figures.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter provides a detailed theoretical framework based on the effect of earnings management on the financial performance of companies quoted at NSE. Specifically, it focuses on theoretical foundation, empirical review of literature, determinants of financial performance and summary of literature review

2.2 Theoretical Review

2.2.1 Agency Theory

As expounded by Alchian and Demsetz (1972) and further supported by Jensen and Meckling (1976), the Agency theory has its foundation in the Economic Theory. This theory has its focus mostly on division of proprietorship and power (Chapman, 2008). It further illustrates the connection that exists between shareholders (who are the principals), company executive (who are the agents) and the managers. The theory shows that the principals who own the organization employ the company executives while the company executives control the activities of the company to the directors and managers as argued by Arie (2005).

Problems arise in the agency when the agents decide to take part in decision making without the knowledge of principals. For instance, in the cases of Adelphia, Enron, WorldCom and Parmalat whereby the agents decided to keep information to themselves and run the companies on their own which eventually resulted to Agency problems.

Jensen and Meckling (1976) argued that the Agency problem is involved with the managers take advantage of the firms building on their own. According to Daily *et al.* (2003) the two main aspects that affect the success of the agency theory. The first and

simple one is the one that leaves a firm to be run by the managers and shareholder while the second one reduces the managers and employees in a firm to be selfish.

The cure to agency problems in the corporate governance requires both the executives and the shareholders to share same interests. In short, the agency theory tries to explain the major responsibility of corporate governance to simplify compliance by ensuring that the executives compensate their risks through the best means possible (Daily *et al*, 2003).

2.2.2 Stewardship Theory

Stewardship Theory explains the role of managers to ensure that the main goals are achieved by doing hard tasks thus their inspiration overcomes simple financial concerns. This theory emphasizes on the principals need to act harder to increase the profits of the shareholders. Also, managers need power and desire respect from their colleagues, friends and their bosses so as to perform their duties effectively.

Therefore, the shareholders also need to empower the managers through governance organization systems, power and information to empower the managers' independence, trust building and to take decisions that matter in their capability to achieve their main goal objectives (Donaldson and Davis, 1991).

In comparison with the Agency theory, Stewardship theory insists on the responsibilities of directors as the stewards who control all the activities of an organization. (Daily *et al*. 2003) contends that executives and directors ensure that the organization is effectively run so as to ensure that financial performance is well enhanced. Managers are required to increase the shareholders benefits and to create a good name to ensure they hold to their positions in the firms (Farouk and Hassan, 2014).

2.2.3 Resource Dependency Theory

The resource dependency theory was developed by Pfeffer (1973) and Pfeffer and Salancik (1978), it highlights the responsibilities by the board of directors (BODs) in ensuring that there is easy access of resources that eventually leads to the good performance of firms. Through the easy access of resources, the board improves organizational performance through easy access to the environment to natural resources and ensure buffers are created against hostile external changes (Daily et al., 2003).

According to Farooqi and Ngo (2014) there are four categories of directors of a company; the insiders (they are executives either former members or current members that give advice to the company directors), experts in business (they provide advice on business strategies), specialists in support systems (lawyers, firmers, insurance company representatives that provide support in their individual specialized field) and the community at large (political leaders, university faculty, members of clergy, and leaders of social or community organizations)

According to (Elizabeth & Elliott, 2014) outside directors, play a great role in the firm as they monitor and control the activities of the board. This theory emphasizes on the background of the firm's directors as their advice is highly relied upon. Large boards are favored in this theory, as cooperation and agreements are harder to attain in large boards (Daily et al., (2003) although large boards do not lead to great firm value when firm risk is measured by the vitality of stock returns, board independence is affected negatively.

2.2.4 Stakeholder Theory

The stakeholder theory emphasizes on the importance of employees, shareholders, suppliers, business partners and contractors and their relationship with the managers. The stakeholder theory was developed by Harrison and Freeman (1999). This theory varies with the agency theory that emphasizes that there exists a relationship between managers and shareholders where the managers have the greatest role to play in increasing the wealth of the shareholder.

In this theory, the managers' actions seem to affect other parties interested in the organization activities rather than greatly affecting the shareholders. This theory insists on managers being answerable in all angles to the stakeholders. Harrison and Freeman (1999) argued that a stakeholder is either one person or a group of individuals who have an effect or is affected by the success of a firm's main goal.

So as to effectively attain the main goals of a company, the stakeholder theory ensures that safety of stakeholders is adequate, consensus building is ensured, conflicts are avoided and harmony is emphasized (Donaldson and Davis, 1991).

The stakeholders' theory has been condemned for over empowering the managers with being responsible over the stakeholders without following particular procedures in ensuring that conflict of interest is solved effectively. Although Harrison and Freeman (1999) argue that there are some relations with some parties that can be used to affect the decision-making process as the theory is mostly concerned with the effects and results of the company and its stakeholders.

According to Donaldson and Davis (1995) the stakeholder theory reflects on the decisions of the managers and the interests of the stakeholders and continues to

emphasize that none of the interests is supposed to overpower the other. Therefore, the managers are supposed to make sure they also consider other parties' interests especially those who are affected in one way or another by the activities and operations of the firm (Fatima, 2011). She also argues that the managers should put the interests of the stakeholders first and ensure that the main goal of the company promotes long term value.

Throughout the years, the idea of earnings management has raised genuine worries among financial market controllers, financial administrators, speculators and academic researchers; as reflected in one of the talks of the previous U.S Security and Exchange Commission Chairman in 2002. Moreover, this idea has kept on accepting consideration because of the arrangement of corporate disappointments in both developed and developing economies. This pattern has constantly increased the questions in the stakeholders' minds on the reliability and dependability of financial report. The significance joined to accounting earnings by stakeholders of any given association can't be over accentuated; as the whole destiny of the association and its stakeholders rely upon it. Moreover, accounting as a field additionally has a stake to ensure, attributable to the way that earnings are the last result of the entire accounting process.

Earnings management expresses a wide cluster of accounting systems used by management to accomplish a particular earnings objective. While there exists no single acknowledged meaning of earnings management, accounting literature gives different portrayals of the training. Albrecht (2006) depicted it as a ponder intercession in the outer financial revealing procedure, with the plan of acquiring some private additions. It includes controlling the earnings figures being revealed, using the judgmental

discretions as allowed by the proper accounting rules (GAAP), in other to either misdirect the clients into accepting what is really not valid in regard of the earnings' figures, and consequently secure great reaction or to overstate legally binding results which rely upon the unrevealed earnings (Arie, 2005).

2.3 Determinants of Financial Performance of Firms

There are several factors which influence the financial performance of commercial firms. They include capital adequacy, size of firm, management efficiency and earnings ability.

2.3.1 Capital Adequacy

Capital adequacy represents the level of capital required by a firm to allow them to endure the risks such as market and operational risks they are prone to in order to absorb the potential losses and protect the organization's debtors. Capital is one of the major firm specific factors that have a direct impact on the level of firm's profitability. Capital represents the amount of own finances available to support a firm's business. A firm's capital acts as a buffer in cases where adverse situations occur within the institution. Good levels of capital minimize the chances of distress within a firm. Capital adequacy is measured based on the capital adequacy ratio (CAR) (Arie, 2005). This is determined by the value of capital measured against the firm's assets. The minimum accepted CAR is 8%. A higher ratio indicates that the firm is at a higher risk of insolvency from excessive losses. A lower value of CAR shows that a firm is under the minimum threshold and possesses a higher ability to deal with the risk of insolvency (Algharaballi, 2013).

2.3.2 Size of Firm

Another factor that researchers have evaluated in relation to the financial performance of firms is the size of the firm which is normally measured in terms of assets. The results of these studies have also been conflicting since researchers have not been able to agree on whether size actually influences performance of commercial firms. Fatima (2011) identified only a slight relationship between the size of a firm and its financial performance.

The size of the firm or any other business entity in terms of the assets is a significant determinant of profitability due to various issues. Firms that have a large asset size are able to expand their operations geographically to regions where competition is not very high or to regions where the market is largely untapped. Such a move would increase the customer base of the firm significantly and this would also lead to increased customer base (Goddard *et al.*, 2014). It is important to remember that most of the profits of firms come from the reinvestment of the capital gains as well as through new customers. Increased customers mean that the firm has a higher capacity to do business. Such a high capacity will result in the firm making more money from the clients and thus recording higher profit margins than those firms that have a smaller asset size. It is therefore clear that there is a relationship between the size of the firm and its level of financial performance or profitability (Ongore & Kusa, 2013).

2.3.3 Management Efficiency

Management efficiency is the ability of the board of directors and management to identify measure, control the risks of an institution's operations, and guarantee the safe and effective operation in fulfillment of pertinent laws and regulations. The management efficiency of a firm is measured using different financial ratios such as

total asset growth, growth rate and earnings growth rate. The performance of management is also often shown by subjective assessment of management systems, organizational discipline, control systems, and quality of staff among other factors (Ongore & Kusa, 2013).

Additionally, the ability of the management to utilize its resources effectively, maximize income, minimize operation costs can be measured by financial ratios. Operating profit to income ratio is particularly useful in measuring management quality. The higher the operating profits to total income, the more efficiently the management is in relation to operational efficiency and income generation. Management efficiency significantly determines the level of operating expenses and in turn has an impact on the firm's profitability (Fatima, 2011).

2.3.4 Earnings Ability

Earnings ability represents the potential for a firm to realize profits that enable the organization to fund expansion remain competitive and increase its capital. From the firm's regulator viewpoint, earnings ability's essential purpose is to absorb losses and boost the firm's capital. Earning ability can be evaluated using a number of accounting ratios namely return on assets (ROA), return on equity (ROE) and Net interest income margin (NIM), (Ongore & Kusa, 2013). These measures are scored from 1 to 5 rating system. In the context of the earning ability, a rating of 1 shows that a firm has strong earnings that suffice and maintains adequate capital and loan allowance and can effectively support operations. A rating of 5 shows consistent losses in an institution and portrays a distinct threat to a firm's solvency through the erosion of capital (Hassan & Ahmed, 2012).

2.4 Empirical Review

Uwuigbe *et al*, (2013) defined earnings management as endeavors of management to control detailed earnings by use of certain accounting strategies or evolving techniques, perceiving non-repeating things, conceding or accelerating costs or income, or utilizing different systems intended to affect short-term earnings; Dabo and Adeyemi (2008) also termed it as an expectant stride to keep away from an in-default circumstance in a credit assertion, decrease the administrative cost, and increase the administrative profits. Therefore, it is a purposeful organizing of revealing or generation/venture choices around all that really matters affect. That is, it incorporates salary smoothing conduct and incorporates any endeavor to adjust detailed wage that would not happen unless management were worried about the financial announcing suggestions.

Thus, this study connects corporate administration with earnings management to a great extent from the organization hypothesis point of view. From the organization hypothesis point of view, the partition of possession and control in large companies of the improved capital markets, for example, the US and UK, is normal and ought to be considered as the base of irreconcilable situation (Fama *et al*, 1969). Started from such irreconcilable circumstance, earnings management is typically determined by the yearning to reinforce association's stock cost, as that cost is usually the key reason for the adaptable parts of administrative pay, which may consist of investment opportunities, rewards, and other long-term motivating forces (Cohen & Zarowin, 2010). Conversely, in the less developed markets, these impetuses may never again be pertinent. It is mostly because of the way that, in such markets, even the stated organizations have a much-focused possession structure and top supervisors are (or straightforwardly speak to the enthusiasm of) controlling investors (Chapman, 2008).

Developing studies have yielded observational discoveries that relate to earnings management to controlling investors' exercises in China. Chan *et al.* (2009) studied the effect of IPOs on earnings in Chinese firms. They evaluated earnings through financial packing (e.g. accruals based strategies like credit deals) in the pre-IPO times. They discovered that accruals based earnings management are decidedly associated with both the biggest shareholder's, best administrators' interests and the CEO duality while being contrarily identified with de-posting.

Ding *et al.*, (2007) examined the responsibilities by a company's possession structure in earnings and realized that Chinese recorded firms dealt with their earnings through both working related groups' components and non-working exchanges with related groups and the entrenchment impact of proprietorship fixation on earnings management is more grounded in the State-claimed recorded firms than in exclusive recorded firms.

Aharony *et al.*, (2001) and Jian and Wong (2004) looked at Related Party Transactions (RPTs) between controlling investors and Chinese recorded firms, and locate that Chinese firms reinforce earnings by utilizing strange related deals to their controlling proprietors. They found that the influence of corporate governance on earnings management has empowered research consideration. Although, from the results of earlier studies, they distinguished the following issues. First, it creates the impression that there is no broad assertion with respect to the impact of corporate administration factors on earnings management. Also, there is little research on earnings management characterization of Nigerian quoted organizations. Thirdly, the scientist is ignorant of any examination in the Nigerian professional workplace that has arranged Nigerian cited organizations in high and high positive earnings management classes and to as

well look at how corporate governance factors correlate with these organizations earnings management classifications.

Uadiale, (2012) studied the order of organizations earnings management among listed firms in Nigeria. They found that the arrangement of organizations into high-positive or negative earnings management group enabled specialists to explore determinant of company's decision of various levels of earnings management practice. They also found that few efforts had been made over the years to contemplate earnings management and corporate administration of Nigerian firms cited.

Adenikinju and Ayorinde (2001) concentrated on Nigerian listed organizations corporate governance performance, they used questionnaires to look at some corporate governance instruments and earnings management relationship in Nigeria, and to inspect the connection between earnings management and proprietorship structure of Nigerian cited firms. Although, these Nigerian examinations made no efforts to arrange Nigerian cited organizations into various levels or degree of earnings management and furthermore did not explore how corporate governance identifies with the likelihood of Nigerian cited related with high or low earnings management. It is in the light of these insufficiencies that this present investigation's commitment gives the significance.

Stolowy and Breton (2004) who studied earnings management among listed firms in Norway discovered that the firms utilized their earnings to settle on accounting decisions or to outline exchanges in a way that it will influence the odds of riches exchange between the organization and society, support suppliers or administrators. They identified two roles played by earnings: [1] the informative and [2] the stewardship part. The instructive part emerges from financial specialists' interest for information to anticipate future money streams and evaluate their hazard while the

stewardship part originates from the division of proprietorship and management out in the open firms which sets the director in a place of a steward to investors.

Kang and Kim (2011), studied the effect of earnings management processes among firms in South Africa through creating choices of accounting or creating decisions of operations that affected the reported earnings. They discovered that management of earnings mainly used accruals and were still the most popular studies in economics and financial studies.

In the past years, most of the studies have studied the determinants and challenges of earnings management (Dechow *et al.*, 2010; Uwuigbe *et al.*, 2014). Although the most important thing that has not been given much attention in the past is the influence of company's characteristics on earning management.

Ball and Foster (2002) investigated earnings management among the big firms in London Stock Exchange. They found that big firms were less inclined to take part in earnings management because of the settled expenses related with keeping up satisfactory inside control systems over financial detailing. Albrechth and Richardson (2000) in a related study established that that vast firms have less motivation to smooth earnings than smaller firms.

Lee and Choi (2002) studied the impact of firm size on earnings in South Korea. They studied the large firms in Seoul. They found that firm size is that quality that impacts a company's propensity to oversee earnings. As need be, they found that smaller firms will probably oversee earnings to abstain from revealing misfortunes than bigger firms. Hence, Rangan (1998) opined that bigger firms were more helpless to controlling their present accumulations to exaggerate the earnings of the accomplished value offerings.

In a similar finding, Sweeney (2010) found that high use is decidedly connected with the presumable hood of damaging obligation agreements. Aivazian *et al.* (2005) demonstrates that financial use has a negative connection over a company's investment, which implies that the ones with higher use frequently have bring down ventures.

For instance, in the United States, Russia and France, there are notable studies on the relationship between companies and earnings management although it is a little different in the developing states like Kenya where there is scarcity of literature due to the major differences between developed and developing states. Therefore, this study will investigate the connection between firms' characteristics and earnings management of listed companies.

2.5 Conceptual Framework

Independent Variables

Dependent variable

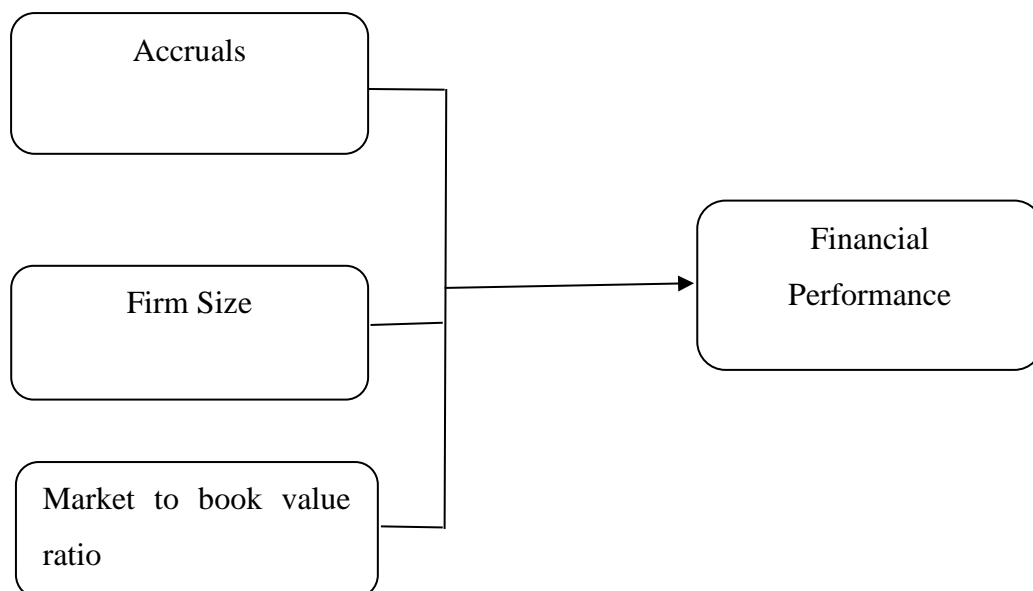


Figure 2.1 Conceptual Framework

2.6 Summary of Literature Review

In the past years, most of the studies have studied the determinants and challenges of earnings management (Dechow *et al.*, 2010; Uwuigbe *et al.*, 2014). Although the most important thing that has not been given much attention in the past is the influence of earning management on the financial performance of firms.

Ball and Foster (2002) investigated earnings management among the big firms in London Stock Exchange (LSE). They found that big firms were less inclined to take part in earnings management because of the settled expenses related with keeping up satisfactory inside control systems over financial detailing. Albreth and Richardson (2000) in a related study established that that vast firms have less motivation to smooth earnings than smaller firms.

Stolowy and Breton (2004) who studied earnings management among listed firms in Norway discovered that the firms utilized their earnings to settle on accounting decisions or to outline exchanges in a way that it will influence the odds of riches exchange between the organization and society, support suppliers or administrators.

Therefore, this study investigated the connection between firms' characteristics and earnings management of listed companies.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter introduces the logical framework that was followed in the process of conducting the study. The research methodology includes research design, target population, sample size, sampling procedure, data collection instruments, data collection procedures, data analysis procedures and analytical model.

3.2 Research Design

This study adopted a descriptive research design. A descriptive design is concerned with determining the frequency with which something occurs or the relationship between variables (Bryman & Bell, 2007). Thus, this approach was suitable for this study, since the study intended to collect comprehensive information through descriptions which will be helpful in identifying variables. Bryman and Bell (2011) assert that a descriptive design sought to get information that describes existing phenomena by asking questions relating to individual perceptions and attitudes. According to Polit and Beck (2013), in a descriptive study, researchers observe, count, delineate, and classify data.

3.3 Population

According to Ngechu (2004), a population is defined as set of people, services, elements, and events, groups of things or households that are being investigated. The population of the study consisted of the 66 companies listed in the Nairobi Securities Exchange as at 31st December 2016 (Appendix I). There was no sampling since the population was not too large hence the study used a census approach.

3.4 Sampling Design

According to Ngechu (2004) sampling ensures that some elements of a population are selected as a driving representative of the population. This study employed a census research design thus no sampling was necessary.

3.5 Data Collection

According to Ngechu (2004) there are many methods of data collection. The choice of an instrument depends on the attributes of the subjects, research problem question, objectives, design, expected data and results. The study used secondary data for analysis. The data was sourced from NSE data base and financial reports of the listed firms for the period 2012 – 2016 found at the NSE.

This data recorded earnings attributable to ordinary shareholders, number of issued common shares and dividends, size, market to book value ratio, debt amounts, current assets, current liabilities, depreciation and cash equivalents.

3.6 Data Analysis

To determine the relationship between earnings management and stock returns for companies listed in the NSE, regression and correlation analysis were carried out. Regression analysis measures the pattern of the relationship and its closeness in absolute terms. Correlation analysis was also used to measure how well the regression line explains the variation of the dependent variable. This was achieved with the help of statistical package for social sciences (SPSS version 22).

Financial performance also known as return on assets is a ratio which calculates the gain or loss of money on any investment relative to the initial money invested.

3.6.1 Analytical Model

To examine the relationship between stock return and predictive variables ordinary least squares regression was used. The regression equation was expressed as follows:

$$Y_i = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

Y_i = Financial Performance (Measured Return on Assets)

X_1 = Accruals (Measured by change in Current Assets – Cash – Depreciation)

X_2 = Firm size (Measured by the natural log of Total assets)

X_3 = Market to book value ratio (Measured by market value to book value
MV/BV)

α = constant

β_1, \dots, β_n = Coefficients for each independent variable

3.6.2 Test of Significance

The model's test of significance was measured on how well the regression model fits the data by comparing explanatory variables that proposed actually explain variations in the dependent variable. Quantities known as goodness of fit statistics are available to test how well the sample regression function (SRF) fits the data how or how close' the fitted regression line is to all of the data points taken together. The most common goodness of fit statistic is known as R^2 (Brooks, 2008). A correlation coefficient must lie between -1 and +1 by definition. Since R^2 defined in this way is the square of a

correlation coefficient, it must lie between 0 and 1. If this correlation is high, the model fits the data well, if the correlation is low (close to zero), the model does not provide a good fit to the data.

R^2 is the square of the correlation coefficient between the values of the dependent variable and the corresponding fitted values from the model. In testing the significance of the model, significance tests were employed to determine whether or not the findings were as a result of a genuine difference between two or more variables, or whether it was just due to chance. Coefficient of determination (R^2) and Analysis of variance (ANOVA) tests was computed. F-statistic was also computed at 95% confidence level to test whether there was any significant relationship between earnings management and financial performance across the years 2012 to 2016.

CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 Introduction

This chapter presents analysis and findings of the study as set out in the research methodology. The general objective of the study was to establish the relationship between earnings management and financial performance among companies listed in Nairobi securities exchange. Data was gathered exclusively from the secondary sources which included records at companies audited financial report. Data was collected from a total of 66 companies listed at Nairobi securities exchange.

4.2 Descriptive Statistics

Descriptive statistics are the measures that define the general nature of the data under study. They define the nature of response from primary data and/or secondary data. Descriptive statistics for this study were: mean, standard deviation, minimum and maximum. Descriptive analysis was performed on the financial performance, discretionary accruals, firm size and market to book value ratio. The descriptive statistics results are tabulated below.

4.2.1 Financial performance (ROA)

The findings as shown in Table 4.1 indicate the trend of return on assets values over the 5-year period between 2012 and 2016. The lowest value for ROA was a mean of 2.53 in year 2012 while the highest value was a mean of 4.54 in year 2016. This represented a positive change in the ROA mean values of 2.01 over the 5-year period. The steady rise in ROA values over the 5-year period indicates that the financial performance of the listed companies has been on the increase over the last 5 years. On

the other hand, the standard deviation indicates variation in the financial performance of the various firms.

Table 4.1 Financial performance (ROA)

Year	N	Mean	Std. Deviation
2012	66	2.53	1.082
2013	66	2.75	0.923
2014	66	3.48	0.692
2015	66	4.02	0.042
2016	66	4.54	0.016

4.2.2 Earnings Management (Accruals)

Table 4.2 presents the findings on the descriptive statistics for accruals for the years 2012-2016. Earnings management (accruals) is the term given to accounting decisions that influence financial reporting outcomes. The means portray a steady decrease in the earnings management for all the 66 firms listed at the Nairobi Securities exchange for years 2012 to 2016. The highest mean was reported in 2012 with a mean of 0.6346 while the lowest was reported in 2015 with a mean of 0.2568. Additionally, the scores of standard deviation indicate variation in forward contracts for the various listed firms statistically.

Table 4.2 Accruals

	N	Mean	Std. Deviation
2012	66	.6346	.57344
2013	66	.4126	.76982
2014	66	.3236	.39826
2015	66	.2568	.82639
2016	66	.5484	.01760

4.2.3 Firm size

Table 4.6 presents the findings on the descriptive statistics for size of firm for the years 2012-2016. The means portray a steady increase in the size of firm for all the 66 firms listed at the Nairobi Securities exchange with the lowest being 10.1227 in the year 2012 and the highest being 10.2950 in 2016. Additionally, the standard deviation figures are high for size, indicating that the data points are spread out over a large range of values, meaning that there is high level of variability in the data. There is a narrow gap between the maximum and minimum size, which means that there is low variability of size change in NSE.

Table 4.3 Firm size

	N	Mean	Std. Deviation
2012	66	10.2538	.72652
2013	66	10.2689	.73481
2014	66	10.2950	.80786
2015	66	10.3568	.82639
2016	66	10.3744	.01760

4.2.4 Market to book value ratio

Table 4.5 presents the findings on the descriptive statistics for market to book value ratio for the years 2012-2016. The means portray an irregular pattern in the market to book value ratio for all the 66 firms listed at the Nairobi Securities exchange with the lowest being 12647.8015 in the year 2011 and the highest being 75274 in 2013. Additionally, the standard deviation figures are high for market to book value ratio, indicating that the data points are spread out over a large range of values, meaning that there is high level of variability in the data. There is a wide gap between the maximum and minimum market to book value ratio, which means that there is high variability of leading and lagging change in NSE.

Table 4.4 Market to book value ratio

	N	Mean	Std. Deviation
2012	66	38489.6652	82249.75669
2013	66	75274.0000	261649.53447
2014	66	55301.2242	204152.10844
2015	66	69328.3568	301721.31017
2016	66	72629.3744	208467.29023

4.3 Inferential Statistics

4.3.1 Model Summary

Coefficient of determination (R square) explains the extent to which change in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable that is explained by the independent variables. From the study findings, the three independent variables studied (that is,

Accruals, Firm size and Market to book value ratio), explain 77.79% of variance in Financial performance of listed firms as represented by the R^2 . This means that other factors not studied in this research contributed 22.21% of variance in the dependent variable.

Table 4.5 : Model Summary

Model	R	R square	Adjusted R Square	Std. Error of the Estimate
1	.882 ^a	.7779	.756	0.0221

a. Predictors: (Constant), Accruals, Firm size and Market to book value ratio

b. Dependent Variable: Financial performance of listed firms.

4.3.2 ANOVA (Analysis of Variance)

Analysis of Variance (ANOVA) consists of calculations that provide information about levels of variability within a regression model and form a basis for tests of significance. From the study findings on Table 4.6, the significance value is 0.012 which is less than 0.05, thus the model is statistically significant in predicting how accruals, firm size and market to book value ratio influence profitability of listed firms in the NSE. The F statistic was significant (as it was =7.32) and this showed that the model had a good fit.

Table 4.6 ANOVA (Analysis of Variance)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.323	2	3.192	7.32	.012 ^a
	Residual	5.408	3	.436		
	Total	6.898	5			

a. Predictors: (Constant), Accruals, Firm size and Market to book value ratio

b. Dependent Variable: Financial performance of listed firms

4.3.3 Regression analysis results

Table 4.7 Coefficient of Correlation

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	6.182	.826		7.484	.0000
Accruals	0.764	1.25	0.518	0.611	.0068
Firm size	0.591	1.29	0.432	0.329	.0321
Market to book value	0.567	.234	0.045	0.423	.0201

Based on the regression results on Table 4.7, the study's regression model became;

$$Y = 6.182 + 0.764X_1 + 0.591X_2 + 0.567X_3$$

According to the equation above, taking all factors (that is, accruals, firm size and market to book value ratio) constant at zero, the profitability of the listed banks would be 6.182. The equation also shows that the three study variables namely accruals, firm size and market to book value ratio had a positive influence on the level of the listed banks profitability with coefficients of 0.764, 0.591 and 0.567 respectively.

At 5% level of significance and 95% level of confidence, accruals had a 0.0068 level of significance; firm size had 0.0321 level of significance while market to book value ratio had a 0.0201 level of significance implying that the most significant factor is market to book value ratio followed by firm size and accruals, respectively.

4.4 Interpretation of the findings

From the study findings, the three independent variables studied (that is, Accruals, Firm size and Market to book value ratio), explain 77.79% of variance in Financial performance of listed firms as represented by the R^2 . This means that other factors not studied in this research contributed 22.21% of variance in the dependent variable.

The study findings showed that there was a significant positive relationship between accruals and financial performance of the firms listed at the NSE ($\beta=0.764$ and P value < 0.05). Therefore, a unit increase in accruals leads to an increase in firms' financial performance by 0.764.

There was a significant positive relationship between firm size and financial performance of the firms listed at the NSE ($\beta=0.591$ and P value < 0.05). Therefore, a unit increase in firm size would lead to an increase in firms' financial performance by 0.591.

The study also discovered that there was a significant positive relationship between market to book value ratio and financial performance of the firms listed at the NSE ($\beta=0.567$ and P value < 0.05). Therefore, a unit increase in market to book value ratio would lead to an increase in firms' financial performance by 0.567.

4.5 Discussion of Findings

The study findings showed that there was a significant positive relationship between accruals and financial performance of the firms listed at the NSE. These findings are in line with Mohamed (2010) who investigated the effect of the earnings announcements on the stock prices of companies listed at the Nairobi Stock Exchange. He found that most of the shares posted statistically negative abnormal returns in the post and pre-earnings announcements of firms listed at the Nairobi Stock Exchange. These studies

show that firms try to avoid losses by engaging in overproduction as to lower the cost of goods sold, to improve profit margins firms will reduce their discretionary expenditures and another means used by firms is offering price discounts to temporarily increase sales (Cohen & Zarowin, 2010; Fazeli & Rasouli, 2011).

Empirical studies inferred that there is a notable negative connection between earnings management and financial performance (Farooqi, Harris & Ngo, 2014). Hassan and Ahmed (2012) argued that collections are the most widely recognized exercises of earnings management that are performed by management to either improve or deduct revealed earnings. This shows the act of accumulations based earnings management has contrarily influenced the financial performance of an organization.

Although, Harrison and Freeman (1999) argued that the connection between earnings management and firm performance differs as per an organization's administration quality. Fernandes and Ferreira (2007) declared that accumulations based earnings management may negatively affect shareholders' precise access to the genuine financial performance of an organization. Thus, this may influence the long-term performance of the organization's reaction to shocks.

The study discovered a significant positive relationship between firm size and financial performance of the firms listed at the NSE. The study concurs with the argument that the size of the firm or any other business entity in terms of the assets is a significant determinant of profitability due to various issues. Firms that have a large asset size are able to expand their operations geographically to regions where competition is not very high or to regions where the market is largely untapped. Such a move would increase the customer base of the firm significantly and this would also lead to increased customer base (Goddard *et al.*, 2014). It is important to remember that most of the

profits of firms come from the reinvestment of the capital gains as well as through new customers. Increased customers mean that the firm has a higher capacity to do business. Such a high capacity will result in the firm making more money from the clients and thus recording higher profit margins than those firms that have a smaller asset size. It is therefore clear that there is a relationship between the size of the firm and its level of financial performance or profitability (Ongore & Kusa, 2013).

The study also discovered a significant positive relationship between market to book value ratio and financial performance of the firms listed at the NSE. Raj and Ramesh (2012) examined the price to book ratio effect in Japanese market. In this study, they have observed that stocks with high MV/BV have earned low returns whereas stocks with low MV/BV have high low stock returns. Simlai (2009) examined and re-investigated the performance of common stock return with two popular variables size and book to market ratio. According to their findings incorporation of time varying conditional variance can significantly support the impact of the three risk factors, he also concluded that, because of these findings Fama and French model is successful and unaffected by the incorporation of time varying investment opportunity set. His study also finds positive and significant relationship between size and stock return.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary, conclusions and recommendations of the study. The study sought to determine the effects of earnings management on the financial performance of companies listed at Nairobi Securities Exchange.

5.2 Summary of Key Findings

The trend of financial performance (RoA) over the 5-year period between 2012 and 2016. Indicated a positive change in the ROA mean values of 2.01 over the 5-year period. The steady rise in ROA values over the 5-year period indicates that the financial performance of the listed companies has been on the increase over the last 5 years.

Earnings management (accruals) is the term given to accounting decisions that influence financial reporting outcomes. The Means portray a steady decrease in the earnings management for all the 66 firms listed at the Nairobi Securities exchange for years 2012 to 2016. The findings on the descriptive statistics for size of firm for the years 2012-2016 portray a steady increase in the size of firm for all the 66 firms listed at the Nairobi Securities exchange. The descriptive statistics for market to book value ratio for the years 2012-2016 portray an irregular pattern in the market to book value ratio for all the 66 firms listed at the Nairobi Securities exchange.

The study findings showed that there was a significant positive relationship between accruals and financial performance of the firms listed at the NSE, therefore, a unit increase in accruals leads to an increase in firms' financial performance. There was a significant positive relationship between firm size and financial performance of the

firms listed at the NSE, therefore, a unit increase in firm size would lead to an increase in firms' financial performance. The study also discovered a significant positive relationship between market to book value ratio and financial performance of the firms listed at the NSE, therefore, a unit increase in market to book value ratio would lead to an increase in firms' financial performance.

5.3 Conclusions

The study concludes that the financial performance of the listed firms went up for the period 2012 to 2016 as indicated by a positive change in the ROA mean values of 2.01 for those years. There was also a steady decrease in the earnings management for all the 66 firms listed at the Nairobi Securities exchange for years 2012 to 2016. The study further concludes that there was a steady increase in the size of firms for all the 66 firms listed at the Nairobi Securities exchange. The study also concludes that there was intermittent growth in the market to book value ratio for all the 66 firms listed at the Nairobi Securities exchange.

5.4 Limitations

This study had several limitations. The nature of data from the financial statements limited the power of the tests to detect associations. This may have been occasioned by variation of statistical figures representing the key variable measurements.

As with all empirical studies, the validity of this study rests on the sample of firms and the time period. The availability of significant variability difference in the chosen/selected financial statement accounts will greatly affect the results of this study. Earnings management is considered both unethical and a violation of securities law. As a result, firms who engage in earnings management may result in unprofessional practices to cover their tracks.

The use of secondary data provided an opportunity to search for a more genuine and intrinsic relationship between the variables. This afforded the researcher the benefits of a greater focus on analyzing the available data more closely in a way that would enhance the achievement of the study objectives. However, selecting the right combination of variables to proxy for unobservable phenomena is always a problem in empirical quantitative research.

5.5 Recommendations

There is need for investors to carefully use market to book ratio to determine the differentials between net assets of the firm and the valuation that the market assigns to them as it reflects the premium (or discount) that the market gives to the firm on its net assets and, as such, reflects the efficiency with which the market views the firm as being managed which in turn affects financial performance.

There is need for firms' management to ensure that there is a positive and constant growth in the market to book value ratio by putting in place practices that increase the value of the listed firms. This will in turn enhance their demand at the NSE and thereby increase their value.

5.6 Suggestion for Further Studies

This study covered a period of five years from 2012 to 2016, future studies could increase the scope and consider the relationship between earnings management and stock market returns among companies listed in Nairobi securities exchange.

A study could be carried out to establish the effects of Earnings management on the performance of non-listed companies in Kenya.

Future research may be directed to comparing the findings of this study with other study findings that relate to firms operating in other developing countries of Africa.

REFERENCES

- Adams, P. (2004). Detecting GAAP violation: implications for assessing earnings management among firms with extreme financial performance. *Journal of Accounting and Public Policy*, 16(3), 309-82.
- Adenikinju, O., & Ayorinde, F. (2001). Ownership structure, corporate governance and corporate performance: The case of Nigerian quoted companies. *In the Final Report presented at the AERC biannual research workshop, Nairobi, May.*
- Aharony, B., Yeung, M., & Laforet, S. (2012). China's outward foreign direct investment: Location choice and firm ownership. *Journal of World Business*, 47(1), 17-25.
- Aivazian, V., Booth, L., Demircuc-Kunt, A., & Maksimovic, V. (2001). Capital structures in developing countries. *The Journal of Finance*, 56(1), 87-130.
- Albrecht, W. (2006). Income smoothing by economy sector. *Journal of Business Finance and Accounting*, 17(5): 713–730.
- Alchian, A. A., & Demsetz, H. (2013). The property right paradigm. *The Journal of economic history*, 33(1), 16-27.
- Algharaballi, P. (2013). Earnings management and its implications. *The CPA Journal*, 79(8): 64-68.
- Arie, P. (2005). *Financial Statement Analysis*, 5th Edition. Irwin: Homewood, IL.
- Ball, R. and J. Foster, 2012. Corporate financial reporting: A methodological review of empirical research. *Journal of Accounting Research*, 20: 161-234.
- Barako, D. G. (2007). Determinants of voluntary disclosures in Kenyan Companies Annual Reports. *African Journal of Business Management*, 1(5), 11328.
- Boubakri, N., Boyer, M., & Ghalleb, N. (2008). Managerial opportunism in accounting choice: evidence from directors' and officers' liability insurance purchases. HEC Montreal Working Paper.
- Bowman, R. G., & Navissi, F. (2013). Earnings management and abnormal returns: Evidence from the 1970-1972 Price Control Regulations. *Accounting and Finance*, 43, 1-19
- Boynton, C. E., Dobbins, P. S., & Plesko, G. A. (1992). Earnings Management and the Corporate Alternative Minimum Tax. *Journal of Accounting Research*, 30 (3), 131-153

- Brooks, J. (2008). Revenue Manipulation and Restatements by Loss Firms. *Journal of Managerial Auditing*, 26(2), 90-113.
- Bryman, A. and Bell, E. (2010). *Business Research Methods*, 3rd ed. Oxford University Press.
- Capital Markets Authority. Annual Report 2014. Government Press. Nairobi.
- Chan, K., Chan, L. K. C., Jegadeesh, N., & Lakonishok, J. (2010). Earnings quality and stock Corporate Alternative Minimum Tax. *Journal of Accounting Research*, 30 (3), 131-153.
- Chapman, C. J. (2008). *Essays on Real Earnings Management*. Harvard University. Retrieved from <http://gradworks.umi.com/33/29/3329521.html>
- Cohen, D. A., and Zarowin, P. (2010). Accrual-based and earnings management activities around seasoned equity offerings. *Journal of Accounting and Economics*, 50, 2-19.
- Dabo, R. EL & Adeyemi, SB (2009). Corporate governance and credibility of financial statements in Nigeria, *Journal of Business Systems, Governance and Ethics*, 4(1), 13-24.
- Dabor, E. L., & Adeyemi, B. (2009). Corporate governance and credibility of financial statements in Nigeria. *Journal of Business Systems, Governance and Ethics*, 4(1), 13-34.
- Daily, C. M., Dalton, D. R., & Cannella, A. A. (2003). Corporate governance: Decades of dialogue and data. *Academy of management review*, 28(3), 371-382.
- Dechow, P. M., & Skinner, D. J. (2010). Earnings management: Reconciling the views of accounting academics, practitioners, and regulators'. *Accounting Horizons*, 14, 235-50.
- Ding, B., Haniffa, R., & Hudaib, M. (2007). Corporate governance structure and performance of Malaysian listed companies. *Journal of Business Finance & Accounting*, 33(7-8), 1034-1062.
- Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of management*, 16(1), 49-64.

- Elizabeth, K. & Elliott, P. (2014). The Competition between Regression and Artificial Neural Network Models in Earning Management Prediction. *International Review of Business Research Papers*, 10(2), 148-159.
- Fama, E. F., Fisher, L., Jensen, M. C., & Roll, R. (1969). The adjustment of stock prices to new information. *International Economic Review*, 10(1), 1-21.
- Farooqi, H. & Ngo, P. (2014). Leverage, investment, and firm growth. *Journal of Financial Economics*, 40(1): 3–29.
- Farouk, M. A., & Hassan, S. U. (2014). Impact of Audit Quality and Financial Performance of Quoted Cement Firms in Nigeria. *International Journal of Accounting and Taxation*, 2(2), 01-22.
- Fatima, A. (2011). Audit fees and discretionary accruals: compensation structure effect. *Managerial Auditing Journal*, 26(2), 90-113.
- Fernandes, N. and M. Ferreira, 2007. The evolution of earnings management and firm valuation: A cross-country analysis. Available from <http://www.ssrn.com/abstract=965636>.
- Gerayli, M. S., Yanesari, A. M., & Ma'atoofi, A. R. (2011). Impact of Audit Quality on Earnings Management: Evidence from Iran. *International Research Journal of Finance* 40(1): 3–29.
- Harrison, J. S., & Freeman, R. E. (1999). Stakeholders, social responsibility, and performance: Empirical evidence and theoretical perspectives. *Academy of management Journal*, 42(5), 479-485.
- Hassan, M. & Ahmed, M. (2012). A review of dominant and emerging issues in corporate earnings management. *Southern Business Review*, 35(1): 15-36.
- Healy, P. & Wahlen (1999). *Dividend Policy and Common Stock Prices*. Barkely: University of Carlifornia.
- Jensen, M. & Meckling, P. (1986). The takeover controversy: Analysis and evidence. *Midland Corporate Finance Journal*, 4(2): 6-32.
- Jensen, P. (2006). Theory of the Firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 4, (7) 53-60.
- Jones, J. J. (2011). Earnings management duration import relief investigations. *Journal of Accounting Research* 29: 193-228.
- Kang, P. & Kim, Y., (2011). The relationship between corporate social responsibility and earnings management: An exploratory study. *Journal of Business Ethics*, 104(4), 461-471.

- Ke, B., (2011). Why do CEOs of publicly traded firms prefer reporting small increases in earnings and long strings of consecutive earnings increases?' Working paper, the Pennsylvania State University.
- Lee, K. & Choi, P. (2002). The causal effects of exports on firm size and labor productivity: first evidence from a matching approach. *Economics Letters*, 77(2), 287-292.
- Mohammad, M. (2012). *The Effect of the Earnings Announcements on the Stock Prices of Companies Listed at the Nairobi Stock Exchange*. Unpublished MBA thesis, University of Nairobi.
- Nairobi Securities Exchange. Annual Report 2013. Government Press. Nairobi.
- Ongore, V. O., & Kusa, G. B. (2013). Determinants of financial performance of commercial banks in Kenya. *International Journal of Economics and Financial Issues*, 3(1), 237.
- Petroni, K. (2012). Optimistic reporting in the Property-Casualty insurance industry. *Journal of Accounting and Economics*, 15(4), 485-508.
- Richardson, P. (2000). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, 13 (4): 365–383.
- Ronen, F. I. & Yaari, P. (2008). The Effects of Earnings Per Share, Dividend Per Share and Price to Earnings Ratio on Share Prices: The Case of Firms Listed at New York Securities Exchange. *Innovational Study of Innovative Research and Studies*, 2(9), 30-44.
- Sayari, A. O., Finet, A., & Faycal Mraih, S. (2013). The Impact of Earnings Management on Stock Returns: *Journal of Business* 10(2), 148-159.
- Stolowy, H., & Breton, G. (2004). Accounts manipulation: A literature review and proposed conceptual framework. *Review of Accounting and Finance*, 3(1), 5-92.
- Sweeney, A. P. (2010). Debt-covenant violations and managers' accounting responses. *Journal of accounting and Economics*, 17(3), 281-308.
- Uadiale, O. M. (2012). Earnings management and corporate governance in Nigeria. *Research Journal of Finance and Accounting*, 3(3), 1-10.
- Uwuigbe, U., Ben-Caleb, E., & Olubukunola, U. (2013). Liquidity management and profitability of manufacturing companies in Nigeria. *IOSR Journal of Business and Management (IOSR-JBM)*, 9(1), 13-21.

Appendix I: Firms Listed at the Nairobi Securities Exchange

Eaagads Ltd
Kapchorua Tea Co. Ltd
Kakuzi Ord. Limuru Tea Co. Ltd
Rea Vipingo Plantations Ltd
Sasini Ltd
Williamson Tea Kenya Ltd
Car and General (K) Ltd
Sameer Africa Ltd
Marshalls (E.A.) Ltd
Barclays Bank Ltd
CFC Stanbic Holdings Ltd
I&M Holdings Ltd
Diamond Trust Bank Kenya Ltd
HF Group Ltd
KCB Group Ltd
National Bank of Kenya Ltd
NIC Bank Ltd
Standard Chartered Bank Ltd
Equity Group Holdings
The Co-operative Bank of Kenya Ltd
Express Ltd
Kenya Airways Ltd
Nation Media Group
Standard Group Ltd
TPS Eastern Africa (Serena) Ltd
Scangroup Ltd
Uchumi Supermarket Ltd
Hutchings Biemer Ltd
Longhorn Publishers Ltd
Atlas Development and Support Services
Deacons (East Africa) Plc
Nairobi Business Ventures Ltd
Athi River Mining

Bamburi Cement Ltd
Crown Berger Ltd
E.A.Cables Ltd
E.A. Portland Cement Ltd
Nairobi Securities Exchange Ltd
B.O.C Kenya Ltd
British American Tobacco Kenya Ltd
Carbacid Investments Ltd
East African Breweries Ltd
Mumias Sugar Co. Ltd
Unga Group Ltd
Eveready East Africa Ltd
Kenya Orchards Ltd
A.Baumann CO Ltd
Flame Tree Group Holdings Ltd
Safaricom Ltd
Stanlib Fahari I-REIT
KenolKobil Ltd
Total Kenya Ltd
KenGen Ltd
Kenya Power & Lighting Co Ltd
Umeme Ltd
Jubilee Holdings Ltd
Sanlam Kenya PLC
Kenya Re-Insurance Corporation Ltd
Liberty Kenya Holdings Ltd
Britam Holdings Ltd
CIC Insurance Group Ltd
Olympia Capital Holdings Ltd
Centum Investment Co Ltd
Trans-Century Ltd
Home Afrika Ltd
Kurwitu Ventures

Appendix II: Earnings Management of Listed Companies

	2012	2013	2014	2015	2016
Eaagads Limited	0.656	0.081	0.326	0.306	0.340
Kakuzi Limited	0.166	0.174	0.131	0.123	0.136
Kapchorua Tea Limited	1.463	3.291	6.145	5.769	6.401
Limuru Tea Limited Company	0.547	0.026	2.335	2.192	2.432
Rea vipingo plantations Limited	0.401	0.001	0.337	0.316	0.351
Sasini Limited	0.270	0.136	0.172	0.161	0.179
Williamson Tea Kenya	0.136	0.136	1.528	1.435	1.592
Car and General Kenya Limited	0.413	0.008	0.120	0.113	0.125
CMC Holding Limited	0.091	0.001	0.413	0.388	0.430
Masharls E.A Limited	0.199	0.002	0.319	0.300	0.333
Sameer Africa Limited	0.225	0.009	0.117	0.110	0.122
Barclays Bank of Kenya Limited	0.245	0.049	1.672	1.570	1.742
CFC Stanbic Bank	0.861	0.121	2.309	2.237	2.482
Diamond Trust Bank	0.078	0.007	0.347	0.336	0.373
Equity Bank Limited	0.407	0.024	1.076	1.042	1.157
Housing Finance Company Limited	0.378	0.001	0.042	0.041	0.045
I&M Holdings	0.023	0.053	0.670	0.649	0.720
Kenya Commercial Bank Limited	0.517	0.007	0.222	0.215	0.238
National Bank of Kenya	1.021	0.024	0.922	0.893	0.991
NIC Bank Limited	0.136	0.136	0.126	0.123	0.136
Standard Chartered Bank Limited	0.569	0.017	0.429	0.416	0.461
Co-operative Bank of Kenya Limited	0.275	0.102	1.017	0.985	1.093
Express Kenya	0.639	0.100	0.643	0.623	0.691
Hutchings Biemer Limited	0.482	0.043	0.529	0.513	0.569
Kenya Airways limited	0.230	0.049	0.767	0.743	0.824

Longhorn Kenya Ltd	0.333	0.007	0.568	0.550	0.611
Nation Media Group Limited	0.394	0.000	0.007	0.007	0.008
ScanGroup Limited	0.039	0.069	0.785	0.761	0.844
Standard Group Limited	0.024	0.053	0.680	0.659	0.731
TPS EA (Serena)Limited	0.024	0.005	0.357	0.346	0.384
Uchumi Supermarkets Limited	0.026	0.023	0.444	0.431	0.478
Athi River Mining Limited	0.131	436000	0.027	0.026	0.029
Bamburi Cement Limited	1.104	0.345	2.691	2.608	2.894
Crown Paints Kenya Limited	0.953	0.068	0.835	0.809	0.898
East Africa Cables Limited	0.468	0.027	0.119	0.115	0.127
East Africa Portland Cement	0.152	0.001	0.146	0.141	0.157
KenGen Limited	0.317	0.011	0.096	0.093	0.104
KenolKobil Limited	0.325	37315.220	0.319	0.299	0.332
Kenya Power and Lighting Company	0.321	38658.970	0.293	0.275	0.305
Total Kenya Limited	0.318	40002.720	0.267	0.250	0.278
CIC Insurance Group Ltd	0.314	41346.470	0.241	0.226	0.251
Jubilee Holdings Limited	0.311	42690.230	0.215	0.202	0.224
Kenya Re Corporation Limited	0.308	44033.980	0.189	0.178	0.197
Pan Africa Insurance	0.304	45377.730	0.163	0.153	0.170
Centum Investment Company	0.301	46721.480	0.137	0.129	0.143
City Trust Limited	0.297	48065.240	0.111	0.105	0.116
Olympia Capital Holdings Limited	0.294	49408.990	0.086	0.080	0.089
Trans-Century Ltd	0.339	55263.030	0.196	0.184	0.205
B.O.C Kenya	0.339	56911.280	0.179	0.168	0.187
BAT Kenya Limited	0.339	58559.530	0.162	0.152	0.169
Carbacid Investments Limited	0.339	60207.780	0.145	0.137	0.151
East African Breweries Limited	0.338	61856.040	0.338	0.121	0.134

Eveready East Africa Limited	0.338	63504.290	0.338	0.105	0.116
Kenya Orchards Limited	0.338	65152.540	0.338	0.089	0.098
Mumias Sugar Limited	0.338	66800.790	0.338	0.073	0.081
Unga Group Limited	0.337	68449.040	0.337	0.057	0.063
Access Kenya Group Limited	0.337	70097.290	0.337	0.041	0.045
Safaricom Limited	0.337	71745.540	0.337	0.025	0.028
A.Baumann & Co Limited (BAUM)	0.341	72628.010	0.341	0.025	0.028
Kurwitu Ventures Limited (KURV)	0.345	73521.335	0.345	0.026	0.028
Atlas Development	0.349	74425.647	0.349	0.026	0.029
Flame Tree Group Holdings Limited	0.354	75341.083	0.354	0.026	0.029
Umeme Limited (UMME)	0.358	76267.778	0.358	0.026	0.029
Liberty Kenya Holdings	0.362	77205.872	0.362	0.027	0.030
Home Afrika Limited (HAFR)	0.367	78155.504	0.367	0.027	0.030
British-American Investments	0.371	79116.816	0.371	0.027	0.030

Appendix III: Size of the firm

	2012	2013	2014	2015	2016
Eaagads Limited	9.26	9.30	9.27	9.30	9.31
Kakuzi Limited	10.31	10.43	10.50	10.08	10.22
Kapchorua Tea Limited	10.53	10.63	10.64	10.51	10.52
Limuru Tea Limited Company	10.14	10.18	10.21	10.03	10.05
Rea vipingo plantations Limited	9.75	9.76	9.83	9.51	9.59
Sasini Limited	9.24	9.30	9.33	9.14	9.18
Williamson Tea Kenya	10.16	10.11	10.16	10.12	10.17
Car and General Kenya Limited	9.35	9.35	9.37	9.27	9.29
CMC Holding Limited	10.69	10.74	10.78	10.54	10.58
Masharls E.A Limited	9.70	9.80	9.83	9.55	9.66
Sameer Africa Limited	10.13	10.15	10.19	10.08	10.08
Barclays Bank of Kenya Limited	8.55	8.76	8.70	8.41	8.41
CFC Stanbic Bank	9.01	9.06	9.09	9.00	9.08
Diamond Trust Bank	8.88	8.70	8.59	9.11	9.13
Equity Bank Limited	9.58	9.55	9.61	9.46	9.51
Housing Finance Company Limited	9.20	9.29	9.33	9.07	9.18
I&M Holdings	11.21	11.21	11.27	11.04	11.18
Kenya Commercial Bank Limited	10.66	10.51	10.61	10.47	10.48
National Bank of Kenya	10.90	10.89	10.89	10.88	10.87
NIC Bank Limited	7.85	7.82	6.85	7.90	7.87
Standard Chartered Bank Limited	11.08	11.13	11.19	10.85	10.93
Co-operative Bank of Kenya Limited	8.28	8.51	8.55	7.93	8.20
Express Kenya	8.85	8.82	8.89	8.63	8.72
Hutchings Biemer Limited	9.03	8.75	8.77	9.16	9.05
Kenya Airways limited	10.36	10.44	10.47	10.24	10.26

Longhorn Kenya Ltd	9.82	9.90	9.95	10.03	10.05
Nation Media Group Limited	9.25	9.14	9.12	8.84	8.86
ScanGroup Limited	10.41	10.47	10.56	10.58	10.63
Standard Group Limited	10.42	10.48	10.58	10.59	10.64
TPS EA (Serena)Limited	10.41	10.47	10.56	10.58	10.63
Uchumi Supermarkets Limited	10.42	10.48	10.58	10.59	10.64
Athi River Mining Limited	10.43	10.49	10.59	10.60	10.65
Bamburi Cement Limited	10.44	10.50	10.60	10.62	10.67
Crown Paints Kenya Limited	10.45	10.52	10.61	10.63	10.68
East Africa Cables Limited	10.41	10.47	10.56	10.58	10.63
East Africa Portland Cement	10.42	10.48	10.58	10.59	10.64
KenGen Limited	10.43	10.49	10.59	10.60	10.65
KenolKobil Limited	10.44	10.50	10.60	10.62	10.67
Kenya Power and Lighting Company	10.45	10.52	10.61	10.63	10.68
Total Kenya Limited	10.46	10.52	10.62	10.64	10.69
CIC Insurance Group Ltd	10.47	10.53	10.63	10.65	10.70
Jubilee Holdings Limited	10.41	10.47	10.56	10.58	10.63
Kenya Re Corporation Limited	10.42	10.48	10.58	10.59	10.64
Pan Africa Insurance	10.43	10.49	10.59	10.60	10.65
Centum Investment Company	10.44	10.50	10.60	10.62	10.67
City Trust Limited	10.45	10.52	10.61	10.63	10.68
Olympia Capital Holdings Limited	10.46	10.52	10.62	10.64	10.69
Trans-Century Ltd	10.47	10.53	10.63	10.65	10.70
B.O.C Kenya	10.48	10.54	10.64	10.66	10.71
BAT Kenya Limited	10.49	10.55	10.65	10.67	10.72
Carbacid Investments Limited	10.50	10.56	10.66	10.68	10.73
East African Breweries Limited	10.51	10.57	10.67	10.69	10.74

Eveready East Africa Limited	10.68	10.70	10.75	10.52	10.58
Kenya Orchards Limited	10.69	10.71	10.76	10.53	10.59
Mumias Sugar Limited	10.70	10.72	10.77	10.54	10.60
Unga Group Limited	10.71	10.73	10.78	10.54	10.61
Access Kenya Group Limited	10.72	10.74	10.79	10.55	10.61
Safaricom Limited	10.72	10.74	10.79	10.56	10.62
A.Baumann & Co Limited (BAUM)	10.73	10.75	10.80	10.57	10.63
Kurwitu Ventures Limited (KURV)	10.74	10.76	10.81	10.58	10.64
Atlas Development	10.75	10.77	10.82	10.58	10.64
Flame Tree Group Holdings	10.76	10.78	10.83	10.59	10.65
Umeme Limited (UMME)	10.83	10.85	10.90	10.67	10.73
Liberty Kenya Holdings	10.62	10.64	10.69	10.46	10.52
Home Afrika Limited (HAFR)	10.62	10.64	10.69	10.47	10.53
British-American Investments	10.63	10.65	10.70	10.47	10.53

Appendix IV: Market to Book Value Ratio

	2012	2013	2014	2015	2016
Eaagads Limited	75193.2	4262.8	3356.4	3512.8	2052.1
Kakuzi Limited	73474.0	4165.3	3279.7	3432.5	2005.2
Kapchorua Tea Limited	465.5	107.8	77.1	200.1	98.4
Limuru Tea Limited Company	471.6	109.2	78.2	202.7	99.7
Rea vipingo plantations Limited	477.9	110.6	79.2	205.4	101.0
Sasini Limited	484.2	112.1	80.2	208.1	102.3
Williamson Tea Kenya	6168.5	1681.4	4316.7	1799.0	747.7
Car and General Kenya Limited	6232.2	1698.8	4361.2	1817.5	755.4
CMC Holding Limited	6296.5	1716.3	4406.2	1836.3	763.2
Masharls E.A Limited	12772.1	5712.4	8500.2	8158.5	12097.2
Sameer Africa Limited	17140.2	7666.0	11407.3	10948.7	16234.4
Barclays Bank of Kenya Limited	23002.1	10287.8	15308.5	14693.2	21786.6
CFC Stanbic Bank	30868.9	13806.2	20544.0	19718.2	29237.6
Diamond Trust Bank	72624.7	165055.2	452303.1	729013.6	421510.2
Equity Bank Limited	57329.9	130294.6	357048.1	575483.3	332740.2
Housing Finance Company Limited	45256.2	102854.5	281853.7	454286.5	262665.1
I&M Holdings	35725.3	81193.4	222495.3	358613.8	207347.8
Kenya Commercial Bank Limited	28201.5	64094.1	175637.8	283089.7	163680.4
National Bank of Kenya	22262.3	50595.8	138648.5	223471.0	129209.3
NIC Bank Limited	56.1	13.5	107.2	51.6	290.1
Standard Chartered Bank Limited	37329.4	5881.0	22513.9	7202.5	26455.4
Co-operative Bank of Kenya	53119.7	8368.7	32037.3	10249.2	37646.1
Express Kenya	66231.9	8147.2	57461.9	25890.0	88344.9
Hutchings Biemer Limited	41792.4	5140.9	36258.5	16336.6	55745.6
Kenya Airways limited	26371.0	3243.9	22879.1	10308.4	35175.5

Longhorn Kenya Ltd	16640.1	2046.9	14436.7	6504.6	22195.7
Nation Media Group Limited	10499.9	1291.6	9109.6	4104.4	14005.5
ScanGroup Limited	6625.4	815.0	5748.1	2589.9	8837.5
Standard Group Limited	4180.6	514.3	3627.1	1634.2	5576.4
TPS EA (Serena)Limited	2638.0	324.5	2288.7	1031.2	3518.7
Uchumi Supermarkets Limited	1664.6	204.8	1444.2	650.7	2220.3
Athi River Mining Limited	1050.3	129.2	911.3	410.6	1401.0
Bamburi Cement Limited	662.8	81.5	575.0	259.1	884.0
Crown Paints Kenya Limited	418.2	51.4	362.8	163.5	557.8
East Africa Cables Limited	263.9	32.5	228.9	103.2	352.0
East Africa Portland Cement	166.5	20.5	144.5	65.1	222.1
KenGen Limited	105.1	12.9	91.2	41.1	140.1
KenolKobil Limited	13241.4	6457.5	25548.7	52661.9	44631.1
Kenya Power and Lighting Company	13512.7	6595.6	27152.8	61196.2	52106.0
Total Kenya Limited	13791.5	6732.9	28906.8	72428.4	61933.2
CIC Insurance Group Ltd	14078.1	6869.5	30832.9	87877.8	75430.2
Jubilee Holdings Limited	14372.8	7005.3	32957.6	110468.5	95124.8
Kenya Re Corporation Limited	14676.1	7140.3	35313.3	146640.0	126557.7
Pan Africa Insurance	14988.2	7274.6	37940.0	213902.6	184678.4
Centum Investment Company	15309.6	7408.1	40887.1	382554.6	328547.9
City Trust Limited	15640.7	7540.9	44217.1	1583291.0	1281576.0
Olympia Capital Holdings Limited	15982.0	7673.0	48009.8	-783319.0	-723286.0
Trans-Century Ltd	16333.8	7804.3	52369.0	-321055.0	-289732.0
B.O.C Kenya	10273.5	6329.1	13196.2	14676.8	12254.2
BAT Kenya Limited	10399.8	6407.0	13358.6	14857.3	12404.9
Carbacid Investments Limited	10527.7	6485.8	13522.9	15040.1	12557.5
East African Breweries Limited	10657.2	6565.5	13689.2	15225.1	12711.9

Eveready East Africa Limited	10788.3	6646.3	13857.6	15412.3	12868.3
Kenya Orchards Limited	10921.0	6728.0	14028.0	15601.9	13026.6
Mumias Sugar Limited	11055.3	6810.8	14200.6	15793.8	13186.8
Unga Group Limited	11191.3	6894.6	14375.2	15988.1	13349.0
Access Kenya Group Limited	11329.0	6979.4	14552.1	16184.7	13513.2
Safaricom Limited	11468.3	7065.2	14731.0	16383.8	13679.4
A.Baumann & Co Limited (BAUM)	6564.4	2160.2	13731.2	56126.4	47997.4
Kurwitu Ventures Limited (KURV)	6170.4	1749.9	12760.3	55375.5	47711.0
Atlas Development	5776.4	1339.7	11789.4	54624.6	47424.5
Flame Tree Group Holdings	5382.5	929.4	10818.5	53873.7	47138.1
Umeme Limited (UMME)	4988.5	519.1	9847.5	53122.8	46851.7
Liberty Kenya Holdings	4594.5	108.9	8876.6	52372.0	46565.3
Home Afrika Limited (HAFR)	4200.6	601.4	7905.7	51621.1	46278.8
British-American Investments	3806.6	88.0	6934.8	50870.2	45992.4

Source: Nairobi Securities Exchange (NSE) Financial Reports and Publications