EFFECT OF EARNINGS MANAGEMENT ON STOCK RETURNS OF COMPANIES LISTED AT THE NAIROBI SECURITIES EXCHANGE

SUSAN MUTHONI KABIRO

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DECLARATION

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

Signed: _____Date: _____28/10/2019_____

SUSAN MUTHONI KABIRO

D63/6601/2017

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

Signed: _____Date: _____

DR. CYRUS IRAYA

Senior Lecturer, Department of Finance and Accounting

School of Business, University of Nairobi

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May God's blessings be upon you all.

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DEDICATION

I dedicate this project to my able husband Mr.John Ngare and my lovely children Levis, Leon, Lemuel and Sabina Angela for your love, patience , encouragement and endless support.

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LIST OF ABBREVIATIONS

AIMS	Alternative Investment Market Segment
ANOVA	Analysis of Variance
CMA	Capital Market Authority
EM	Earnings Management
EMH	Efficient Market Hypothesis
FISMS	Fixed Income Securities Market Segment
FRA	Financial Reporting Award
GAAP	General Accepted Accounting Principles
GEMS	Growth Enterprises Market Segment
ICPAK	Institute of Certified Public Accountants of Kenya
IFRS	International Financial Reporting Standard
MIMS	Main Investment Market Segment
NASI	Nairobi All Share Index
NSE	Nairobi Securities Exchange
SPSS	Statistical Package for Social Sciences

ABSTRACT

The main objective of any firm is the maximization of the wealth of its shareholders. This means that every corporate event undertaken by the firm should be geared towards achieving this goal. Earnings management is a major corporate issue and is therefore no exception. Although most studies have reported on the negative side of earnings management, some studies still differ from the argument by suggesting that earnings management can be practised in a positive way. Reported earnings can be smoothed with earnings management practices to reduce unpredictability and thereby increasing firm value. The aim of this study was to ascertain the effect of earnings management on stock returns of firms quoted at the NSE. The population for the study was all the 63 companies quoted at the NSE. The independent variables for the study were earnings management as measured by discretionary accruals, capital structure as measured by debt ratio, liquidity measured by current ratio, firm size as measured by the natural logarithm of total assets and management efficiency as measured by the ratio of total revenue to total operating expenses. Stock return was the dependent variable and was measured by change in share price plus any dividend issued during the period. Secondary data was collected over a five year time frame (January 2014 to December 2018) annually. The descriptive cross-sectional research design was employed for the study and the relationship between variables established using multiple linear regression analysis. Data analysis was undertaken using the SPSS software. The results of the study produced R-square value of 0.245 which means that about 24.5 percent of the variation in stock returns of firms quoted at the NSE can be explained by the five selected independent variables while 75.5 percent in the variation in stock returns of firms listed at the NSE was associated with other factors not covered in this research. The study also found that the independent variables had a moderate correlation with stock returns of firms listed at the NSE (R=0.495). ANOVA results show that the F statistic was significant at 5% level with a p=0.000. Therefore the model was fit to explain the association between the selected variables. The findings also showed that liquidity and firm produced positive and statistically significant values for this study while capital structure produced negative and statistically significant values for this study. Earnings management and management efficiency produced positive but statistically insignificant values for this study. This study recommends that listed firms should enhance their liquidity and their asset levels as this has a significant positive effect on stock returns of listed firms.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The main objective of any firm is the maximization of the wealth of its shareholders. This means that every corporate event undertaken by the firm should be geared towards achieving this goal. Earnings management is a major corporate issue and is therefore no exception. Although most studies have reported on the negative side of earnings management, some studies still differ from the argument by suggesting that earnings management can be practised in a positive way. For example, it can be used to convey information that is not included in the financial statements (Dutta & Gigler, 2002). Also, reported earnings can be smoothed with earnings management practices to reduce unpredictability and thereby increasing firm value (Magrath & Weld, 2002).

This research will be directed by three theories namely the agency theory, efficient market hypothesis theory and signaling theory. Agency hypothesis proposes that occurrence of earning management may be when supervisors have motivation of promoting their own interests by conceding stakeholders concern as an effect of information asymmetry (Chen et, 2010). This may in effect lead to a rise in the share price as investors are likely to interpret the reported performance as reflecting the true state of the firm. Efficient market hypothesis also argued that there is no relationship between earnings management and stock returns while signaling theory posits that the managers of a firm can mislead investors by conducting income smoothing and in so doing improve the value of a share (Alzoubi, 2016).

The companies that are listed at the NSE must give quarterly, semi-annual and annual financial statements. CMA regulations dictate that the financial statements should be prepared in adherence to the International Standards on Auditing (ISA) and

International Financial Reporting Standards (IFRS). In order to encourage adherence to the IFRS, ICPAK composed with the NSE and CMA have established the FRA that reviews the participating firms' annual reports and rewards the best financial statements that conform with IFRS. Further, the guidelines of CMA encourage companies to divulge supplementary evidence on management and director compensation (CMA, 2017). Despite the measures put in place, there are still opportunities for managers to practice earnings management, the current study seeks to determine whether earnings management has an effect on stock returns for companies listed at the NSE.

1.1.1 Earnings Management

Earnings management is referred to as the alteration of firms' conveyed economic performance by insiders to deceive some shareholders or to impact contractual outcomes (Healy & Wahlen, 2010). Earnings Management also refers to ways in which managers in the company manipulate figures in financial reporting to end up with their desired earnings value (Baker et al., 2003). Managers can overstate profits to show that the firm is performing well so that they can obtain incentives like bonuses. Consequently, reported profits can be understated to lower the current market price of the shares traded. When a firm reports low earnings, it leads to reduction in the share price, resulting to lower exercise price of stock options (Baker et al., 2003).

Past studies reported that managers can select accounting methods that can lead to an increase in income thus concealing poor performance of the firm (Campello et al., 2013). In addition, through the flexibility offered by both IFRS and GAAP, managers are at liberty to select preferred accounting methods when computing earnings

management procedures. Although most studies have reported on the side effects of EM, some studies still differ from the argument by suggesting that earnings management can be practised in a positive way. For example, used to convey information that is not included in the financial statements (Dutta & Gigler, 2002). Also, reported earnings can be smoothed with EM practices to reduce unpredictability (Magrath & Weld, 2002).

Ronen and Yaari (2008) gave two categories of earning management; opportunistic earnings management and value-enhancing earnings management. Value-improving earnings management is a method of supervisors of establishing bond with proprietors by beckoning value appropriate information remembering too many clumsy facts. Safeguarding the benevolence of the proprietors is treasured while they distinct the other kind of opportunistic earnings management is possible for the reason that battle of attention between stakeholders and administration and for the reason that those owning personal evidence makes it stress-free to use it to the advantage of its owner at the cost of others.

1.1.2 Stock Returns

Stock return refers to the loss or gain of the cost of a share during a precise time frequently cited as a percentage. It contains of capital advances and any revenue acknowledged by the financier from the stock (Mugambi & Okech, 2016). Stock returns can be used to predict output and investment since they are forward-looking variable which outlines future discount rates and cash flow expectations. Stock returns aid as a directory to financiers in making their stock choices. Financiers of different monetary ability are able to put stocks as long as they are capable to obtain profit that is advanced than their rate of investment (Wang, 2012).

According to Taofik and Omosola (2013) the availability of adequate market information and the effectiveness and efficiency of stock in the allocation of shares and equities is determined by stock returns. Changes in stock prices create some form of uncertainty for the investors which influence the stocks' supply and demand. Shares and stock markets react to any prize-shaping evidence, applicable for upcoming marketplace expansion (Širucek, 2013). Firms with higher stock returns are more profitable and thus they generally contribute to economic growth (Aliyu, 2011). Therefore, stock markets returns' uncertainties is a fundamental facet of the aggregate economy since unstable economic growth trends makes consumption and investment difficult (Erdugan, 2012).

Stock returns are mostly measured using the stock market indexing. The performance of a specific stock is shown by fluctuations in its stock price. Just like a rise in stock prices indicates positive stock performance while a decrease shows declining performance, a higher stock index marks a better performing market or sector, as compared to a lower stock index (Daferighe & Sunday, 2012). In Kenya, several indices are used in the calculation of stock returns and they include NSE All Share Index (NASI), FTSE NSE Kenya 15, FTSE NSE Kenya 25 Indices and NSE 20 share index. The oldest (since 1964) is NSE 20 share index which is occasionally reviewed to reflect the accurate picture of stock market performance.

1.1.3 Earnings Management and Stock Returns

The part that financial statements contribute in the country can never be under stressed. Administration bears info around the organization to its proprietors and extra concerned residents by use of financial reports. This purpose receipts on an extra meaning in a public organization wherever the parting of possession and marks it the

only method over which proprietors and stockholders can become a indication of the organization (Chen et al., 2010).

According to Rafournier (2010), organizations embracing earnings management measured by optional accumulations have negative or positive discretionary accruals or positive or negative abnormal returns throughout fallouts publication. These outcomes shows that earnings management is an exercise embraced by many organizations to impact investors' awareness of the organization's future earnings and to give them unanticipated market outcomes greater to their opportunities. Indeed, stable managers may embrace an accounting policy which permits for walloping their management observes. This is connected to their effect on investors' conduct and on the market, by cumulative the gap between real stock revenues and that which may be accomplished in case no deployed information was acknowledged.

Nicholson (2009) noted that the effect of earnings management function in such a technique that organizations by means of short ratios amongst stock price and stock earning steadily deliver higher earnings over them with high incomes ratios. On contrary, stock market returns lowers when the preparedness of stakeholders to salary charge per unit decreases as well as when the price paid per stock by investor's rises in slower leap than the incomes per share. A great price earnings ratio regularly specifies that the marketplace will pay extra to obtain the corporation's earnings because it have faith in the firm's capacity to intensify its earnings. Corporations in those businesses adoring a surge of attractiveness tend to have great price earnings ratio, replicating a growing in orientation. A low price earnings ratio shows that the market has less self-assurance that the company's earnings will rise.

1.1.4 Firms Listed at the Nairobi Securities Exchange

The research focuses on corporations listed at the (NSE). The NSE has the fourth largest trading volume across the African continent and plays a key role in the economic growth in Kenya. NSE was recognised as an association of stock brokers, it was later recorded underneath the societies Act in 1954.The NSE was registered under the companies Act of Kenya in 1991 as a corporation limited by guarantee, there was no share capital (Kibuthu, 2005). Subsequently, the market has evolved with an increase in the numeral of brokers, formation of guardian institutions, credit evaluation agencies and the numeral of listed corporations over time. Securities merchandized in the market comprise equities, bonds and preference shares (NSE, 2018).

Currently, there are 65 corporations registered at NSE, 63 of which have been actively trading at NSE for the last five years. The companies operate in various segments of the economy. Companies listed at NSE are registered under companies act and they operate as public Act Cap486 (CMA handbook, 2017). The study targets firms listed at NSE specifically as it represents almost all sectors in the economy. Corporate governance considerations are among requirements at NSE before listing any company NSE website (2018). However, the Kenyan economy has experienced a wave of company failures due to mismanagement of resources and managers opportunistic behavior in carrying out earnings management practices. Some of the affected firms are listed at NSE; this has resulted in job loss, closure of companies and a negative effect on the Kenyan Economy (Njogu, 2016).

1.2 Research Problem

Various theories have indicated that the goals followed by shareholders and company managers tend to differ and are inconsistent with esteems to their interests and this has given rise to corporate governance which is said to minimize the spill over. Nicholson (2009) noted that the effect of earnings management function in a manner that organizations with small ratios amongst stock earnings and stock price have been providing greater profits than that with greater ratios of earnings. On contrary, stock market returns goes down when the readiness of stockholders to compensate per unit drops as well as when the fee paid per stock by stockholder's upsurges in relaxed pace than the earnings per share. A high price earnings ratio frequently specifies that the marketplace will recompense more to gain the company's earnings because it trusts in the firm's capability to intensify its earnings. Companies in those businesses enjoying a surge of admiration tend to have great price earnings ratio, reflecting a development in direction. A low price earnings ratio indicates that the market has less confidence that the company's earnings will increase.

Empirical evidence is largely uneven and rather varied on the effect of earnings management on stock returns. Amaadi and Amadi (2014) conducted a research on earnings management and stock market returns in USA and concluded that earnings management has a positive and significant effect on stock market returns. These findings are supported by Fazeli and Rasouli (2011) concluded that indeed earnings management raises the share price of listed firms. Courteau et al., (2011) however found that earnings management has a negative effect on stock market returns. Nuryaman (2013) also conducted a study on the relationship between earnings

management and stock market returns using 149 manufacturing firms listed at the ISE and concluded that there occurs a negative association amongst the two variables.

In Kenya, potential investors acquire important information on tradeoff doings of corporations. Similar to other exchanges, NSE encourages firms to disclose as much information as possible so that stock prices in the exchange reflect the most current information (Mwangi & Mwiti, 2015). Since 2008, the exchange has impressively focused on corporate governance to an extent of punishing participants for going against the acceptable market regulations. Absolutely, by way of the CMA stressing on constriction of corporate governance between the market contributors, the extent of earnings management is bound to be curtailed in the NSE. It is therefore imperative to investigate whether this development have an effect on stock returns of listed firms.

Studies in Kenya include Oduma (2015) who sought to establish the relationship between earnings management and stock returns of firms listed at the NSE and concluded that there exists a positive and significant relationship. Garane (2017) focused on determinants of earnings management among retail stores in Nairobi and concluded that contracting motivation and industry performance influences earnings management. Ngunjiri (2017) focused on the effect of earnings management on the financial performance of quoted companies at the NSE and concluded that earnings management had a positive and significant effect on financial performance of quoted companies. Were (2018) sought to establish the effect of corporate governance on earnings management of the quoted firms at the NSE and revealed that board independence and board activity have a negative and statistically significant influence on earnings management. Chepkwony (2018) sought to determine the association between earnings management and stock returns of financial firms listed at the NSE

and found that earnings management has no important influence on financial firms' stock returns. The current study seeks to contribute to the debate by attempting to give an explanation to the research question; what is the effect of earnings management on stock returns of firms listed at the NSE?

1.3 Objective of the Study

To determine the effect of earnings management on stock returns of firms listed at the Nairobi Securities Exchange

1.4 Value of the Study

The study's findings will be used for future reference by researchers, students and scholars who seek to undertake correlated or similar studies. The study will also benefit researchers and scholars in the identification of other fields of research by citing related topics that require further studies and empirical studies to determine study gaps.

The findings are hoped to be of benefit to the various managers who manage registered firms and other organizations in Kenya as this research gives important info to sustain them in making more knowledgeable choices causing shareholders' wealth maximization. The study adds to the information accessible to support both existing and future firms to improve their returns and ensure sustainability.

To government and organizations such as the CMA, in the formulation and implementation of policies and regulations governing earnings management to ensure a stable financial sector so as to promote economic growth and reduce its spiral effects on the economy. This will contribute to the advancement of financial development and improvement in the economy.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter reviews hypothesis that custom the foundation of this study. Previous empirical studies that have been carried before on this research topic and related areas are also discussed. The other sections of this chapter include determinants of stock returns, conceptual framework and a literature review summary.

2.2 Theoretical Framework

Theoretical framework provides a foundation for understanding the theoretically expected relationship among the study variables. The theories selected for this study are the agency theory, efficient market hypothesis theory and signaling hypothesis.

2.2.1 Agency Theory

The Agency relationship, as depicted by Jensen and Meckling (1976), is an covenant under which one or more people (the principals) draw in someone else (the Agent) to accomplish certain administration on their behalf and delegates some basic leadership power to the specialist. In organizations, Agents relate to chiefs while principals compare to shareholders. They facilitate hypothesize that directors can get to data more than shareholders, and consequently the agency relationship leads to information asymmetry. This in turn causes the agency conflict arising from the assumption that the two parties have different interests and naturally managers will perform their activities in a mode that is able to their wellbeing at the expense of shareholders' interests.

The first means of mitigating the agency problem is regulation by the law, IASs, IFRS and Securities Exchange rules requiring managers to fully disclose private information. The SEC and FASB outlines the guidelines that need to be followed in

the process of mandatory disclosures. However, full disclosure is not guaranteed even with these regulations owing to the conflict between managers and shareholders. They argue that corporate reporting directions are hence expected to furnish financial specialists with the base amount of data that aids in basic leadership (Al-Razeen & Karhari 2004).

In addition, principals have to incur agency costs to mitigate on the conflict. These include monitoring expenditures (remunerated by stockholders to follow up on managers and minimize the agents' divergent activities), connection costs (paid by managers for optimal contracts to warranty that there will be no mischief to the principal's benefits will cause their deeds) and outstanding loss costs (stemming from the divergence of judgments of agents from judgments that would lead to maximization of the principal's wellbeing). Thus, the price of agency is the summary of these three costs (Jensen & Meckling, 1976).

This theory relates to this research because it envisages divergence of interests amongst directors and shareholders and therefore the probability of managers engaging in earnings management to satisfy their own interests. Since agency costs can help in reducing this conflict, the theory elucidates that incurring agency costs aligns the goals of managers with those of shareholders and therefore lowers the probability of earnings management in an organization.

2.2.2 Efficient Market Hypothesis Theory

Eugene Fama (1970) who is one of the promoters of EMH advanced the view that the trading value for stocks is usually its fair value and consequently, it is not possible for investors to obtain underestimated stocks or inflate prices of stocks in sale arrangements. Based on the above, expert market timing or stock selection would not

result into outperforming the overall market hence the single method a financier would find advanced earnings is by accidental or by buying dangerous savings. According to EMH, there exist three methods of effectiveness: Weak form efficiency results whereby prices of securities (bonds, stocks or property) replicate all historical public information. Second is the semi-strong efficiency that arises where stock prices replicate historically openly accessible information such that charges vary rapidly to replicate release of new info. Lastly is the strong method of effectiveness which proclaims that securities' prices reflect historical, public and even private information.

While there exist a huge assortment of validation in support of EMH, numerous disagreements have been raised. Adversaries of the EMH likewise indicate occasions, for instance, the coming down of the 1987 security exchange where Dow Jone Industrial Average (DJIA) dropped by excess of 20% in only a day, which confirms that stock costs are able to truly stray from their normal qualities. Commentators have questioned the faith in reasonable marketplaces for a large number of the 2000s currency connected emergencies (Asava, 2013). Thus, in light of these reactions, defenders of the hypothesis have conveyed that marketplace aptitude is not meant for having no unsteadiness around the coming future yet rather, it is an outline of the realm which may not normally persist unbroken, and the marketplace is essentially effective for speculation resolutions for most persons (Asava, 2013).

The theory relates to this investigation because it links movement of security prices to information availed in the market through earnings management. Participants in financial markets use information for decision making concerning investments and thus earnings management always informs the kind of investment decisions made. It follows, therefore, that if a listed firm conducts earnings management to smooth their

income or to meet a pre-determined target, this is likely to be interpreted by investors as a firm that is performing and well and essentially improve its share price.

2.2.3 Signaling Theory

This model was formulated courtesy of Brennan and Copeland (2001). Signaling hypothesis argues that profit making companies give a market with good info. Signaling refers to the manner information is communicated by one party or interpreted by another (Bini, Dainelli & Giunta, 2010). Closely related to signaling is the concept of information asymmetry. Adverse selection or information asymmetry may happen when a gathering in a transaction gets info on another gathering.

Akerlof (1970) highlights the issue of information asymmetry in his 'market of lemons' analogy - that sellers usually have more knowledge about quality of their merchandise than the buyers. Sellers of bad quality used cars (lemons) will make vendors of used cars that are quality from the market as they seek to profit by overestimating the quality of their cars. In this scenario, the buyers discount the price of all the cars in the pool as they cannot ascertain the quality – this results in a market dominated by 'lemons'.

Healy and Palepu (2001) argue that information asymmetry results in undervaluation or overvaluation of business ideas relative to the information available to the investors. In the context of earnings, investors ideally want to make their investment choices after comparing different firms' earnings fluctuations. Earnings management by companies is therefore value relevant as investors make capital allocation decisions based on information in their domain. Guo (2014) argues that the market should reward firms that are consistent in their earnings through increased firm value and higher stock prices (Repetto & Austin, 2000).

This hypothesis is related to this study as earnings management could lead to misallocation of resources. Managers are aware of the value effect of information and could release information depending on their perceived investor reaction (Suijs, 2007). If investors perceive that the management are withholding 'bad news' they will downgrade their assessment of the firm resulting in fall of market value (Dye, 1985). Schaltegger (1997) argues that just like in the case of the 'lemons', bad quality information drives out good quality information as investors are unable to validate their quality leading to discounting and mis-valuation of firms. Nikolaou, Chymis and Evangelinos (2010) advocate for an information auditing certification scheme to enhance the information quality through standardization.

2.3 Determinants of Stock Returns

Stock returns is a matter of great interest to the stock market investors, in that it directly affects the wealth they hold. Key factors that are believed to play a part in the overall performance of stock markets are as follows:

2.3.1 Earnings Management

Earnings management is a vital subject for financiers and stockholders. Investor's assessment of a firm is dependent on choosing a quantity model of earnings management. As posited by Jones (2011), organizations in the export/import trade can profit from imported goods release and it enables to lower revenues gotten from ITC. The inspiration for the earnings management is to smooth earnings and eventually improve the value of a share.

Various theories have explained the association between earnings management and stock returns. According to the efficient market hypothesis, there is no relationship between the two variables while agency theory posits that if the goals of directors are

not affiliated by shareholders', then the managers are likely to mislead the shareholders and earnings management is one of the ways through which this can be done. Signaling theory posits that the managers of a firm can mislead investors by conducting income smoothing and in so doing improve the value of a share (Alzoubi, 2016).

2.3.2 Firm Size

The size of a listed firm is measured by its stock market capitalization. Firm size can also be assessed in terms of a firm's total assets. Ikikii and Nzomi (2013) define stock market capitalization as the combined value of all company's issued shares listed on a national stock exchange. The higher the number of outstanding shares for a firm, holding other factors constant, the larger the market capitalization. Musebe (2015) noted that market capitalization is a key measure for investors in the determination of the yields from their investment. It is also a universally accepted metric for assessing the health of a publicly traded company and an approximation of the value of a business entity.

Organizations, whose marketplace capitalization is low, on average, realize greater returns than organizations whose marketplace capitalization is high (Banz, 1981). The assertion was supported by Idris and Bala (2015) who established that market capitalization has a significant negative effect on stock market returns. The assertions are owing to the point that investors demand higher returns from smaller firms compared to larger firms due to the risky nature of smaller firms. Firm size can also be computed or measured by the sum of total assets for a firm (Pervan & Visic, 2012). Firm size was an independent variable in the study.

2.3.3 Firm Liquidity

Liquidity refers to the extent by which company meets its immediate obligations in full and in a timely way. Excessive liquidity lead to building up of idle resources that does not create any profits for the firm while low levels of liquidity on the other hand, lead to damage of company goodwill, reduce credit standings and it can also lead to compulsory liquidation of company's assets. It cannot be doubted that every firm desires to maximize profitability by maintaining appropriate level of liquidity. However, magnifying profits at the expense of liquidity can cause serious trouble to the company, which can lead to financial insolvency as well. As a result, firm should properly manage their liquidity in order to maximize their profitability (Vieira, 2010).

Assets are said to be liquid if such assets can be swiftly be changed into cash. Whether a firm has or is coming up with readily available capital base to facilitate its operation, is a critical performance concern in relation to the firm's liquidity. Liquidity of the firm is measured using liquidity ratios and the alterations in the working capital of the organization (Brealey et al., 2001). The capability of the firm to pay its maturing obligations on a timely way is of vital importance and is closely related to firm's performance and existence. The inability of the firm to maintain sufficient liquidity level can make the company insolvent and jeopardize its operations (Gitman, 2003).

2.3.4 Capital Structure

According to Lee (2009), the steadiness between debt and equity in funding firm actions has some level of effect on the level of earnings on fairness and Return on assets detailed in firms. According to capital structure irrelevant hypothesis, in perfect markets, it is presumed that there is an impeccable flow of information and thus no

opportunity for arbitrage. This therefore means that the gross earnest of an association is not affected by the leverage. Nevertheless, in real world, taxes occur and affect the way association works in terms of their capital structure (Njoroge, 2014).

Usage of debt emanates with specific agency costs like the presence of restrictions put by the firm provided that debt on how an association is to run its matters (Lee, 2009). However, this may convey about stubbornness in taking some developments even if they assure superior reoccurrence on equity (Amato & Burson, 2007). This may unpleasantly impact the general performance of the association which will in turn influence its stock return.

2.3.5 Management Efficiency

Management efficiency is a key internal factor that qualitatively measures and determines the operational efficiency of a firm. The ability of the management to efficiently utilize the resources of the firm, their ability to maximize funding and their ability to efficiently allocate those funds are some of the ways of assessing the management efficiency (Kusa & Ongore, 2013).

Management efficiency is a qualitative measure and determinant of operational efficiency and it can be assessed by looking at the quality of the staff, the effectives and efficiency of the internal controls, the discipline within the organization and the effectiveness of the management systems (Athanasoglou, Sophocles & Matthaois, 2009). The quality of the management has an influence on the level of operating expenses which affects the bottom line of a firm hence management efficiency significantly affects the efficiency of firms (Kusa & Ongore, 2013).

2.4 Empirical Review

Studies have been conducted both locally and internationally on the relationship between earnings management and stock returns but these studies have produced mixed results.

2.4.1 Global Studies

A study by Ambrose and Bian (2010) distinct stock price in formativeness as the quantity of info concerning future wages restricted in existing stock prices, through alleged earnings administration organizations and non-earnings administration organizations. Their outcomes recommended that stock price in formativeness is not continuously dissimilar between companies that are alleged of earnings management and the non-earnings administration companies; this is in validation with the well-organized market hypothesis.

Islam et al., (2011) used Jones model to determine the earning management on listed firms in Dhaka Stock Exchange. The study found that R squared improved from 8.9 percent to 83.9% implying that earning management has a significant influence.

Hashemi and Rabiee (2011) studied the effect of corporate governance on real earnings management. Number or percentage of independent directors and board size were used as the measures of corporate governance. They found that panel magnitude and panel independences are adversely associated with unequal cash flow from setup. In addition, panel extent and independence are harmfully linked with abnormal unrestricted expenditures. However, panel scope is harmfully associated with production operational expenses while panel freedom is not meaningfully linked to manufacture operational expense.

Fazeli and Rasouli (2011) scrutinized money flow from actions, production charges, and optional expenditures organizations registered in Tehran Stock Exchange of Tehran. This study was similar to that of Roychwdhury (2006) who prepared solid situation for actual actions by administration. Both researches illustrated that businesses attempt to elude harms by appealing in production by way of subordinate the charge belongings sold, to increase revenue boundaries organizations decreases their unrestricted expenses, and additional incomes castoff by organizations is proposing value deductions to provisionally rise trades.

Fathi et al., (2011) presented that greater revenue supervision organizations draw lesser stock liquidity. Hence, corporations that achieve their salaries are more problematic to job hence merchants must supplement a superior to uphold a marketplace for the organization's stock. This gives an opening suggestion that financiers in Tehran are not misleading by incomes managements.

2.4.2 Local Studies

Oduma (2015) assumed a descriptive study to determine the effect of earnings management on stock market returns amongst NSE firms. The populace of the research contained of 66 companies quoted in the NSE. The research used a census method. The research found that firm size, earnings management and market to book value ratio affected stock return.

Garane (2017) aimed at establishing the determinants of earnings managements among retail chains in Nairobi County. The study assumed descriptive research plan. In addition, the study was cross-sectional where data was collected only once between the time frame 2012 and 2016 and a causal study executed in a non-contrived setup without interference of any researcher. The effect relationship between the study

variables was established using the numerous regression analysis. The research proven that contracting motivations and industry performance have an influence on earnings management while bonus system and regulatory requirements have a positive but insignificant influence on earnings management.

Ngunjiri (2017) applied a descriptive research design to determine the effect of revenue management of quoted companies. The sample period was from 2012 to 2016. This study used secondary data from CMA. A regression model was used in data analysis. The results are that revenue administration, organization size and market to book value ratio significantly and positively influence financial performance.

Were (2018) sought to establish the effect of corporate governance on earnings management of the quoted firms at the NSE. The population of the study was all the 64 firms quoted at the NSE as at 31st December 2017. The descriptive cross-sectional research design was used and the association between the study variables established using multiple linear regression model. The results revealed that board independence and board activity produced negative and statistically significant values for the study while firm size produced positive and statistically significant values for the study. Board size and ownership characteristics were found to be statistically insignificant determinants of earnings management of firms at the NSE listing.

Chepkwony (2018) conducted an empirical study with an aim of analyzing the link between earnings management and stock returns of financial firms listed at the NSE. A descriptive cross-sectional research design using panel data between the time frame 2013 and 2017 was utilized. Target population comprised 19 financial listed firms. Secondary data was retrieved from selected firms' financial reports using document

analysis guide. It was concluded from the study that earnings management and market to book value ratio do not have a significant effect on stock returns of listed financial firms while firm size has a significant effect on stock returns of financial listed firms at the NSE.

2.5 Conceptual Framework

The conceptual model developed below portrays this expected relationship between the study variables. The independent variable is earnings management as measured using discretionary accruals. The control variables characterized here are liquidity, capital structure and firm size. Stock returns of the listed firms at the NSE will be measured by change in stock prices in addition to stock dividend if issued.

Figure 2.1: Conceptual Model

Independent variable   **Dependent variable**

Earnings Management (discretionary accruals)	→	**Stock Returns** $$\frac{(MP_t - MP_{t-1}) + Dt}{MP_{t-1}}$$

Control Variables

- Liquidity (current ratio)
- Capital structure (debt ratio)
- Firm size (log total assets)
- Management efficiency (Revenue/operating expenses)
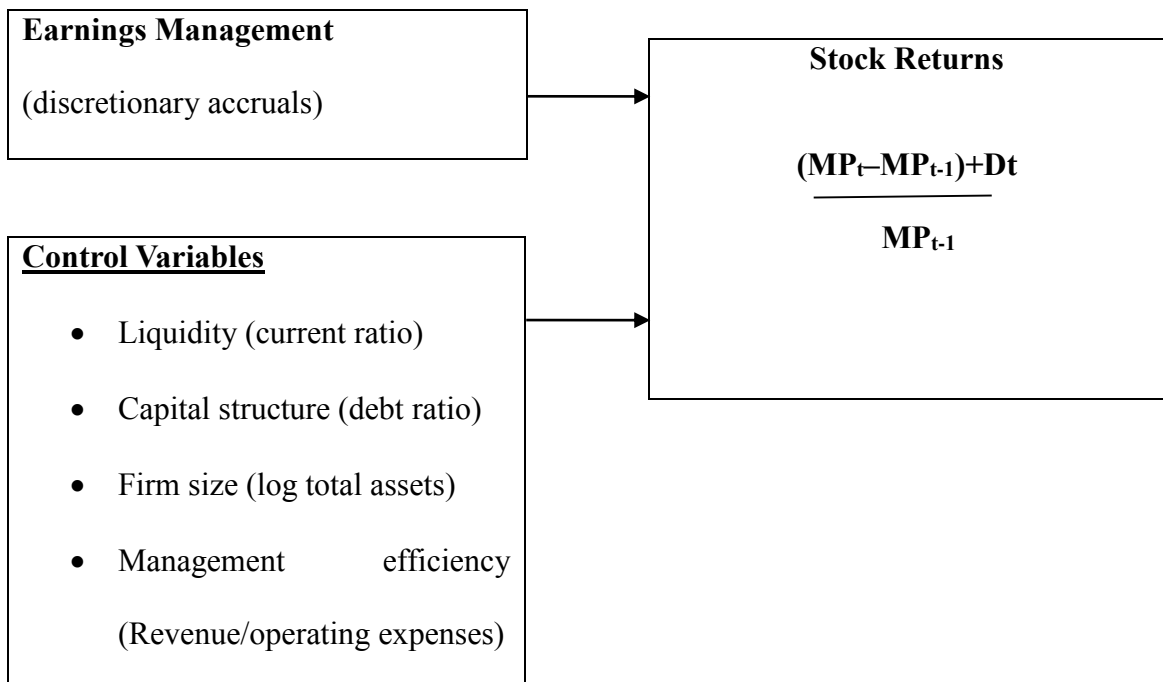
Source: Researcher (2019)

2.6 Summary of the Literature Review

This chapter has focused on the theories that form the foundation for this study. The theories discussed here are namely; agency theory, efficient market hypothesis and signaling theory. The chapter has also focused on some of the factors that are expected to determine stock returns. There have been previous studies carried out either in this area and/or related areas and their findings have been discussed under empirical review. The lack of consensus among the various scholars on the effect of earnings management on stock returns is reason enough to conduct another study. This study attempted to give an explanation to the research question; what is the effect of earnings management on stock returns of firms listed at the NSE?

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

In order to determine the effect of earnings management on stock returns, a research methodology is necessary to outline how the research was carried out. This chapter has four sections namely; research design, data collection, and diagnostic tests and data analysis.

3.2 Research Design

A descriptive research design was employed in this study to investigate the effect of earnings management on stock returns of listed firms. Descriptive design was utilized as the researcher is interested in finding out the state of affairs as they exist (Khan, 2008). This research strategy was suitable for the research as the investigator is acquainted with the spectacle under exploration but want to recognize more in terms of the nature of associations between the study sub variables. In addition, a descriptive research aims at providing a valid and accurate representation of the study variables and this helps in responding to the research question (Cooper & Schindler, 2008).

3.3 Population

Burns and Burns (2008) argues that population is the characters of interest upon which the study seeks to draw deductions. The population comprised of all the 63 firms listed at the NSE as at 31st December 2018.

3.4 Data Collection

Data was totally composed from a secondary source. The secondary information was obtained from the listed firms financial reports and from the Capital Markets

Authority as it is a requirement for the listed firms to submit their reports to the regulator. The data obtained covered 5 years on an annual basis from January 2014 to December 2018. The specific data collected was; current liabilities, long term liabilities, current assets, cash, depreciation, equity, total revenue, total operating expenses, share prices and dividends distributed.

3.5 Data Analysis

The data composed from the different sources was organized in a manner that can help address the research objective. Statistical Package for Social Sciences (SPSS) version 22 was utilized for data analysis purposes. Both descriptive and regression analyses were carried out. In inferential statistics, both regression and correlation analysis were carried out. Correlation analysis involved determining the extent of relationship between the study variables while regression analysis involved establishing the basis and result between the independent and dependent variables. A multivariate regression analysis was employed to determine the association between the dependent variable (stock returns) and independent variables: earnings management, liquidity, capital structure and firm size.

3.5.1 Diagnostic Tests

To determine the viability of the study model, the paper carried out several diagnostic tests, which included normality test, test for multicolinearity, test for homogeneity of variances and the autocorrelation test. The normality assumption assumes that the data was normally distributed and the assumption was determined using skewness, kurtosis and the Shapiro Wilk test. In the case where one of the variables is not normally distributed it was transformed and standardized using the logarithmic transformation method. The homogeneity of variance assumption was assessed using the Breusch-

Pagan / Cook-Weisberg test for heteroskedasticity and the plotting of residual plots. In cases where the data failed the assumption of homogeneity of variances the study used robust standard errors in the model.

Multicolinearity on the other hand refers to the correlation among the variables and was assessed using the correlation matrix and the variance inflation factors (VIF) where a VIF of more than 10 was an indication of multicolinearity. Any multicolinear variable was to be dropped from the study and a new measure selected and substituted with the variable which exhibits co-linearity. Finally, serial correlation (autocorrelation) was assessed using the Durbin Watson statistic where a value of 1.5 and 2.5 indicated the absence of autocorrelation and incase the assumption is violated the study employed robust standard errors in the model.

3.5.2 Analytical Model

Using the collected data, the researcher conducted a regression analysis to establish the extent of the relationship between earnings management and stock returns. The study applied the following regression model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

In which:

Y = Stock returns as measured by the change in stock prices as shown in the following formula $\dfrac{(\mathbf{MP_t - MP_{t-1}) + D_t}}{\mathbf{MP_{t-1}}}$ Where MP is the market price of the share

α = y intercept of the regression equation.

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = are the slope of the regression

β_0 = Constant Term

X_1 = Earnings management as measured by discretionary accruals which was

arrived at by taking the natural logarithm of change in current assets less cash and depreciation on an annual basis

X_2= Liquidity as given by current assets divided by current liabilities on an annual basis.

X_3= Capital structure given as long term debt divided by total assets on an annual basis

X_4= Firm size as given by natural logarithm of total assets on an annual basis

X_5= Management efficiency as given by the ratio of total revenue to total operating expenses on an annual basis

ε =Error term

3.5.3 Tests of Significance

The researcher carried out parametric tests to establish the statistical significance of both the overall model and individual parameters. The F-test determined the significance of the overall model and it was obtained from Analysis of Variance (ANOVA) while a t-test was used to establish statistical significance of individual variables.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This section represents study's findings established on the objectives of research. This chapter focused on analysis of collected data to determine the influence of earnings management on stock returns of firms quoted at the NSE. Using descriptive statistics, correlation analysis and regression analysis, the results of the study were presented in form of tables for easy interpretation.

4.2 Descriptive Analysis

Descriptive statistics gives a presentation of the mean, maximum and minimum values of variables applied together with their standard deviations in this study. An analysis of all the variables was obtained using SPSS software for the period of five years (2014 and 2018) on an annual basis. Stock returns had 0.0335 as mean with a 0.1159 standard deviation. Earnings management resulted to 0.1794 mean with a 0.2353 standard deviation. Liquidity, capital structure, firm size and management efficiency had means of 2.4218, 0.5088, 9.2807 and 2.2229 and standard deviations of 1.5949, 0.2607, 1.150 and 1.7990 respectively.

Table 4.1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Stock Returns	279	-.5700	.3900	.033528	.1158942
Earnings management	279	-.5320	.6700	.179441	.2353011
Liquidity	279	.3431	11.6481	2.421823	1.5948546
Capital structure	279	.0246	1.7822	.508845	.2606688
Firm size	279	6.8455	11.5766	9.280653	1.1500609
management efficiency	279	.3431	11.6481	2.222869	1.7990125
Valid N (listwise)	279				

Source: Research Findings (2019)

4.3 Diagnostic Tests

Diagnostic tests were carried out before the regression model was run. In this case, the tests conducted were Multicollinearity test, normality test, autocorrelation and Heteroscedasticity tests.

4.3.1 Multicollinearity Test

Multicollinearity can be defined as a statistical situation where two or more predictor variables in a multiple regression model are highly correlated. It is an undesirable situation where the correlations among the independent variables are strong. A set of variables is said to be perfectly Multicollinear in case there is one or more exact linear relationship among some of the variables.

Table 4.2: Multicollinearity Test for Tolerance and VIF

	Collinearity Statistics	
Variable	**Tolerance**	**VIF**
Earnings management	0.503	1.99
Management efficiency	0.609	1.428
Capital structure	0.310	1.326
Firm size	0.380	1.367
Firm Liquidity	0.706	1.417

Source: Research Findings (2019)

The researcher carried out diagnostic tests on the collected data. A test of Multicollinearity was undertaken. Tolerance of the variable and the VIF value were used where values more than 0.2 for Tolerance and values below 10 for VIF suggest that there is no Multicollinearity. From the findings, the all the variables had a tolerance values >0.2 and VIF values <10 as shown in table 4.2 suggesting that no Multicollinearity exists.

4.3.2 Normality Test

To test for normality, the researcher used the Shapiro-Wilk test and Kolmogorov-Smirnov tests. The null and alternative hypotheses are as shown below.

H0: the secondary data was not normal.

H1 the secondary data is normal

A p-value greater than 0.05, would lead the researcher to reject the null hypothesis and vice versa. The test results are summarized in table 4.3.

Table 4.3: Normality Test

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
Stock returns	Statistic	Df	Sig.	Statistic	Df	Sig.
Earnings management	.165	279	.300	.880	279	.784
Capital structure	.149	279	.300	.857	279	.853
Firm size	.156	279	.300	.906	279	.822
Firm liquidity	.172	279	.300	.869	279	.723
Management efficiency	.168	279	.300	0.876	279	.776
a. Lilliefors Significance Correction						

Source: Research Findings (2019)

The data revealed a p- value of greater than 0.05 hence the researcher rejected the null hypothesis, accepted the alternative hypothesis and concluded that the data used in the research was normally distributed. This data was therefore appropriate for use to conduct parametric tests such as Pearson's correlation, regression analysis and analysis of variance.

4.3.3 Heteroskedasticity Test

The researcher checked for panel level heteroskedasticity by use of the Likelihood Ratio (LR) as indicated in the Table 4.4 below. This test used the null hypothesis that the error variance was homoscedastic. A chi-square value of 64.51 was produced by the likelihood-ratio test with a 0.0000 p-value. The chi-square esteem was statistically significant at 1 percent level and in this manner the invalid speculation of consistent fluctuation was rejected meaning the nearness of heteroskedasticity in the examination information as suggested by Poi and Wiggins (2001). To deal with this issue the examination utilized the FGLS estimation method.

Table 4.4: Heteroskedasticity Test

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of ROA
chi2(1)   =   64.51
Prob > chi2 =   0.0000

Source: Research Findings (2019)

4.3.4 Autocorrelation Test

Correlation of error terms across time periods were checked by conducting a serial correlation test. The Durbin Watson test for serial correlation was used to test for the existence of autocorrelation in the linear panel data which is a major challenge in panel analysis of data and it has to be accounted for so as to get the correct model specification. A DW statistic of 1.878 implied there is no serial correlation as it was within the accepted limit of 1.5 to 2.5

Table 4.5: Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.495[a]	.245	.231	.1016466	1.878

a. Predictors: (Constant), management efficiency, Capital structure, Firm size, Liquidity, Earnings management
b. Dependent Variable: Stock Returns

Source: Research Findings (2019)

4.4 Correlation Analysis

Correlation analysis was used to test the relationship that exists between two variables. A negative and positive correlation coefficient indicates a negative and positive correlation respectively. Pearson correlation test was employed to evaluate the correlation between stock returns of firms quoted at the NSE and the independent variables under study.

From the results of correlation analysis, the study revealed that earnings management and management efficiency have a weak, positive and insignificant correlation with stock returns of firms listed at the NSE as evidenced by (r = .105, p = .081) and (r = .001, p = .980) respectively. The study further found out that there was a negative and statistically significant correlation (r = -.467, p = .000) between capital structure and stock returns. The study further established that a positive and insignificant correlation exists between liquidity and stock returns of quoted firms as evidenced by (r = .103, p = .087). Firm size was found to have a weak positive and insignificant association with stock returns as evidenced by (r = .102, p = .090).

Table 4.6: Correlation Analysis

		Stock Returns	EM	Liquidity	Capital structure	Firm size	management efficiency
Stock Returns	Pearson Correlation	1					
	Sig. (2-tailed)						
EM	Pearson Correlation	.105	1				
	Sig. (2-tailed)	.081					
Liquidity	Pearson Correlation	.103	.218**	1			
	Sig. (2-tailed)	.087	.000				
Capital structure	Pearson Correlation	-.467**	-.077	-.047	1		
	Sig. (2-tailed)	.000	.199	.439			
Firm size	Pearson Correlation	.102	.278**	.116	-.022	1	
	Sig. (2-tailed)	.090	.000	.053	.709		
management efficiency	Pearson Correlation	.001	-.044	.169**	-.030	.059	1
	Sig. (2-tailed)	.980	.461	.005	.615	.330	

**. Correlation is significant at the 0.01 level (2-tailed).
b. Listwise N=279

Source: Research Findings (2019)

4.5 Regression Analysis

Stock returns of companies enlisted at the NSE was regressed against five predictor variables; earnings management, management efficiency, capital structure, firm size and liquidity. The results are as shown in table 4.7. To determine the influence of selected predictor variables on stock returns of listed firms, the research employed the coefficient of determination- R- squared. The study findings indicate that the value of the R-square was 0.245 implying that the selected predictor variables explain 24.5% of changes in stock returns. The R-square column highlights the quality of prediction by the independent variables. The study revealed that the independent variables have

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a moderate relationship with the dependent variable as shown by an R value of 0.495%.

Table 4.7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.495[a]	.245	.231	.1016466	1.878
a. Predictors: (Constant), management efficiency, Capital structure, Firm size, Liquidity, Earnings management					
b. Dependent Variable: Stock Returns					

Source: Research Findings (2019)

Table 4.8 provides the outcomes of the ANOVA which reveals that the overall model was statistically significant as supported by a p value of 0.000 which is lesser than the critical p value of 0.05. This was supported by an F statistic of 17.679 which implies that the selected predictor variables are good predictors of stock returns.

Table 4.8: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	.913	5	.183	17.679	.000[b]
1	Residual	2.821	273	.010		
	Total	3.734	278			
a. Dependent Variable: Stock Returns						
b. Predictors: (Constant), management efficiency, Capital structure, Firm size, Liquidity, Earnings management						

Source: Research findings (2019)

The researcher used t-test to determine the significance of each individual variable used in this study as a predictor of stock returns of firms listed at the NSE. The p-value under sig. column was used as an indicator of the significance of the association between the dependent and the independent variables. At 95% level of confidence, a p-value of less than 0.05 was interpreted as a statistical significance measure. As such,

a p-value above 0.05 shows that a statistically insignificant association between the dependent and the independent variables. The findings are as indicated in table 4.9.

Table 4.9: Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.055	.055		1.017	.310
	Earnings management	.007	.004	.095	1.741	.083
	Liquidity	.060	.028	.123	2.183	.030
	Capital structure	-.200	.024	-.450	-8.505	.000
	Firm size	.012	.006	.115	2.087	.038
	management efficiency	.000	.003	.002	.044	.965
a. Dependent Variable: Stock Returns						

Source: Research findings (2019)

From the above results, it is evident that liquidity and firm size produced positive and statistically significant values for this study (high t-value (2.183 and 2.087), $p < 0.05$). Capital structure produced negative and statistically significant values for this study as shown by a p value greater than 5%. Earnings management and management efficiency produced positive but insignificant values for this study as shown by high p values.

The following regression equation was estimated:

$Y = 0.055 + 0.060X_1 - 0.200X_2 + 0.012X_3$

Where,

Y = Stock returns

X_1 = Liquidity

X_2 = Capital structure

X_3= Firm size

On the estimated regression model above, the constant = 0.055 shows that if selected dependent variables (earnings management, management efficiency, capital structure, firm size and liquidity) were rated zero, firms' quoted at the NSE stock returns would be 0.055. A unit increase in liquidity would result to an increase in stock returns of firms quoted at the NSE by 0.060. A unit increase in firm size would result to an increase in stock returns of companies listed at the NSE by 0.012 while a unit increase in capital structure would lead to a decrease in stock returns of companies listed at the NSE by 0.200.

4.6 Discussion of Research Findings

The researcher sought to ascertain the influence of earnings management on stock returns of firms. The independent variable is earnings management as measured using discretionary accruals. The control variables characterized here are liquidity, capital structure and firm size. Stock returns of the listed firms at the NSE were measured by change in stock prices in addition to stock dividend if issued. The influence of each predictor variable on the dependent variable was analyzed in terms of strength and direction.

The Pearson correlation showed that the correlation of earnings management against stock returns is weak and positive. The association is also insignificant as shown by a p value greater than 0.05. Capital structure has a negative correlation with stock returns. This means that higher levels of debt as compared to assets of a firm lead to a reduction in stock returns. The study further established that liquidity, firm size and management efficiency exhibit positive and insignificant correlation with stock returns of quoted firms.

Regression analysis undertaken discovered that the model would predict 24.5% of variations in returns of the firms. The other 75.5% however would be as a result of factors not in this model. The analysis showed that p value was less than the alpha value and therefore the relationship was significant. The calculated value of F was higher than F statistic making the null hypothesis to be rejected. In conclusion the findings of the study were that there is a significant effect of the selected independent variables on stock returns of listed firms at the NSE.

The findings of this study are in line with Chepkwony (2018) who conducted an empirical study with an aim of analyzing the link between earnings management and stock returns of financial firms listed at the NSE. A descriptive cross-sectional research design using panel data between the time frame 2013 and 2017 was utilized. Target population comprised 19 financial listed firms. Secondary data was retrieved from selected firms' financial reports using document analysis guide. It was concluded from the study that earnings management and market to book value ratio do not have a significant effect on stock returns of listed financial firms while firm size has a significant effect on stock returns of financial listed firms at the NSE.

This study is also in agreement with Oduma (2015) who assumed a descriptive study to determine the effect of earnings management on stock market returns amongst NSE firms. The populace of the research contained of 66 companies quoted in the NSE. The research used a census method. The research found that firm size, earnings management and market to book value ratio affected stock return.

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CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter gives a summary of the previous chapter's results, conclusion and study limitations. The section also elucidates the policy recommendations that policy makers can implement to achieve the expected stock returns of companies listed at the NSE. It finally discusses a few main limitations encountered and suggestions for future research.

5.2 Summary of Findings

The researcher was seeking to investigate the effect of earnings management on stock returns of companies enlisted at the NSE. The independent variables for the study were earnings management, capital structure, firm size, liquidity and management efficiency. The study adopted a descriptive cross-sectional research design. CMA reports were used to retrieve secondary data which were analyzed using SPSS software version 22. The study used annual data for 53 firms listed at the NSE covering a five year time frame as from January 2014 to December 2018.

From the results of correlation analysis, the Pearson correlation showed that the correlation of earnings management against stock returns is weak and positive. The association is also insignificant as shown by a p value greater than 0.05. Capital structure has a negative correlation with stock returns. This means that higher levels of debt as compared to assets of a firm lead to a reduction in stock returns. The study further established that liquidity, firm size and management efficiency exhibit positive and insignificant correlation with stock returns of quoted firms

From the regression analysis results, the findings revealed that 24.5% of changes in stock returns of entities quoted at the NSE are explained by the five selected predictor variables. This means that there are other factors not included in the model that account for 75.5% of changes in returns of entities trading at the NSE. The overall model was found to be significant as the P value was less than 0.05. This means that the selected independent variables significantly influence returns of enlisted entities at the NSE.

The regression model further revealed that individually earnings management does not have a significant influence on stock returns of quoted entities and this implies that an increase in earnings management will have a positive but not statistically significant effect on stock returns. It was also revealed that firm size and liquidity have a significant positive effect on stock returns of listed firms and this implies that an increase in assets held by a firm and current ratio will lead to an increase in stock returns. Capital structure was found to have a significant negative influence on stock returns.

5.3 Conclusion

A conclusion can be drawn that stock returns of companies listed at the NSE is significantly affected by earnings management, capital structure, firm size, and liquidity and management efficiency. Earnings management was found to have an insignificant positive effect on stock returns of listed firms and therefore this study concludes that earnings management does not significantly influence stock returns. Management efficiency was found to have a positive but insignificant effect on stock returns and therefore this study concludes that management efficiency influences stock returns positively but not in a significant manner.

Capital structure was noted to have a negative and statistically significant influence on stock returns of listed firms companies enlisted at NSE and this means an increase in leverage leads to a decrease in stock returns. The study established that liquidity had a positive and significant impact on stock returns of companies quoted at the NSE and therefore it is concluded that higher levels of liquidity leads to an increase in stock returns. Firm size was found to have a positive and statistically significant effect on stock returns of companies quoted at the NSE and therefore this study concludes that firm size does significantly influence stock returns of companies quoted at the NSE.

This study concludes that the predictor variables chosen for this study; earnings management, capital structure, firm size, management efficiency and liquidity affect to a large extent stock returns of firms quoted at the NSE. It could be therefore concluded that these variables significantly affect stock returns as depicted by the p value of ANOVA summary. Since the five independent variables explain 24.5% of changes in stock returns of companies listed at the NSE imply that the variables not included in the model explain 75.5% of changes in stock returns.

This finding concurs with Chepkwony (2018) who conducted an empirical study with an aim of analyzing the link between earnings management and stock returns of financial firms listed at the NSE. A descriptive cross-sectional research design using panel data between the time frame 2013 and 2017 was utilized. Target population comprised 19 financial listed firms. Secondary data was retrieved from selected firms' financial reports using document analysis guide. It was concluded from the study that earnings management and market to book value ratio do not have a significant effect on stock returns of listed financial firms while firm size has a significant effect on stock returns of financial listed firms at the NSE.

5.4 Recommendations

Earnings management was found to have a not significant positive influence on stock returns of listed firms. This study recommends that listed firms and all firms in general should strive to avoid earnings management as it does not improve their stock return which is the main goal of a firm. Capital structure was found to have an significant negative impact on stock returns of listed firms companies quoted at the NSE. The research therefore recommends that when firms are setting their capital structure they should strike a balance between the tax savings benefit of debt and bankruptcy costs linked with borrowing. High levels of debt has been found to reduce stock returns of listed firms from the findings of this study and so firm managers should maintain debt in levels that do not impact negatively on stock returns to ensure the goal of maximizing shareholders' wealth is attained.

The study found out that a positive relationship exists between stock returns and liquidity position. This study recommends that a comprehensive assessment of listed listed firms firm's immediate liquidity position should be undertaken to ensure the company is operating at sufficient levels of liquidity that will lead to improved stock returns of firms. This is because a firm's liquidity position is of high importance since it influences the firm's current operations.

The study established that there was a positive influence of firm size on stock returns of listed firms quoted at the NSE though not significant. This study recommends adequate measures should be put in place by managers of these firms to improve and grow their stock returns by increasing their asset base. Listed firms and all firms in general should work on increasing their assets that will lead to an increase in stock

returns because this translates to improved shareholder wealth which is the main goal of a firm.

5.5 Limitations of the Study

The study period selected for this study was 5 years that is from 2014-2018. There is no proof that similar results will remain the same for a longer time period. Additionally, it cannot be determined if the same results will hold beyond 2018. A longer period of time would prove more reliable since it will include cases of major economic changes like recessions and booms.

The most significant limitation for this study was the quality of the data. It cannot be concluded with accuracy from this study that the findings are a true representation of the situation at hand. An assumption has been made that the data used in the study is accurate. Additionally, a lot of inconsistency in the measurement of the data was experienced due to the prevailing conditions. The study utilized secondary data contrast to primary data which is first-hand information. The study also took into consideration a few of the determinants of stock returns and not all factors because of the limit imposed by data availability.

To complete the analysis of the data, multiple linear regression model was used. Because of the limitations involved when using the model like erroneous and misleading results resulting from a change in variable value, it would be impossible for the researcher to generalize the findings with accuracy. In case of an addition of data to the functional regression model, the model may not perform as per the previous.

5.6 Suggestions for Further Research

This study focused on earnings management and stock returns of firms quoted at the NSE and relied on secondary data. A research study where data collection relies on primary data i.e. in depth questionnaires and interviews covering all the firms listed at the NSE is recommended so as to compliment this research.

The study was not exhaustive of the independent variables affecting stock returns of firms quoted at the NSE and this study recommends that further studies be conducted to incorporate other variables like growth opportunities, ownership structures, industry practices, age of the firm, political stability and other macro-economic variables. Establishing the impact of each variable on stock returns of companies quoted at the NSE will enable policy makers know what tool to use when maximizing shareholder's wealth.

The study concentrated on the last five years since it was the most recent data available. Future studies may use a range of many years e.g. from 2000 to date and this can help confirm or disapprove this study's findings. The study limited itself by focusing on listed firms at the NSE. The recommendations of this study are that further studies be conducted on other listed firms operating in Kenya. Finally, due to regression models' limitations, other models such as the Vector Error Correction Model (VECM) may be applied in explanation of the various relationships among variables.

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APPENDICES

Appendix I: Firms Listed at the NSE

	COMPANY	SECTOR	YEAR OF LISTING
1	Deacons (East Africa)	Consumer Services	2016
2	Nairobi Business Ventures	Consumer Services	2016
3	Stanlib Fahari I-REIT	Financials	2015
4	Atlas African Industries	Industrials	2014
5	Flame Tree Group Holdings	Basic Materials	2014
6	Kurwitu Ventures	Financials	2014
7	Nairobi Securities Exchange	Financials	2014
8	Home Afrika	Financials	2013
9	I&M Holdings	Financials	2013
10	CIC Insurance Group	Financials	2012
11	Umeme	Utilities	2012
12	Britam (Kenya)	Financials	2011
13	TransCentury	Industrials	2011
14	Co-operative Bank of Kenya	Financials	2008
15	Safaricom	Telecommunications	2008
16	Kenya Re-Insurance Corporation	Financials	2007
17	Liberty Kenya Holdings	Financials	2007
18	Equity Group Holdings	Financials	2006
19	Eveready East Africa	Consumer Goods	2006
20	KenGen Company	Utilities	2006
21	WPP Scangroup	Consumer Services	2006
22	Mumias Sugar Co	Consumer Goods	2001
23	ARM Cement	Industrials	1997
24	TPS Eastern Africa	Consumer Services	1997
25	Kenya Airways	Consumer Services	1996
26	National Bank of Kenya	Financials	1994
27	Sameer Africa	Consumer Goods	1994
28	Longhorn Publishers	Consumer Services	1993
29	Crown Paints Kenya	Basic Materials	1992
30	HF Group	Financials	1992
31	Uchumi Supermarkets	Consumer Services	1992
32	KCB Group	Financials	1989
33	Standard Chartered Bank Kenya	Financials	1988
34	Total Kenya	Oil & Gas	1988

35	Barclays Bank of Kenya	Financials	1986
36	Jubilee Holdings	Financials	1984
37	Express Kenya	Consumer Services	1978
38	Olympia Capital Holdings	Industrials	1974
39	East African Cables	Industrials	1973
40	Nation Media Group	Consumer Services	1973
41	Carbacid Investments	Basic Materials	1972
42	Diamond Trust Bank Kenya	Financials	1972
43	Eaagads	Consumer Goods	1972
44	East African Breweries	Consumer Goods	1972
45	East African Portland Cement	Industrials	1972
46	Kapchorua Tea Kenya	Consumer Goods	1972
47	Kenya Power & Lighting	Utilities	1972
48	Williamson Tea Kenya	Consumer Goods	1972
49	NIC Group	Financials	1971
50	Unga Group	Consumer Goods	1971
51	Bamburi Cement	Industrials	1970
52	Stanbic Holdings	Financials	1970
53	B O C Kenya	Basic Materials	1969
54	BAT Kenya	Consumer Goods	1969
55	Centum Investment	Financials	1967
56	Limuru Tea	Consumer Goods	1967
57	Sasini	Consumer Goods	1965
58	Sanlam Kenya	Financials	1963
59	KenolKobil	Oil & Gas	1959
60	Kenya Orchards	Consumer Goods	1959
61	Standard Group	Consumer Services	1954
62	Kakuzi	Consumer Goods	1951
63	Car & General (K)	Consumer Services	1940

Source: Nairobi Securities Exchange (2019)

Appendix II: Research Data

COMPANY	Year	Stock Returns	Earnings management	Liquidity	Capital structure	Firm size	management efficiency
Athi river mining	2018	-0.1600	0.2690	3.9703	0.5125	10.6304	1.7659
	2017	-0.0600	0.2190	3.9512	0.4556	10.7081	2.9085
	2016	0.1500	0.1260	3.9318	0.6756	10.7155	5.9581
	2015	0.0400	0.1230	3.9120	0.7448	10.5672	11.6481
	2014	0.0500	0.0707	3.8918	0.7232	10.4728	7.5035
Bamburi	2018	0.1400	0.3300	3.9120	0.2742	10.6604	2.1231
	2017	0.1500	0.4100	3.8918	0.3254	10.5285	3.2366
	2016	0.1200	0.3900	3.8712	0.2887	10.6222	1.0823
	2015	0.0900	0.3100	3.8501	0.2953	10.6033	2.2792
	2014	0.1100	0.3900	3.8286	0.2754	10.6336	1.3029
Car & General	2018	0.0100	0.4980	4.3944	0.6428	9.9731	1.5945
	2017	0.0200	0.3890	4.3820	0.6662	9.9870	1.4376
	2016	0.0200	0.3870	4.3694	0.6639	9.9537	1.0129
	2015	0.0400	0.3600	4.3567	0.6526	9.9113	0.9113
	2014	0.0600	0.2840	4.3438	0.6372	9.8389	2.3548
Carbacid	2018	0.1300	0.1100	3.1781	0.1158	9.5194	3.0471
	2017	0.1200	0.1500	3.1355	0.1323	9.4888	3.0008
	2016	0.1300	0.0250	3.0910	0.1656	9.4726	2.8067
	2015	0.1700	-0.1600	3.0445	0.1472	9.4037	2.9726
	2014	0.2200	0.0017	2.9957	0.1270	9.3433	2.8340
Crown Berger	2018	0.0400	0.4100	2.0794	0.7007	9.7688	3.2485
	2017	0.0500	0.3900	1.9459	0.6912	9.7041	6.2517
	2016	0.0100	0.3100	1.7918	0.7020	9.6570	2.0761
	2015	0.0100	0.3900	1.6094	0.6503	9.5858	2.0507
	2014	0.0700	0.4980	1.3863	0.5377	9.4691	2.6737
East Africa Cables	2018	-0.1000	0.2110	3.5835	0.7331	9.8475	1.9401
	2017	-0.0800	0.2500	3.5553	0.6613	9.8779	1.0225
	2016	0.0200	0.2520	3.5264	0.5954	9.9235	0.7213
	2015	0.3900	0.0300	3.4965	0.6081	9.8970	0.6988
	2014	0.0600	0.1510	3.4657	0.5497	9.8331	0.8031
E.A Portland	2018	-0.0400	0.6140	3.9703	0.3826	10.4371	1.0523
	2017	0.1500	0.4260	3.9512	0.3554	10.4447	2.3571
	2016	0.3100	0.3240	3.9318	0.4025	10.3638	2.2968
	2015	-0.0200	0.4060	3.9120	0.5734	10.1964	2.6813
	2014	0.1100	0.3590	3.8918	0.5605	10.2077	2.3480

COMPANY	Year	Stock Returns	Earnings management	Liquidity	Capital structure	Firm size	management efficiency
Eveready	2018	0.3500	0.2870	3.9120	0.2890	8.8880	2.6204
	2017	-0.1800	0.3090	3.8918	0.5506	9.0346	1.3164
	2016	0.3900	0.2510	3.8712	0.4309	9.1795	1.1960
	2015	-0.1900	0.2470	3.8501	0.7651	8.9685	1.1739
	2014	0.0500	0.3220	3.8286	0.5803	8.9734	1.2056
Kakuzi	2018	0.1000	0.0840	4.3944	0.2478	9.7594	1.2276
	2017	0.1100	-0.0630	4.3820	0.2405	9.7045	1.0562
	2016	0.1200	-0.1770	4.3694	0.3577	9.4807	1.0962
	2015	0.0400	0.0300	4.3567	0.2284	9.5863	1.1120
	2014	0.0500	-0.1510	4.3438	0.2211	9.5703	1.1601
Kengen	2018	0.0200	0.2510	3.1781	0.5144	11.5766	1.1233
	2017	0.0200	0.2470	3.1355	0.5296	11.5650	4.5106
	2016	0.1900	0.3220	3.0910	0.5866	11.5347	6.2963
	2015	0.0200	0.0840	3.0445	0.6934	11.3983	10.0893
	2014	0.0300	0.0940	2.9957	0.6071	11.2757	4.2579
Kenolkobil	2018	0.0900	0.1900	2.0794	0.5346	10.3820	8.8431
	2017	0.0900	0.3300	1.9459	0.5924	10.3838	1.1065
	2016	0.1000	0.3400	1.7918	0.5076	10.2400	1.1464
	2015	0.0400	0.2700	1.6094	0.6935	10.3787	1.3815
	2014	0.0200	0.0440	1.3863	0.7629	10.4490	1.5359
KPLC	2018	0.0200	0.4980	2.3571	0.7952	11.5336	1.4639
	2017	0.0200	0.3890	2.2968	0.7848	11.4735	1.2832
	2016	0.0300	0.3870	2.6813	0.6970	11.4401	1.1679
	2015	0.0400	0.3600	2.3480	0.6677	11.3442	1.3048
	2014	0.0300	0.2840	2.6204	0.6829	11.2484	1.1971
KQ	2018	-0.0600	0.3300	1.3164	1.3073	11.1648	1.1606
	2017	-0.1900	0.4100	1.1960	1.2291	11.1922	1.5853
	2016	-0.1900	0.3900	1.1739	1.0328	11.2602	0.9464
	2015	-0.0200	0.3100	1.2056	0.8101	11.1722	1.0851
	2014	-0.0400	0.3900	1.2276	0.7456	11.0888	1.0237
Safaricom	2018	0.3000	-0.3580	1.0562	0.1556	11.2087	1.4691
	2017	0.2400	-0.2570	1.0962	0.1738	11.2019	0.9836
	2016	0.2000	-0.0773	1.1120	0.3356	11.1958	1.3339
	2015	0.1700	0.0184	1.1601	0.3222	11.1290	1.5404
	2014	0.1400	-0.4070	1.1233	0.3771	11.1101	1.2591
Sameer	2018	0.0000	-0.3570	4.5106	0.3930	9.4727	1.1154
	2017	-0.2000	0.0375	6.2963	0.4443	9.5173	4.1442
	2016	-0.0100	-0.2030	10.0893	0.3845	9.5742	6.6570
	2015	-0.0200	-0.3130	4.2579	0.3275	9.5863	7.9538

COMPANY	Year	Stock Returns	Earnings management	Liquidity	Capital structure	Firm size	management efficiency
	2014	0.1200	-0.5320	8.8431	0.2696	9.5645	8.4745
Sasini	2018	0.0200	0.1900	1.1065	0.1425	10.1204	3.3451
	2017	0.0300	0.3300	1.1464	0.1037	10.2258	0.9506
	2016	0.1300	0.3400	1.3815	0.0904	10.2053	1.0966
	2015	0.3800	0.2700	1.5359	0.1881	10.1740	1.4218
	2014	0.0100	0.0440	1.4639	0.2950	9.9569	1.4858
Standard Group	2018	-0.0500	0.1800	1.2832	0.5820	9.6493	1.7358
	2017	0.0500	0.1500	1.1679	0.5287	9.6439	1.2374
	2016	-0.0700	0.1800	1.3048	0.5689	9.6390	0.9502
	2015	0.0500	0.1500	1.1971	0.4618	9.6129	0.9346
	2014	0.0500	0.1500	1.1606	0.5065	9.6194	0.9684
Total Kenya	2018	0.0700	0.2400	1.5853	0.4366	10.5799	1.2242
	2017	0.0600	0.1200	0.9464	0.4653	10.5585	1.6434
	2016	0.0500	0.0380	1.0851	0.4858	10.5343	1.0320
	2015	0.0400	-0.0081	1.0237	0.4953	10.5124	0.9226
	2014	0.0300	-0.0380	1.4691	0.6154	10.6019	0.8973
TransCentury	2018	-0.2100	0.4000	0.9836	1.0060	10.2728	1.1574
	2017	-0.0500	0.4200	1.3339	0.7975	10.2767	0.5021
	2016	-0.0500	0.2300	1.5404	0.9662	10.2767	0.4648
	2015	-0.0800	0.4100	1.2591	0.3658	10.3388	0.5627
	2014	0.0300	0.4100	1.1154	0.4455	10.3773	1.4005
Uchumi	2018	-0.3900	0.1800	4.1442	1.7822	9.6362	1.0634
	2017	-0.5700	0.1500	6.6570	1.4193	9.6992	0.6245
	2016	-0.5300	0.1800	7.9538	0.8674	9.8071	0.7402
	2015	0.0800	0.1500	8.4745	0.5202	9.8379	0.6930
	2014	0.0600	0.1500	3.3451	0.4751	9.7461	0.5634
Unga Group	2018	0.0000	0.1600	0.9506	0.4664	10.0115	0.6361
	2017	0.0600	0.1900	1.0966	0.3808	9.9638	2.2050
	2016	0.0700	0.1900	1.4218	0.3826	9.9381	2.5238
	2015	0.0600	0.1600	1.4858	0.3937	9.9045	3.3740
	2014	0.0400	0.1600	1.7358	0.4708	9.9089	2.8332
Nation Media	2018	0.1200	0.4490	1.2374	0.2786	10.0539	3.0200
	2017	0.1300	0.4460	0.9502	0.2851	10.0854	4.4016
	2016	0.1600	0.4710	0.9346	0.2948	10.1037	2.3280
	2015	0.2000	0.2780	0.9684	0.2659	10.0772	1.7710
	2014	0.2300	0.3740	1.2242	0.2797	10.0586	1.8952
BOC Kenya	2018	0.0200	0.2650	1.6434	0.2771	9.3480	2.1309

COMPANY	Year	Stock Returns	Earnings management	Liquidity	Capital structure	Firm size	management efficiency
	2017	0.0600	0.1710	1.0320	0.2403	9.3471	0.9554
	2016	0.0600	0.1260	0.9226	0.2615	9.3657	1.2192
	2015	0.1000	0.1620	0.8973	0.2405	9.3618	1.1561
	2014	0.0800	0.1050	1.1574	0.2165	9.4205	1.1158
EABL	2018	0.1200	0.4490	0.5021	0.8202	10.8239	1.0780
	2017	0.1600	0.4460	0.4648	0.8878	10.7906	1.5236
	2016	0.1400	0.4710	0.5627	0.8005	10.8257	1.4882
	2015	0.1100	0.2780	1.4005	0.8552	10.7984	1.2774
	2014	0.1100	0.3740	1.0634	0.8684	10.7613	1.2997
Eaagads Ltd	2018	0.1700	0.4170	0.6245	0.0783	8.9651	1.1003
	2017	0.0500	0.4140	0.7402	0.0910	8.8815	0.6298
	2016	0.0100	0.4270	0.6930	0.1478	8.6334	1.5950
	2015	-0.0900	0.3860	0.5634	0.1914	8.6491	1.4871
Williamson Tea	2018	0.1000	0.3640	0.6361	0.2388	9.9780	1.2846
	2017	-0.0300	0.1100	2.2050	0.2651	9.9224	1.4099
	2016	0.0500	0.1400	2.5238	0.2212	9.9509	0.3431
	2015	0.0100	0.0740	3.3740	0.2289	9.9324	0.6717
	2014	0.0900	-0.0960	2.8332	0.2535	9.9314	2.9726
Kapchorua Tea	2018	-0.0300	0.0120	3.0200	0.3028	9.3076	2.8340
	2017	0.0500	0.3780	4.4016	0.2939	9.3313	3.2485
	2016	-0.0100	0.3960	2.3280	0.2801	9.2974	6.2517
	2015	0.0700	0.4540	1.7710	0.2843	9.2854	2.0761
	2014	0.0900	0.3910	1.8952	0.3822	9.3177	2.0507
Limuru Tea	2018	-0.0700	0.4070	2.1309	0.2833	8.4183	2.6737
	2017	-0.0800	0.4000	0.9554	0.2710	8.4505	2.8280
	2016	0.0100	0.4200	1.2192	0.2674	8.4966	2.9102
	2015	0.0000	0.2300	1.1561	0.2358	8.5297	3.4630
	2014	0.0800	0.4100	1.1158	0.2410	8.5353	3.6012
Express	2018	-0.0700	0.4100	1.0780	1.1388	8.5741	4.3590
	2017	-0.2500	0.4490	1.5236	0.9389	8.5793	1.7659
	2016	-0.1400	0.4460	1.4882	0.7282	8.6453	2.9085
	2015	-0.1600	0.4710	1.2774	0.6733	8.6794	5.9581
	2014	0.0000	0.2780	1.2997	0.5869	8.6817	11.6481
TPS	2018	0.0100	0.3740	1.1003	0.4759	10.2427	7.5035
	2017	0.0000	0.5600	0.6298	0.4368	10.2300	2.1231
	2016	-0.0300	0.5600	1.5950	0.3876	10.1991	3.2366
	2015	0.0100	0.6700	1.4871	0.3467	10.2025	1.0823
	2014	0.0300	0.5200	1.2846	0.3458	10.2078	2.2792

COMPANY	Year	Stock Returns	Earnings management	Liquidity	Capital structure	Firm size	management efficiency
Scan Group	2018	0.0400	0.4200	1.4099	0.3484	10.1386	1.3029
	2017	0.0300	0.4000	0.3431	0.3469	10.1299	1.5945
	2016	0.0200	0.4200	0.6717	0.3099	10.0958	1.4376
	2015	0.0400	0.3300	0.7048	0.3569	10.1233	1.0129
	2014	0.0600	0.3400	1.0983	0.3686	10.1053	0.9113
Business Venture	2018	-0.2300	0.3800	1.0861	0.6834	8.1575	2.3548
	2017	0.0300	0.2330	2.3685	0.6793	8.1915	3.0471
	2016	0.0300	0.2900	2.2713	0.5936	8.0483	3.0008
	2015	0.1000	0.3200	1.8378	0.7626	7.9003	2.8067
	2014	0.0300	0.2540	2.3583	0.7537	7.6541	2.9726
Home Africa	2018	-0.0400	0.2190	2.5221	1.0875	9.6511	2.8340
	2017	-0.0400	0.2100	1.3097	1.0535	9.5944	3.2485
	2016	-0.1000	0.3200	1.1747	1.0108	9.5868	6.2517
	2015	0.0000	0.3500	1.1699	0.9063	9.5704	2.0761
	2014	0.0300	0.2100	1.1666	0.8892	9.4864	2.0507
Kurwitu	2018	-0.0800	0.0140	1.1380	0.5301	8.1475	2.6737
	2017	-0.0300	0.1520	0.4479	0.5264	8.7080	2.2713
	2016	0.0000	0.1240	1.0423	0.5370	8.7810	1.8378
	2015	0.0000	0.1600	1.0590	0.4524	8.7119	2.3583
	2014	-0.1100	0.1510	1.1121	0.4029	8.1094	2.5221
NSE	2018	0.1000	0.1070	1.1251	0.0457	9.3239	1.3097
	2017	0.0900	0.1680	1.0611	0.0748	9.3040	1.1747
	2016	0.1600	0.2120	1.1587	0.0748	9.2829	1.1699
	2015	0.1900	0.0968	1.1441	0.0843	9.2266	1.1666
	2014	0.2300	0.0525	1.1447	0.3640	9.0604	1.1380
BAT	2018	0.1900	0.0366	1.0939	0.5597	10.2506	0.4479
	2017	0.2600	0.1520	1.0332	0.5245	10.2672	1.0423
	2016	0.2700	0.1240	1.2705	0.5261	10.2714	1.0590
	2015	0.2300	0.1600	1.2776	0.5548	10.2613	1.1121
	2014	0.2200	0.1510	1.1715	0.0246	10.2301	1.1251
MUMIAS	2018	-0.2800	0.1070	1.1658	0.9686	10.3819	1.0611
	2017	0.0600	0.4000	1.5582	0.7179	10.4282	1.1587
	2016	-0.2300	0.4200	1.5334	0.7097	10.3103	1.1441
	2015	-0.1200	0.2300	1.6234	0.6361	10.3722	1.1447
	2014	-0.0500	0.4100	1.6385	0.5670	10.4359	1.0939
Longhorn Publishers Limited	2018	0.0600	0.4100	1.6048	0.4912	9.2692	1.0332
	2017	0.0500	0.1100	1.5050	0.4925	9.2711	1.2705

COMPANY	Year	Stock Returns	Earnings management	Liquidity	Capital structure	Firm size	management efficiency
	2016	0.0900	0.1500	1.2653	0.4482	8.8384	1.2776
	2015	0.1300	0.0250	1.2875	0.4229	8.8765	1.1715
	2014	0.1700	-0.1600	1.2781	0.4367	8.8357	1.1658
Deacons (East Africa) PLC	2018	-0.5400	0.0017	1.2225	0.7875	9.1911	1.5582
	2017	-0.1200	0.3300	1.0468	0.4861	9.3583	1.5334
	2016	0.0400	0.4100	1.1691	0.3917	9.3955	1.6234
	2015	0.0300	0.3900	1.1254	0.2804	9.2927	1.6385
	2014	-0.0400	0.3100	1.0996	0.5297	8.7413	1.6048
Barclays	2018	0.0498	0.3900	1.0417	0.4680	8.2674	1.5050
	2017	0.0389	-0.3580	1.2396	0.4500	8.3160	1.2653
	2016	0.0387	-0.2570	2.2624	0.4420	8.3543	1.2875
	2015	0.0360	-0.0773	2.9326	0.3410	8.3823	1.2781
	2014	0.0284	0.0184	3.5336	0.2830	8.4142	1.2225
Diamond Trust Bank	2018	0.0498	-0.4070	2.5000	0.4000	8.2674	1.0468
	2017	0.0389	-0.3570	3.1447	0.3180	8.3160	1.1691
	2016	0.0387	0.0375	2.5063	0.3990	8.3543	1.1254
	2015	0.0360	-0.2030	2.5000	0.4000	8.3823	1.0996
	2014	0.0284	-0.3130	2.9851	0.3350	8.4142	1.0417
Standard Chartered Bank Kenya Ltd	2018	0.0449	-0.5320	3.0675	0.3260	8.2908	1.2396
	2017	0.0446	0.1900	2.9586	0.3380	8.3432	1.1984
	2016	0.0471	0.3300	2.6596	0.3760	8.3473	1.1591
	2015	0.0278	0.3400	2.9674	0.3370	8.3692	1.1483
	2014	0.0374	0.2700	2.1739	0.4600	8.3988	1.0814
NIC Bank	2018	0.0417	0.0440	1.4728	0.6790	8.0348	2.0954
	2017	0.0414	0.1800	2.4155	0.4140	8.0830	2.3650
	2016	0.0427	0.1500	1.3569	0.7370	8.1637	2.5203
	2015	0.0386	0.1800	1.8315	0.5460	8.2195	2.2533
	2014	0.0364	0.1500	2.5641	0.3900	8.2291	2.3134
National Bank	2018	0.0110	0.1500	2.9412	0.3400	7.8271	2.9412
	2017	0.0140	0.2400	2.2727	0.4400	7.9661	2.2727
	2016	0.0074	0.1200	2.3810	0.4200	8.0894	2.3810
	2015	-0.0096	0.0380	2.6316	0.3800	8.0964	2.6316
	2014	0.0012	-0.0081	4.3478	0.2300	8.0611	4.3478
KCB Bank	2018	0.0378	-0.0380	4.9505	0.2020	8.4839	4.9505

COMPANY	Year	Stock Returns	Earnings management	Liquidity	Capital structure	Firm size	management efficiency
	2017	0.0396	0.4000	2.7174	0.3680	8.5088	2.7174
	2016	0.0454	0.4200	3.0211	0.3310	8.5763	3.0211
	2015	0.0391	0.2300	3.2468	0.3080	8.6700	3.2468
	2014	0.0407	0.4100	3.5714	0.2800	8.7031	3.5714
I&M Bank	2018	0.0400	0.4100	4.7393	0.2110	7.2905	4.7393
	2017	0.0420	0.1520	2.1739	0.4600	8.0426	2.1739
	2016	0.0230	0.1240	2.9412	0.3400	8.1377	2.9412
	2015	0.0410	0.1600	3.2895	0.3040	8.1698	3.2895
	2014	0.0410	0.1510	3.4364	0.2910	8.2152	3.4364
HFCK	2018	0.0189	0.1070	2.9674	0.3370	7.6094	2.9674
	2017	0.0185	0.3900	2.6596	0.3760	7.6698	2.6596
	2016	0.0162	-0.3580	1.4728	0.6790	7.7817	1.4728
	2015	0.0212	-0.2570	2.4155	0.4140	7.0011	2.4155
	2014	0.0113	-0.0773	1.3569	0.7370	7.0000	1.3569
Equity Bank	2018	0.0560	0.0184	1.8315	0.5460	8.3341	1.8315
	2017	0.0560	-0.4070	2.5641	0.3900	8.3769	2.5641
	2016	0.0670	-0.3570	2.9412	0.3400	8.4411	2.9412
	2015	0.0520	0.0375	2.2727	0.4400	8.5332	2.2727
	2014	0.0420	-0.2030	1.6556	0.6040	8.5795	1.6556
Co-operative Bank	2018	0.0400	-0.3130	2.0833	0.4800	8.3003	2.0833
	2017	0.0420	-0.5320	2.5000	0.4000	8.3596	2.5000
	2016	0.0330	0.1900	2.9412	0.3400	8.4513	2.9412
	2015	0.0340	0.3300	4.1667	0.2400	8.5309	4.1667
	2014	0.0380	0.3400	4.3478	0.2300	8.5441	4.3478
CFC Stanbic	2018	0.0233	0.2700	4.9505	0.2020	7.6698	4.9505
	2017	0.0290	0.0440	2.7174	0.3680	7.7817	2.7174
	2016	0.0320	0.1800	3.0211	0.3310	8.2339	3.0211
	2015	0.0254	0.1500	3.2468	0.3080	8.2979	3.2468
	2014	0.0219	0.1800	3.5714	0.2800	8.3115	3.5714
Jubilee	2018	0.0212	0.1500	1.7659	0.7143	6.8455	1.1971
	2017	0.0097	0.1500	2.9085	0.8333	6.8953	1.1606
	2016	0.0330	0.2400	5.9581	0.8750	7.7397	1.5853
	2015	0.0340	0.1200	11.6481	0.8750	7.8129	0.9464
	2014	0.0290	0.0380	7.5035	0.8750	7.8152	1.0851
Pan Africa	2018	0.0265	-0.0081	2.1231	0.8750	6.9446	1.0237
	2017	0.0171	-0.0380	3.2366	0.7143	6.9849	1.4691
	2016	0.0126	0.4000	1.0823	0.7143	7.0103	0.9836

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COMPANY	Year	Stock Returns	Earnings management	Liquidity	Capital structure	Firm size	management efficiency
	2015	0.0162	0.4200	2.2792	0.7143	7.0192	1.3339
	2014	0.0105	0.2300	1.3029	0.7500	7.0159	1.5404
Kenya Re	2018	0.0546	0.4100	1.5945	0.8750	7.0138	1.2591
	2017	0.0489	0.4100	1.4376	0.7778	7.1349	1.1154
	2016	0.0411	0.1520	1.0129	0.7778	7.2366	4.1442
	2015	0.0493	0.3900	0.9113	0.7778	7.3015	6.6570
	2014	0.0375	-0.3580	2.3548	0.7500	7.3503	7.9538
Liberty	2018	0.0269	-0.2570	3.0471	0.7500	7.2804	8.4745
	2017	0.0219	-0.0773	3.0008	0.7500	7.2931	3.3451
	2016	0.0126	0.0184	2.8067	0.8889	7.3312	0.9506
	2015	0.0123	-0.4070	2.9726	0.7778	7.3436	1.0966
	2014	0.0071	-0.3570	2.8340	0.7500	7.3507	1.4218
Britam	2018	0.0330	0.0375	3.2485	0.9091	7.6641	1.4858
	2017	0.0410	-0.2030	6.2517	0.9091	7.7162	1.7358
	2016	0.0390	-0.3130	2.0761	0.8889	7.7920	1.2374
	2015	0.0310	-0.5320	2.0507	0.8750	7.8336	0.9502
	2014	0.0390	0.1900	2.6737	0.8750	7.9186	0.9346
CIC	2018	0.0498	0.3300	2.8280	0.8750	8.2674	0.9684
	2017	0.0389	0.3400	2.9102	0.8750	8.3160	1.2242
	2016	0.0387	0.2700	3.4630	0.4000	8.3543	1.6434
	2015	0.0360	0.0440	3.6012	0.5000	8.3823	1.0320
	2014	0.0284	0.1800	4.3590	0.5714	8.4142	0.9226