

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

**JOLENE CHEPKIRUI CHEPKWONY**

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## DECLARATION

This Research Project is my original work and has not been presented in any other University.

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

**Jolene Chepkirui Chepkwony**

**D63/87769/2016**

This Research Project has been submitted for examination with my approval as University Supervisor.

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

**Supervisor: Dr. Cyrus Iraya**

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## **LIST OF ABBREVIATIONS**

<b>ANOVA-</b>	Analysis of Variance
<b>CAPM-</b>	Capital Asset Pricing Model
<b>CMA-</b>	Capital Markets Authority
<b>EMH-</b>	Efficient Markets Hypothesis
<b>GAAP-</b>	Generally Accepted Accounting Principles
<b>IAS-</b>	International Accounting Standard
<b>ISE-</b>	Indonesia Stock Exchange
<b>MBV-</b>	Market to Book Value
<b>NSE-</b>	Nairobi Securities Exchange
<b>NYSE-</b>	New York Stock Exchange
<b>PSE-</b>	Philippine Stock Exchange
<b>ROI-</b>	Return on Investment
<b>SPSS-</b>	Statistical Package for Social Sciences
<b>TSE-</b>	Tunis Stock Exchange
<b>USA</b>	United States of America



## ABSTRACT

This research studied the effect of earnings management on the stock returns of financial firms listed at the NSE, with the objective of investigating the effect of earnings management on stock returns for listed financial firms over the period 2013 to 2017. A descriptive research design was employed in the study. The population of the study consisted of 19 out of 23 financial firms that were listed at the NSE as at 31st December 2017, whereby the four financial companies excluded from the study had incomplete financial statements. The yearly stock returns and necessary information from financial statements for the 19 listed firms in the financial sector were gathered and data was analyzed statistically using SPSS (version 25) to determine the effect that earnings management has on stock returns for these firms. Market to book value ratio and firm size were the controlling variables in the study. The research established that earnings management and market to book value ratio have no significant effect on stock returns while firm size has a negative significant effect on stock returns. The results showed that the intercept was 3.742 for all years. The coefficient for earnings management was found to be 0.045 ( $p > 0.05$ ), meaning that earnings management had no significant effect on Stock returns among financial companies listed at the Nairobi Securities Exchange in Kenya. The coefficient for firm size was discovered to be -0.167 ( $p < 0.05$ ), meaning that firm size had a negative significant influence on the stock returns among financial companies listed at Nairobi Securities Exchange. The study concluded that the coefficient for market to book value ratio was -0.035 ( $p > 0.05$ ), meaning that market to book value ratio had no significant influence on the stock returns among listed financial companies at the Nairobi Securities.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background to the Study

The relationship between earnings management and stock returns has been a popular subject of research internationally for very many years. Ball and Brown (1968) were the first to document the relationship between stock returns and accounting earnings, and since then, many accounting literatures attempting to accommodate the incentives of the earnings and returns relations, as well as the ability of forecasting future earnings from stock movements have been published. Earnings management is the intentional manipulation of financial statements to look better than they should really look. This strategy is used by the management of a firm to purposely alter the earnings of the company so that the numbers meet a particular goal (Dechow et al.,1995). Stock returns, on the other hand, according to Easterling (2011) are the returns, in form of profits or dividends that investors gain from trading in an efficient stock market. They are mostly generated through trading in the secondary market and are subject to market risks.

The Efficient Markets Hypothesis suggests no significant connection between stock returns and earnings management, since accounting modifications that do not affect cash flows in any way, cannot provide the market with any information, thus not able to influence stock prices since it does not affect the predictions and expectations of investors (Sayari et al., 2013). The Signaling Theory shows a positive association between earnings management and stock returns as the information content of non-discretionary results and cash flow is inferior to the information content of earnings (Subramanyam, 1996). The Income Smoothing Hypothesis indicates that the income smoothing behavior and stock returns in the long-run have a significant negative

relationship and a significant relationship between earnings management and long-run returns to avoid losses.

Sayari, Mraih, Finet and Abdelwahed (2013) found that earnings management for large Tunisian companies gives room for increasing positive stock returns whereas for small, reducing negative stock returns that are abnormal. Cruz and Aeson (2015) discovered that earnings management does not affect short-term stock returns significantly. Nuryaman (2013) established that earnings management influences stock returns negatively. According to Oduma (2015), market to book value ratio, earnings management and firm size affect stock returns positively. So far, no research has been done in Kenya on earnings management and stock returns, based on listed companies in individual sectors. The study was set to cover the financial companies listed at the NSE.

### **1.1.1 Earnings Management**

The deliberate alteration of financial information, either to acquire contractual benefits which are largely dependent on accounting figures, or to misguide and misinform investors about the current and real economic status of a firm is known as earnings management (Healy & Wahlen, 1999; Watts & Zimmerman, 1986). It is a very crucial matter to shareholders, investors and managers. According to Makar (2000), earnings management occurs when companies look for ways of best reporting desired results instead of looking for ways to report actual results that have an economic reality. It is often considered materially misleading and includes selecting GAAP with concerns for appearance rather than reality. Julio and Yook (2016) argue that although earnings management is usually associated with fraud and poor corporate governance practices, it can be used by managers to portray remarkable earnings prospects to current and potential investors.

The most crucial instruments of earnings management are accruals and are used by managers to either drop or raise reported income, as they are “components of earnings that are not reflected in current cash flows, and a great deal of managerial discretion goes into their construction” (Bergstresser & Philippon, 2006). According to Mills (1990), the amount of discretion in accruals, provides a measure of earnings management, since accrual-based accounting presents a greater extent of discretion, to managers, in figuring out the earnings of companies with discretionary accruals being the largest and most important accruals for companies (Francis & Dechow, 2008). This is because of the opportunity that it provides to managers, of manipulating earnings (Dechow et al., 1995). Current research methodologies, according to Dechow and Skinner (2000), have not been very successful at identifying the managers that practice earnings management. There have been complex and numerous measurement problems encountered while trying to detect earnings manipulation (Courteau et al., 2011; Dechow et al., 1995; Collins & Hribar, 2002).

### **1.1.2 Stock Returns**

Gartner (1995) defined returns as the loss or gain in the value of a security over a specified period. It is quoted as a percentage and may be in the form of profits, capital gains or dividends (Strong, 1992). Stock returns are futuristic and predictive. They provide information about discount rates and future cash flows hence they can be used to measure a company's output and investment levels. They serve as indicators to users of financial statements information, examples being governments, shareholders etc. and are used to measure a company's level of output and investment (Wang, 2012). An increase or a decrease in stock prices creates uncertainties to the investors and in turn affects the demand and supply of stocks (Taofik & Omosola, 2013).

A company's financial performance is measured using stock returns. The higher the stock returns, the higher the profitability of companies which means overall economic growth and the lower the stock returns and vice versa (Aliyu, 2011). Return uncertainties in stock markets is therefore a very vital aspect of economic growth because unstable economic trends in a country, makes savings, consumption and investment difficult (Erdugan, 2012). Trading in a secondary market, by buying at low prices and selling at high prices, is the best way of generating positive stock returns (Ondiala, 2014). CAPM explains the relationship between stock returns and systematic risk, using the beta coefficient, but over time, it has faced serious criticism for failing to explain stock returns (Sharpe, 1964). According to the arbitrage pricing model, beta is not the sole coefficient that has the ability to explain stock returns (Ross, 1976). Fama and French (1992) came up with a three- factor return model which explains returns by beta coefficient, market to book ratio and size of the firm.

### **1.1.3 Earnings Management and Stock Returns**

Stock prices tend to fluctuate due to the agreement where a buyer agrees to purchase a particular good or service, and a seller agrees to sell it. Constantly fluctuating stock prices cause investors to decide whether or not to invest. These investment decisions are majorly influenced by the earnings information in published financial reports. Therefore, the earnings information of a company that engages in earnings management, may lead to wrong investment decisions by investors (Nuryaman, 2013).

Managers' incentives to misinform and mislead the company's investors may be heightened by increased stock sales by managers. Although these motives continue being high, it is unlikely for the investors to be forever tricked because, a rise in stock prices, achieved by means of a report on earnings increased through a manipulation of

the firm's accruals, means that consecutive periods' earnings must be less by an equal value. In other words, earnings management ought to change with time (Huddart & Henock, 2007). The stock market will know a firm is overvalued if its stock price is inflated, because if stock is overvalued, it will not be possible for the company to produce the financial performance required by the market, to prove the value (Jensen, 2004).

Theories explaining the relationship between earnings management and stock returns include Efficient Markets Hypothesis which argues that there is no relationship between the two variables, Signaling Theory suggests a positive connection between these two variables and Income Smoothing Hypothesis shows the existence of a significant link between returns in the long run and earnings management to avoid losses.

#### **1.1.4 Financial Companies Listed at the Nairobi Securities Exchange**

NSE is responsible for the progress of the securities market and trading activities' regulation (NSE, 1954-1962). It provides a stage for posting and exchange of securities and gives a stage to the debt market, the trade of different instruments, derivatives markets and equities in the securities market (NSE, 2017). The Financial companies that are listed at the NSE are 23. That is, 11 listed in banking, 6 in insurance, 5 in investment and 1 in investment services.

Internationally done studies have shown that insurance firms and banks provided research grounds regarding specific accruals that have been applied to manipulate earnings. In banks, property casualty claim loss reserves and loan loss reserves are very large relative to net income and equity book values, are associated directly to their most critical liabilities and assets and are highly dependent on the management's

judgement (Healy & Wahlen, 1999). Liu, Ryan and Wahlen (1998) are among many researchers who explored loan loss provision but did were not able to get credible evidence of earnings management for purposes of stock returns. Beaver and McNichols (1998) among others, studied casualty insurance loss reserves and found signs of earnings manipulation were not sure if it was motivated by regulatory concerns or by stock market incentives.

## **1.2 Research Problem**

The management of a company always has incentives to inflate stock prices before selling stock, even if it is only temporarily. They increase their company's prices of stocks via earnings management or manipulation. Thus, subsequent managerial selling and an increment in earnings is expected to have a positive relation (Huddart & Henock, 2007). Effect of earnings management operates in a way that companies with low stock price to stock earnings ratio consistently provides higher returns than those firms with high stock price to earnings ratios (Nicholson, 2009). It is a principal mechanism that managers of a firm use in stock price increment (Huddart and Henock, 2007). Coffee (2004) proved that an increase in stock-based executive compensation creates a situation in which managers become responsive to stock performance in the short term. The motives to artificially increase earnings in order to maintain high and rising stock prices is created by the successful spread of options and shareholding among business managers.

Volatility of stock prices affects market returns and disrupts the smooth running of NSE because it reduces the investors' confidence. This volatility ranges from financial crisis of 2008, political election, other government activities and general performance of the Kenyan economy. There has been an upward and downward trend

in the NSE share index. The unstable nature of the NSE results in over-sensitivity of stock returns to macroeconomic factors. Despite earnings management-stock market returns being of considerable interest, very little is documented about the effect of earnings management on stock market returns of financial companies listed at the Nairobi Securities Exchange.

Prior research done on earnings management and stock returns provided conflicting results. Various studies reported a positive relationship (Sayari et al., 2013 and Oduma 2015), while others reported a negative relationship (Nuryaman ,2013). Also, theories that have been done found mixed conclusions on this relationship. These mixed results are due to the fact that it is difficult to provide a common meaning to earnings management and the shortcomings of the applied procedures. Studies relating to Earnings management and stock returns have been done globally. Amadi and Amadi (2014) and Oduma (2015) conducted a research on earnings management and stock market returns. Irungu (2010), Fazeli and Rasouli (2011), Bulle (2014) and Ngunjiri (2017) carried out researches on the effect that earnings management has on some particular variables. Muriuki (2014) and Kithome (2017) investigated the impact of various parameters on stock returns. So far, researches that have been conducted in Kenya earnings management and stock returns generalized all the listed companies. None focused on listed individual sectors. It is therefore obvious that there is a literature gap about the effect of earnings management and stock returns in Kenya in listed individual sectors, seeing as the closest study is the one by Oduma (2015), which was on the association between earnings management and stock market returns, among firms listed at the NSE. This study hoped to fill this gap by answering the following question: What is the effect of earnings management on stock returns of financial firms quoted at the NSE.



### **1.3 Research Objectives**

The objective of the study was to assess the influence of earnings management on stock returns of listed financial firms at the Nairobi Securities Exchange.

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

To academicians, scholars and learning institutions, this study will add value to them, as it will be of use to them as a reference and as a basis for further research in this field or in a related area. This study will help in the knowledge build up in this line of study, contribute to existing awareness and give more insight on earnings management level in financial companies.

Key policy makers, that is, the government and capital market, will be able to have at their disposal important information regarding the NSE and the reasons behind investing in listed companies, to enable development of policies that are aligned with current developments in the exchange to promote effectiveness, transparency and efficiency. The government will also be able to monitor the stock market performance and therefore will be able to provide economic stability to the country. As a regulator, the government will be able to formulate policies, factor in the effects of this study and ensure a conducive market platform for investors.

To the managers, this study will thrive in enlightening them on the latest progress in research on their earnings manipulation activities. They will know the extent to which their manipulation of the earnings really affects the companies and how easy it is for them to lose potential investors because of it. Lenders may also use the results of this study to evaluate a company's actual stock returns before financing loans, emphasizing on the risk level involved.

To investors and shareholders of financial companies, this study will provide more insight to these parties on the existence of earnings management. It will also enable future and potential investors to get into business with full knowledge about what they are really getting into.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter will review past investigations on the subject and critically review relevant literature. It contains the theoretical review, the determinants of stock market returns, empirical studies, the conceptual framework and summary of the literature review.

### **2.2 Theoretical Review**

This section will discuss several theories that relate to studies previously done by researchers, relating to earnings management and stock market returns.

#### **2.2.1 Efficient Markets Hypothesis**

It is attributed to the work of Fama (1970), who defined an efficient market as a market in which prices always reflect available information. Information in this market is anything that can lead to share price changes but is currently unknown and hence appears in future. Three categories of market efficiency exist. First, strong form, where no one makes profits that are above average because none of the market participants has monopolistic access to the relevant information. Secondly, Semi-strong form, in which information is confined as soon as possible in the share prices as they become available. Investors who base decisions on new information cannot make profit that is above average after the information is made. Thirdly, weak form whereby future share prices cannot be forecasted using past rates of return (Fama, 1970).

The efficiency theory states a noticeable link exists between stock markets and information, as stocks should reflect declared information, and not the accounting

value. Therefore, any accounting modifications which do not affect cash flows is unable to provide the market with information and hence will not be able to affect stock prices, because it does not affect the investors' expectations and predictions (Sayari et al., 2013). Studies that are based on the circumstances that have a relationship with the information content of accounting profits pointed out that there is a probability that investors will focus on earnings variations (Foerster, 2009; Yang & al 2011). This theory is appropriate as it seeks to understand a company's behavior by analyzing historical stock price sequences, market generated information and rates of return. Data collected in the form of stock prices will be assumed to reflect all the publicly available information. The Efficient Markets Hypothesis suggests no significant association between stock returns and earnings management.

### **2.2.2 Signaling Theory**

Signaling theory was advanced via Stephen Ross (1977). It assumes that, in as much as accounting figures allow the investors of companies to better appreciate the companies' real value, they should be confirmed as the real tools of signaling the trends of the market. Accounting researchers use the hypothesis that indicates existence of information asymmetry between investors and managers, where the latter gets rid of confidential information about the company's perspectives, status and ability to generate future cash flows. Therefore, earnings management may be used as an adaptable tool that allows transmission of private information to investors and to mold accounting information within the limits of the law. Managers wish to act on the accounting result. Manipulated accounting figures allow the investors to appreciate the company's stock portfolios and build up in an ideal manner and is therefore an instrument to signal market trends (Sayari et al., 2013).

Studies done by Choen and Bamber, Ronen and Donto (1993) and Kim and Verrecchia (1991), show that during publication of accounting information, information asymmetry may guide stock price reactions. The motivation to attract more investors and competition between companies compels managers to provide accounting data that has been altered in their favor. This results either in under-estimation or over-estimation of company value on the market (Watts and Zimmerman, 1986). Zhen, Xie et Xu (2005) stated that signal theory based on earnings management is a tool of financial communication and the information value of published results is enriched. Manipulating accounting figures that is, earnings management, has an impact on the market and also on the investors. The signaling theory suggests a positive link between earnings management and stock returns.

### **2.2.3 Income Smoothing Hypothesis**

Hepworth (1953) was the first to suggest that there is a suspicion that firms intentionally smooth income, which was elaborated further by Gordon (1966). Income smoothing is defined as the repetitive choice of reporting rules or accounting measurements in a specific manner, which leads to reporting income streams with smaller variations from trend, than would have appeared otherwise (Copeland, 1968). GAAP allow for the selection of different alternatives to account for a given set of financial occurrences. Managers, for example, can select from the several acceptable methods of depreciating an asset and they can also time financial transactions. Therefore, due to this flexibility, managers can systematically influence reported income from year to year, in order to smooth income (Koch, 1981).

Income smoothing is a method used by managers in variability reduction in reported income streams compared to a perceived stream that is targeted by accounting and

transactional manipulation. Managers are motivated to smooth income so as to improve relations with creditors, employers and investors and to gain tax advantage. Year to year income fluctuations are moderated through smoothing by shifting earnings from peak year to less successful periods. This results in lower peaks and support in troughs thus making less volatile earnings fluctuations (Koch, 1981). Hepworth (1953) suggests that managers can improve their own welfare by engaging in smoothing behavior. Aflatooni and Nikbakht (2009) found that firms that report incomes that are smoothed for the purposes of loss evasion, have lower significant returns in the long run compared to firms which do not smooth income. Therefore, there is a significant negative association between income smoothing behavior and long-run stock returns. There is also a significant connection between returns in the long-run and earnings management to avoid losses.

## **2.3 Determinants of Stock Returns**

This section will discuss earnings management, market to book value ratio and company size as some determinants of stock returns.

### **2.3.1 Earnings Management**

A principal mechanism used by managers to increase stock price, is earnings management. The response of stock prices towards earnings manipulation is a relevant question of which theoretical predictions are provided and divided on how stock prices respond to earnings management (Huddart & Henock, 2007). A signal-jamming model presented by Stein (1989) talks about a situation where current earnings are inflated by managers but the capital market anticipates the earnings increment correctly, reconstructs the series of unmanipulated earnings and then price the company at fundamental value. However, when there is uncertainty about the

management's incentives of earnings manipulation, the market is not able to reconstruct the series of unmanaged earnings (Fischer and Verrecchia, 2000). In companies where motives of managers to inflate stock price are higher than anticipated, stock price exceeds fundamental value, when earnings are increased by a value that is higher than expected by the stock market. On the other hand, stock price falls short of fundamental value when earnings are decreased to a value that is less than expected by the stock market. Therefore, earnings management is dependent on investors' knowledge about the incentives of the management to manipulate earnings, for it to lead to distorted stock prices in models where agents have logical expectations (Huddart & Henock, 2007).

### **2.3.2 Market to Book Value Ratio**

It compares stock market and book value and indicates whether stock is overvalued or undervalued. The multi-factor asset pricing model by Fama and French (1992, 1993) indicates that the MV/BV is an indicator of stock returns. They show that stocks of firms with a low MV/BV earn higher returns, whereas stocks with a high ratio earn low returns. Firms with low ratios might be distressed financially thus causing investors to demand higher risk premiums from stocks of these companies.

A study done by Raj and Ramesh (2012) on the price to book ratio effect in Japanese market showed high MV/ BV stocks earned low returns whereas those with high ratios earned low returns and concluded an existence of an inverse association between stock returns and price to book ratio in Japanese markets. Petkova and Zhang (2005) found empirical support for the Fama-French hypothesis by documenting that investors consider low MV/BV firm stocks to be riskier in "bad" times while Oliech

(2002) found that the ratio of book to market value has no relationship to returns of the companies.

### **2.3.3 Firm Size**

It is also known as market capitalization. It represents the firm's magnitude. The "size effect" concept was introduced by Banz (1981) on the NYSE and discovered that company size and return on its common stock are inversely related and that firms that are smaller always yield higher returns than those that are larger. L'Her et al. (2004) employed the three-factor pricing model methodology between the year 1960 and 2001 and found that firm size is a significantly stronger parameter relating to strong returns in January compared to other months in the Canadian stock market. They also found that market to book value has a positive notable impact in down markets.

Between 1985 and 1995, the size effect remained practically non-existent (Dichev, 2013). Oliech (2002) established that the size of the companies quoted on the NSE have no relationship with the returns of those companies. Firms experiencing rapid growth by making capital investments and acquisitions subsequently have poor stock returns, whereas firms experiencing contraction through share repurchase and debt retirement subsequently report good operating results and high stock returns (Ogello, 2014).

## **2.4 Empirical Studies**

Sayari, Mraih, Finet and Omri (2013) studied how earnings management influences stock returns focusing on Tunisian firms. They aimed at observing whether investors in Tunisia were conscious of earnings manipulation practices and if it encouraged them to react when earnings were publicized. Data was assembled from financial statements of 33 companies quoted at the TSE, between the year 1999 and year 2008,



and used Jones' model (1991) together with contributions from DeAngelo (1986) and Dechow et al. (1995) as their estimation models. They found that earnings management causes stock returns to be positive and increasing in large Tunisian firms and negative stock returns that are abnormal and reducing for small firms.

An empirical study about the effect of earnings management on stock returns was carried out by Cruz and Aeson (2015). Their objective was to assess how particular earnings management choices affect capital market incentives for companies. The study focused on four public industries that are listed in the PSE as at 31<sup>st</sup> December 2013, over a five-year period, from 2009 to 2013. Jones' model (1991) as used by Zang (2012) was adopted to estimate the level of normal accruals. They found that earnings management does not affect short-term stock returns significantly. They concluded that the market participants seem to understand the incentives around earnings management and therefore do not react to signs of earnings management. Also, investors have the ability to "see through" financial information, hence are capable of managing their own expectations when earnings management is present.

Olowonoyi and Ojenike (2010) sought to find the determinants of stock returns in developing nations, Nigeria being the case study. The research used data from annual reports of 70 publicly listed Nigerian firms, between year 2000 and 2010 and analysis was done using descriptive statistics and panel data econometric approach. The findings of the study suggested that firm size and expected growth rate positively influences stock returns, whereas tangibility has a negative influence on stock returns. Therefore, efforts towards improving firm size and adjusting tangibility of companies to a positive side should be made in order to improve the financial situation of companies through stock returns.

Babalyan (2001) examined the connection between stock returns and accounting earnings as a measure of value relevance of accounting standards, evidenced from the Swiss market. The research was based on pulled cross-sectional and time-series observations from 1997 to 1999 on listed Swiss companies, using the regression model. They discovered that an IAS compliance claim by Swiss listed companies does not necessarily imply that their earnings numbers are more significant in terms of value, than when reported under Swiss standards. Audit quality and firm size demonstrated more relevance for the reported numbers quality. Firms reporting under USA GAAP provide earnings numbers that are more informative.

Nuryaman (2013) investigated how earnings management affects stock returns, using the purpose of audit quality as a controlling parameter. 149 manufacturing firms that are listed on ISE were used in the investigation, applying Jones' model in the determination of earnings management, using the cross-section approach brought about by Dechow et al. (1995). The outcome showed that earnings management has a negative effect on stock returns and this relationship can be moderated by quality audit.

Bulle (2014) aimed at determining the impact of corporate governance on earnings management on 30 selected firms listed at the NSE in Kenya, from 2009 and 2013. Regression model was used for data analysis. He discovered a negative relation between earnings management and board independence.

Ngunjiri (2017) had an objective of establishing the relationship between earnings management and financial performance of 66 quoted companies at the NSE as at 31<sup>st</sup> December 2016 adopting a descriptive research design and using regression model for data analysis. He established that for companies listed at the NSE, earnings

management, MV/BV and company size have a positive relevant influence on company performance. A unit increase in market to book value ratio leads to an increase in financial performance of companies.

Khaemba (2016) examined the influence of earnings announcement on stock market returns at the NSE. 10 out of 66 listed companies that have actively trading stocks was selected and examined during a 14-day event window, 7 days before announcement and 7 days after announcement, during the 2014 Financial year and used Microsoft office excel for data analysis. The research found that there was a slight abnormal positive return over the window period for stocks listed at the NSE. The study concluded that there was no significant return in the stock market due financial returns at the year end.

Oduma (2015) had an objective of examining how earnings management and stock market returns are associated, among listed firms at the NSE. The study was carried out on 66 companies listed at the NSE as at 31<sup>st</sup> December 2014, adopting a descriptive research design and determined that size of a firm, earnings management and MV/BV ratio have affects tock returns positively.

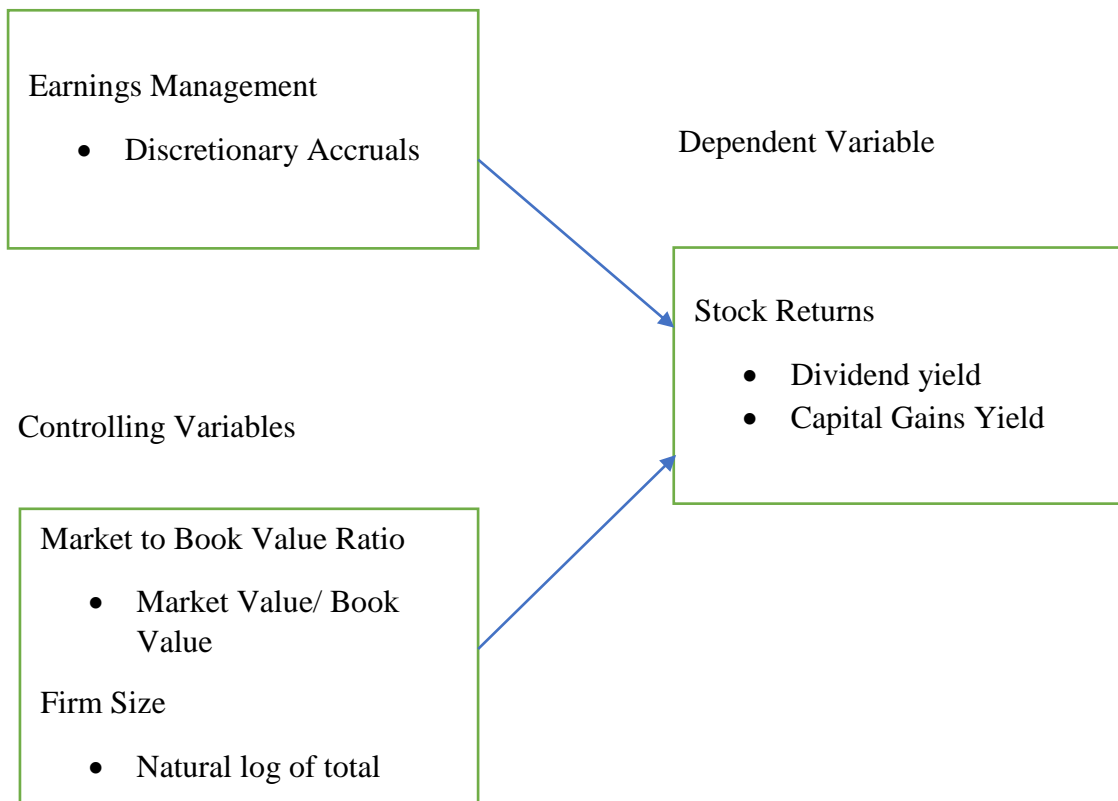
Wangaruro (2014) researched the influence that corporate governance practices have on earnings management for quoted commercial banks in Kenya. The study targeted 11 listed commercial banks as at 2013 and it adopted a descriptive research design and it found that an increase in directors as well as executive compensation is positively associated with earnings management. Also, an increase in the total directors in the board, number of board meetings, company size and total debt to assets ratio has a negative association with earnings management. The study

concluded that agency theory explains clearly the relationships between corporate governance practices and earnings management practices.

## 2.5 Conceptual Framework

The figure below illustrates how the dependent variable, that is, the stock returns associates with the independent variable, that is earnings management and the controlling variables are MV/BV and size of a firm.

Independent Variable



(Author 2018)

*Figure 1: Conceptual Framework*

## **2.6 Summary of the Literature Review**

Three theories discussed in this study reached mixed conclusions, based on the how earnings management and stock returns are associated. The Efficient Markets Hypothesis concluded no relevant connection between the two variables, the Signaling Theory argued a positive link and last but not least, the Income Smoothing Hypothesis showed a relevant relationship between returns in the long run and earnings management.

Empirical studies have shown that earnings management exists in companies and there is an existence of its association with stock returns. Sayari, Mraihi, Finet and Omri (2013) and Oduma (2015) found that there is a positive connection between earnings management and stock returns, Nuryaman (2013) found a negative link, whereas Cruz and Aeson (2015) discovered that earnings management has no effect on short-term stock returns. Olowoniyi and Ojenike (2010) and Ngunjiri (2017) found that firm size has positive effects on stock returns. Babalyan (2001) concluded that the size of a company, as well as audit quality is more significant in terms of quality reported numbers. Bulle (2014) and Wangaruro (2014) found that earnings management has a negative effect on board independence. Khaemba (2016) established that there are no significant returns in the stock market according to financial returns at the close of the year.

Empirical studies above proved that there are research gaps regarding the effects and link between stock returns and earnings management. Looking at international studies, Sayari, Mraihi, Finet and Omri (2013) studied only 26 out of a total of 33 companies that were quoted at TSE, Aeson and Cruz (2015) public listed companies from only 4 sectors listed at the Philippine Stock Exchange, Olowoniyi and Ojenike

(2010) publicly listed Nigerian firms, Nuryaman (2013) listed companies at the Indonesia Stock Exchange and Babalyan (2001) covered only two years. Locally, many studies on earnings management have been done, but very few on its relationship or even on its effect on stock returns have been done. Oduma (2015) was the closest research which was about the connection between stock market returns and earnings management, but he generalized all the companies that are listed at the NSE. Therefore, it is clear that there was a research gap as none of the researches done in Kenya covered the effect of earnings management on stock returns based on only the financial quoted firms at the NSE.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter will cover the methodology to be utilized in the study which includes design, population, methods of data collection and analysis techniques that were applied.

### **3.2 Research Design**

This study adopted a descriptive research design which entailed getting facts and different types of surveys and it purposed to describe the existing circumstances (Kothari, 2004). Raw data was available for this study

### **3.3 Population**

The research consisted of 23 financial companies listed at the NSE as at 31st December 2017, that is, 11 banks, 5 investment, 1 investment services and 6 insurance firms (CMA, 2017). A census of all the 23 companies was studied.

### **3.4 Data Collection**

The study covered 5 years from the beginning of 2013 to the end of 2017. The beginning and ending stock prices of all the listed financial companies, for each financial year were obtained from the NSE website ([www.nse.co.ke](http://www.nse.co.ke)) from a document titled “Historical daily market reports for equity and debt data” and this provided the secondary data that was used for the research. Data was collected and filled in the stock prices collection sheet as per appendix 1. Financial statements were also obtained from the websites of the various companies under study.

### **3.5 Data Analysis**

Correlation and regression analysis was carried out in the determination of the relationship between earnings management and stock returns for financial firms listed at the NSE. Regression analysis measured the pattern of the relationship and its closeness in absolute terms whereas correlation measured how best the regression line explained the dependent variable variation, which was achieved using the assistance of Statistical Package for Social Sciences (SPSS version 25).

Stock returns, otherwise known as ROI, is a ratio that estimates the loss or gain of the value of an investment, in relation to the original amount invested. Stock return was calculated using the dividend adjusted approach, that is:

$$\text{Total Stock Return} = \frac{(S_1 - S_0) + D_1}{S_0}$$

Where:

$S_0$  = Opening stock price on the first day of the financial year

$S_1$  = Closing stock price on the last day of the financial year

$D_1$  = Dividends paid during the first period (period 1)

#### **3.5.1 Diagnostic Tests**

##### **3.5.1.1 Normality**

Normality test was used to determine whether the data set was well modelled by a normal distribution. It was intended to determine the distribution of the data used in the study. Normality test assumes that the residual response variable is distributed around the mean. The One- Sample Kolmogorov-Smirnov test was used to determine whether or not the data was normally distributed such that if the significant value was



greater than 0.05, then the data was normally distributed whereas if the significant value was less than 0.05, then the data was not normally distributed.

### **3.5.1.2 Heteroskedasticity**

Heteroskedasticity implies unequal variances of the random error terms,  $E_i$  and unequal conditional variances in the response variables,  $X_i$ . Heteroskedasticity was useful to examine whether there was a difference in residual variance of the observation period to another period of observation. This study used Glejser Test, using SPSS, to check whether the model was free from heteroskedasticity or not, where if the value was greater than 0.05, then heteroskedasticity was not present. If the value was less than 0.05, then heteroskedasticity was present.

### **3.5.1.3 Multicollinearity**

Multicollinearity is the existence of perfect or exact linear relationships among some or all explanatory variables of the regression model. It was used to determine whether the variables in the model are highly linearly related and whether data used in the study was fit for regression. If the VIF value lied between 1 and 10, then there was no multicollinearity and if it was either less than 1 or more than 10, then multicollinearity was present.

### **3.5.1.4 Linearity**

Linearity test aimed to determine whether the association between independent variables and the dependent variable was linear or not. It was a requirement in the correlation and regression analysis such that for a good research in the regression model, there should be a linear relationship between the independent and dependent variable. If the significant value for deviation from linearity was greater than 0.05,

then the dependent and independent variables were linearly dependent. If it was less than 0.05, then the relationship between the variables was not linear.

### 3.5.2 Analytical Model

Ordinary least squares relationship was used in examining the relationship between stock returns and predictive variables. The following regression equation was be stated:

$$Y_t = \alpha + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \varepsilon$$

Where:

Y= Stock Return- Estimated by adding capital gain yield to dividend yield, such that:

$$\text{Stock Return} = \text{Dividend Yield} + \text{Capital Gain}$$

Where Dividend Yield= Annual Dividend Yield ÷ Closing stock price

$$\text{Capital Gain} = \left( \frac{\text{Closing stock price} - \text{Opening stock price}}{\text{Opening stock price}} \right) * 100$$

t= Time period in years

$\alpha$ = Constant

X<sub>1</sub>= Discretionary Accruals as an earnings management tool- Measured by change in current assets less cash and depreciation, such that:

$$\text{Accruals} = \text{Natural log} (\text{Change in Current Assets} - \text{Cash} - \text{Depreciation})$$

X<sub>2</sub>= Market to Book Value Ratio- Measured by dividing market value by book value, such that:

$$\text{Market to Book Value Ratio} = \text{Market Value} \div \text{Book Value}$$

X<sub>3</sub>= Firm Size- Calculated by taking the natural log of total assets

$\beta_1 \dots \beta_n$  = Coefficients of each of the independent variables

$\varepsilon =$  Error term

### **3.5.3 Statistical Tests of Significance**

Tests of significance were measured to establish how accurately the model of regression suited the data. ANOVA test, the coefficient of determination ( $R^2$ ) and the F-statistic was calculated at 95% level of confidence to test any significant association existing between earnings management and stock returns from 2013 to 2017.

## **CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION**

### **4.1 Introduction**

This chapter covers the analysis, findings and discussion of the effect of earnings management on stock returns of the 23 financial companies listed at the Nairobi Securities Exchange, as per the research objective and methodology. Data was collected from secondary sources namely the NSE website ([www.nse.co.ke](http://www.nse.co.ke)) and audited financial statements from the company websites of quoted financial companies.

### **4.2 Response Rate**

The sample size of this study was the target population of 23 quoted financial firms at the NSE. Kurwitu Ventures, NSE, Sanlam Kenya and Olympia Capital Holdings were excluded from the sample due to incomplete financial statements. The remaining 19 firms had complete data and were sufficient enough for data analysis.

### **4.3 Data Validity**

Tests to determine the validity of the data used in the study included Normality Test, Heteroskedasticity, Multicollinearity and Linearity.

#### **4.3.1 Normality Test**

The null hypothesis for the normality test was that secondary data used in the study was not normally distributed. If the significant value recorded was more than 0.05, the null hypothesis would be rejected. The results of the test are shown in Table 4.1.

**Table 4.1: Tests of Normality- One-Sample Kolmogorov-Smirnov Test**

		ACCRUALS	MBV RATIO	FIRM SIZE	STOCK RETURNS
N		94	95	95	85
Normal Parameters <sup>a,b</sup>	Mean	22.20786	.10834	25.19844	.44199
	Std. Deviation	1.421043	.259772	1.328429	.361783
Most Extreme Differences	Absolute	.103	.340	.124	.112
	Positive	.065	.313	.066	.099
	Negative	-.103	-.340	-.124	-.112
Test Statistic		.103	.340	.124	.112
Asymp. Sig. (2-tailed)		.016 <sup>c</sup>	.000 <sup>c</sup>	.001 <sup>c</sup>	.010 <sup>c</sup>

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

**Source: Research findings (2018)**

From the above output of the One- Sample Kolmogorov-Smirnov test, all the variables under study have significant values that are less than 0.05 implying that their data was not normally distributed and thus the null hypothesis in this case was not rejected.

### 4.3.2 Heteroskedasticity

**Table 4.2: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	1.819	.557		3.265	.002
ACCRUALS	.019	.018	.114	1.047	.298
MBV RATIO	-.280	.102	-.346	-2.744	.007
FIRM SIZE	-.076	.020	-.467	-3.752	.000

a. Dependent Variable: AbsUt

**Source: Research findings (2018)**

Based on the above output coefficients, the obtained significant value for the Accruals variable was 0.298, Market to Book Value ratio variable was 0.007 and Firm size variable was 0.000 which shows that the accruals data was the only one with a significant value that is more than 0.05. It can therefore be concluded that the accruals data was free from the heteroskedasticity problem whereas market to book value ratio and firm size were heteroskedastic.

### 4.3.3 Multicollinearity

**Table 4.3: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	1.488	.966		1.540	.128		
ACCRUALS	.024	.031	.092	.787	.433	.886	1.129
MBV RATIO	-.227	.177	-.172	-1.283	.203	.665	1.503
FIRM SIZE	-.062	.035	-.232	-1.747	.084	.681	1.467

a. Dependent Variable: STOCK RETURNS

**Source: Research findings (2018)**

Based on the above Coefficients output, collinearity statistics obtained a VIF value of 1.129 for accruals, 1.503 for market to book value ratio and 1.467 for firm size meaning that the VIF value obtained was between 1 and 10. It can therefore be concluded that the data for all the variables under study was free from multicollinearity.

### 4.3.4 Linearity

**Table 4.4: ANOVA Table**

			Sum of Squares	df	Mean Square	F	Sig.
STOCK	Between	(Combined)	8.613	59	.146	1.528	.127
RETURNS	Groups	Linearity	.008	1	.008	.081	.778
* ACCRUALS		Deviation from Linearity	8.605	58	.148	1.553	.118
	Within	Groups	2.293	24	.096		
	Total		10.906	83			

**Source: Research findings (2018)**

From the ANOVA output in the table above, the Significant value for deviation from linearity is 0.118 which is greater than 0.05 implying that the independent and dependent variables had a linear relationship.

### 4.4 Descriptive Statistics

Descriptive statistics discussed in this section included mean, standard deviation, coefficient of variation, skewness and kurtosis for each study variable.



#### 4.4.1 Earnings Management (Accruals)

**Table 4.5: Accruals**

Year	N	Mean	Std. Deviation	Coefficient of Variation	Skewness	Kurtosis
2013	16	22.08	1.329	6.02%	-0.292	-1.143
2014	12	21.899	1.515	6.92%	-0.282	-1.496
2015	10	21.711	1.819	8.38%	-0.98	1.235
2016	15	22.921	1.766	7.71%	-1	3.644
2017	14	22.143	0.966	4.36%	-0.603	-0.155

**Source: Research findings (2018)**

Table 4.5 indicates the trend of accruals over a five-year period from the year 2013 to the year 2017. The lowest mean value of accruals was 22.143 in 2017 while the highest value was 22.921 in 2016. Mean values of accruals for the various listed financial firms had negative fluctuations throughout the years 2013 to 2015, with a positive change in 2016 then a decrease in 2017. This implied that earnings management of listed financial companies fluctuated unsteadily over the last 5 years. Standard deviation values for accruals showed the variations of earnings management for the various financial firms listed at the NSE, whereas the coefficient of variation is a measure of relative variability. The higher the coefficient of variation value for the various listed firms, the greater the level of dispersion around the mean, over the years under study. The coefficient of variation values showed that the year 2015 had the most variation relative to its mean, compared to all the other years whereas the year 2017 had the lowest variation relative to its mean. Since the skewness values for the years 2013, 2014, 2015 and 2017 were less than -1, it meant that the data for these years was highly negatively skewed whereas the skewness value for 2016 being equal

to -1 meant that the data for that year was moderately negatively skewed. On the other hand, the Kurtosis values for the years 2013, 2014 and 2017 were less than 0 implying that the distribution of the data for these years had light tails while that for 2015 and 2016 showed that the distribution for these 2 years had heavier tails.

#### 4.4.2 Market to Book Value Ratio (MBV Ratio)

**Table 4.6: Market to Book Value Ratio**

Year	N	Mean	Std. Deviation	Coefficient of Variation	Skewness	Kurtosis
2013	19	0.108	0.127	117.59%	2.006	4.227
2014	19	0.097	0.119	122.68%	2.07	4.029
2015	18	0.079	0.08	101.27%	2.043	5.516
2016	19	0.194	0.546	281.44%	4.206	18.017
2017	18	0.06	0.082	136.67%	2.654	8.323

**Source: Research findings (2018)**

Table 4.6 shows the market to book value ratio trends over a five-year period from the year 2013 to the year 2017. The lowest mean value of the MBV Ratio was 0.06 in 2017 while the highest value was 0.194 in 2016. MBV Ratio mean values for the financial listed firms under study had an unsteady change throughout the years 2013 to 2017, with a decrease in mean from the year 2013 through to the year 2015, then an increase in mean in 2016 and then an decrease in 2017. This implied that the MBV Ratio of quoted financial companies had drastic fluctuations over the last 5 years. Standard deviation values for MBV Ratio show the variations of the MBV Ratio for the selected companies under study from 2013 to 2017. The year 2016 had the most variation relative to its mean, compared to all the other years whereas the year 2015 had the lowest variation relative to its mean. Skewness values for 2013 through to

2017 were greater than +1, implying that the data for listed financial companies for these years was highly positively skewed. Kurtosis values for all the years under study was greater than 0 which implied that the distribution throughout the years under study had heavy tails.

### 4.4.3 Firm Size

**Table 4.7: Firm Size**

Year	N	Mean	Std. Deviation	Coefficient of Variation	Skewness	Kurtosis
2013	19	24.818	1.451	5.85%	-0.807	-0.94
2014	19	25.161	1.221	4.85%	-0.891	0.69
2015	19	25.315	1.236	4.88%	-0.951	1.08
2016	19	25.273	1.469	5.81%	-1.528	3.52
2017	19	25.426	1.305	5.13%	-0.899	0.584

**Source: Research findings (2018)**

Table 4.7 portrays firm size values over a five-year period from the year 2013 to the year 2017. The means showed gradual fluctuations over the five years that were studied, whereby the mean reduced from 2013 to 2014, increased in 2015, decreased again in 2016 and then increased in 2017. The lowest mean of 24.818 was reported in 2013 while the highest value was 25.426 in 2017. Standard deviation values for firm size showed the variations of the firm size for the selected companies under study. the highest coefficient of variation was recorded in 2013 while the lowest was recorded in 2014. Moderate negative skewness was seen in 2013, 2014, 2015 and 2017 data with skewness values that were between -1 and -0.5 while data for the year 2016 was highly negatively skewed evidenced by a skewness value of less than -1. Kurtosis

values for the year 2013 was less than 0 implying that the distribution has light tails. On the other hand, Kurtosis values for the rest of the years under study were all greater than 0 implying that the distribution had heavy tails.

#### 4.4.4 Stock Returns

**Table 4.8: Stock Returns**

Year	N	Mean	Std. Deviation	Coefficient of Variation	Skewness	Kurtosis
2013	19	0.682	0.455	66.72%	0.779	0.94
2014	15	0.44	0.317	72.05%	0.419	-0.996
2015	2	0.212	0.039	18.40%	0	0
2016	4	0.045	0.04	88.89%	-0.011	-5.91
2017	14	0.343	0.177	51.60%	0.003	-1.379

**Source: Research findings (2018)**

Table 4.8 indicates the stock returns from 2013 to 2017. Mean values of stock returns for the various listed financial firms had fluctuations throughout the years under study, with a gradual decrease in mean from the year 2013 to 2016 and an increase in mean in the year 2017. The lowest mean value of stock returns was 0.045 in 2016 while the highest value was 0.682 in 2013. Standard deviation values for stock returns showed the variations of stock returns for the various financial firms listed at the NSE over the five years. The coefficient of variation values showed that the year 2016 had the most variation relative to its mean whereas the year 2015 had the least variation relative to its mean. Skewness values for the years 2013, 2014 and 2017 were between +0.5 and +1, which meant that the stock returns data for the listed financial companies for these years was moderately positively skewed. Skewness value for 2015 implied a

perfectly symmetrical data set which is a normal distribution. The year 2016 had a skewness value that is less than +0.5 but more than -0.5 implying that the data was fairly symmetrical. On the other hand, the Kurtosis value for the 2013, was more than 0 which showed that the data had heavy tails, 2015 being equal to zero meant that the data for this year was normally distributed whereas 2014, 2016 and 2017 were all less than 0 meaning that the distribution had light tails.

#### **4.5 Correlation Analysis**

The Pearson Correlation was employed to measure the direction and strength of a linear relationship between the dependent variable and each of the independent variables. The table below shows the correlation analysis for the variables under study.

**Table 4.9: Correlations**

		ACCRUALS	MBV RATIO	FIRM SIZE	STOCK RETURNS
ACCRUALS	Pearson	1	.263*	.200	-.041
	Correlation				
	Sig. (2-tailed)		.031	.105	.797
	N	67	67	67	41
MBV RATIO	Pearson	.263*	1	-.520**	.163
	Correlation				
	Sig. (2-tailed)	.031		.000	.239
	N	67	93	93	54
FIRM SIZE	Pearson	.200	-.520**	1	-.355**
	Correlation				
	Sig. (2-tailed)	.105	.000		.009
	N	67	93	95	54
STOCK RETURNS	Pearson	-.041	.163	-.355**	1
	Correlation				
	Sig. (2-tailed)	.797	.239	.009	
	N	41	54	54	54

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

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Source: Research findings (2018)**

From the above correlation analysis, there existed a negative statistically insignificant linear relationship between stock returns and earnings management ( $r=-0.41$ ,  $p>0.05$ ).

There was a positive linear link that was insignificant, between stock returns and the

market to book value ratio ( $r=0.163$ ,  $p>0.05$ ). A negative significant linear association between stock returns and firm size was observed ( $r=-0.355$ ,  $p<0.01$ ).

#### 4.6 Regression Analysis and Hypothesis Testing

Stock returns was regressed against earnings management (accruals), market to book value ratio and firm size. The study obtained the model summary statistics shown in table 4.10 below.

**Table 4.10: Model Summary**

##### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.436 <sup>a</sup>	.190	.124	.373358

a. Predictors: (Constant), FIRMSIZE, ACCRUALS, MBVRATIO

##### Source: Research findings (2018)

The output in table 4.10 above reveals that the value of R Square is 0.436 implying that changes in accruals, market to book value ratio and firm size cause only 43.6% of the deviations in the stock returns for listed financial companies at the NSE. The other 56.4% of the deviations are caused by other variables that are not included in the model. Therefore, further research should be conducted to investigate the other factors (56.4%) that affect stock returns for the listed financial companies at the NSE.

**Table 4.11: ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.210	3	.403	2.893	.048 <sup>b</sup>
	Residual	5.158	37	.139		
	Total	6.367	40			

a. Dependent Variable: STOCKRETURNS

b. Predictors: (Constant), FIRMSIZE, ACCRUALS, MBVRATIO

**Source: Research findings (2018)**

The significant value of 0.048 is less than  $p=0.05$ , implying that the model was statistically significant in predicting how earnings management, market to book value ratio and firm size influence stock returns. With a level of confidence of 95%, the F value of 2.893 confirms that the overall multiple regression model was statistically significant such that it was the most suitable prediction model for explaining the effect that earnings management, market to book value ratio and firm size has on stock returns for quoted financial companies at the NSE.



**Table 4.12: Coefficients<sup>a</sup>**

Model	Unstandardized		Standardized	t	Sig.	95.0% Confidence	
	Coefficients		Coefficients			Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	3.742	1.729		2.165	.037	.240	7.245
ACCRUALS	.045	.051	.144	.893	.378	-.058	.148
MBVRATIO	-.035	.640	-.010	-.054	.957	-1.332	1.262
FIRMSIZE	-.167	.066	-.477	-2.546	.015	-.300	-.034

a. Dependent Variable: STOCKRETURNS

T-test was applied in the study to determine the significance of the individual independent variables used in this study as predictors of stock returns at the NSE. The p-values under sig. column were used as indicators of the significance of the association between the independent and dependent variables. At a level of confidence of 95%, a p-value of less than 0.05 was illustrated as a measure of statistical significance. Therefore, a p-value of above 0.05 showed an association that is statistically insignificant between the dependent and independent variables in the study.

Table 4.12 above shows that earnings management and market to book value ratio have p-values that are more than 0.05 and are therefore insignificant determinants of stock returns for financial companies listed at the NSE. Firm size on the other hand had a p-value that is less than 0.05 implying that of all the variables under study, firm size was the only significant determinant of stock returns for those financial firms that are listed at the NSE.

The regression equation estimated was as follows:

$$Y = 3.742 + 0.045X_1 - 0.035X_2 - 0.167X_3$$

Where,

Y = Stock returns at the NSE

X<sub>1</sub> = Earnings management

X<sub>2</sub> = Market to book value ratio

X<sub>3</sub> = Firm size

The estimated regression model above shows that if earnings management, firm size and market to book value ratio were equal to zero, stock returns would be equal to 3.742. A unit increase in earnings management would lead to an increase in stock returns by 0.045 whereas a unit increase in market to book value ratio would decrease stock returns by 0.035. A unit increase in firm size would lead to a decrease in stock returns by 0.167.

#### **4.7 Discussion of research findings**

It was found that 43.6% of the changes in stock returns for listed financial companies at the NSE are caused by the various variables under study that is earnings management, stock returns and firm size whereas 56.4% are caused by other variables that were not considered in this study.

The results of the regression model carried out in the study showed that the intercept was equal to 3.742 for firms listed at the NSE, over all the years under study. The output also showed that earnings management had a statistically insignificant positive effect on stock returns, market to book value ratio had a statistically insignificant

negative effect on stock returns and firm size had a statistically significant negative effect on stock returns for the firms under study. This implied that earnings management and market to book value ratio have no significant effect on stock returns for listed financial firms since their effect was found to be statistically insignificant, whereas firm size has a significant negative effect on stock returns for these firms.

These findings that earnings management has no significant effect on stock returns for listed financial firms were consistent with the efficient markets hypothesis but inconsistent with the signaling theory and the income smoothing hypothesis that were discussed earlier in this study. The efficient markets hypothesis suggested no significant link between stock returns and earnings management, signaling theory suggested a positive link between earnings management and stock returns, and the income smoothing hypothesis suggested a significant negative association between stock returns in the long run and the income smoothing behavior. These findings were also inconsistent with the discovery made by Oduma (2015) that earnings management affects the stock returns of all the listed firms at the NSE positively.

These findings mean that managers of financial companies do not manipulate earnings, but if they do, these manipulations have no effect on stock returns.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter covers the summary of the findings, conclusions made from the study, recommendations made from the findings of the research, limitations of the study and suggestions for future research.

### **5.2 Summary of findings**

The study sought to establish the effect of earnings management on the stock returns of financial companies listed at the NSE. The dependent variable was stock returns, which was measured by capital gain yield and dividend yield. The independent variable was earnings management which was measured by discretionary accruals whereas the moderating variables were market to book value ratio and firm size which were measured by market value to book value ratio and total assets respectively. The impact of each of the independent variables on the dependent variable was analyzed in terms of direction and strength.

Correlation analysis showed the existence of a weak negative correlation that exists between stock returns and earnings management and between stock returns and firm size, and a weak positive correlation that exists between stock returns and market to book value ratio. It was also found that these variables affect only 43.6% of the stock returns, 56.4% being contributed by other variables that were not looked at in this study.

The coefficient for earnings management was 0.045 ( $p > 0.05$ ) implying that earnings management has a positive insignificant effect on stock returns which meant that

earnings management has no significant effect on stock returns for listed financial companies at the NSE. It was also found that the coefficient for MBV ratio was -0.035 ( $p > 0.05$ ) which means that MBV ratio had a negative insignificant association with stock returns implying that it has no significant effect on stock returns for quoted financial firms at the NSE. The coefficient for firm size was -0.167 ( $p < 0.05$ ) meaning that firm size affects stock returns negatively for financial companies listed at the NSE.

### **5.3 Conclusion**

From the findings discussed above, it can be concluded that for listed financial firms, earnings management and MBV ratio have no significant effect on stock returns, while firm size has a significant negative effect on stock returns. The regression model showed that the intercept for all the years under study was 3.742. Also, a unit increase in earnings management would lead to an increase in stock returns by 0.045, a unit increase in MBV ratio would lead to a decrease in stock returns by 0.035 and a unit increase in firm size would reduce stock returns by 0.167.

### **5.4 Recommendation**

Since it has been found that earnings management has no effect on the stock returns of the listed financial firms at the NSE, investors, shareholders and clients of these companies should know that the firms' performance as indicated by managers of these companies are free from earnings manipulation.

### **5.5 Limitations of the study**

Since earnings management has been considered as an unethical practice and a violation of the securities law, firms that engage in earnings management may result in unprofessional practices for the purposes of covering their tracks. This said, it is

evident that discovering a company that engages in earnings management is not usually an easy task.

The nature of the data yield from the financial statements of the financial firms listed at the NSE might limit the power of the tests done to detect associations and might also impact the output in an anticipated manner. Also, too many calculations done in order to find the various variables and the short time period of five years, of the study might have affected the output of the study.

## **5.6 Suggestions for further research**

The effect of earnings management on stock returns is a topic that has been covered rarely in Kenya compared to those studies on the same topic that have been done internationally. More so, the few studies on this topic that have been done here in Kenya focused on all the firms that are listed at the NSE. The NSE has companies from different sectors and thus studies should be done focusing on the individual sectors, or even comparing different sectors listed at the NSE. Studies can also be done on this topic but for those companies that are not listed at the NSE.

This study covered a period of five years from 2013 to 2017. Studies could be done focusing on a wider scope, say ten years or even more, so as to find out the trend of the effect of earnings management on stock returns for listed financial companies over a period that is more than five years, or for listed firms over a period of more than five years, or for non-listed firms for a period of more than five years.

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## **APPENDICES**

### **Appendix 1: Population List**

#### **Listed Companies in the Banking Sector**

1. Barclays Bank Ltd
2. Stanbic Holdings
3. I&M Holdings Ltd
4. Diamond Trust Bank Kenya Ltd
5. Housing Finance Group Ltd
6. Kenya Commercial Bank Group Ltd
7. National Bank of Kenya Group Ltd
8. NIC Group Ltd
9. Standard Chartered Bank Ltd
10. Equity Group Holdings
11. The Co-operative Bank of Kenya Ltd.

#### **Listed companies in the insurance sector**

1. Jubilee Holdings Ltd
2. Sanlam Kenya
3. Kenya Re-insurance Corporation Ltd
4. Liberty Kenya Holdings Ltd
5. Britam Holdings Ltd
6. CIC Insurance Group Ltd.

#### **Listed Companies in the Investment Sector**

1. Olympia Capital Holdings Ltd

2. Centum Investment Company Limited
3. Trans-Century Limited
4. Home Afrika Ltd
5. Kurwitu Ventures

**Investment Services**

1. Nairobi Securities Exchange Ltd

**Appendix 2: Data Collection Sheet**

Sector: .....

<b>Year</b>	<b>Firm</b>	<b>X1- Discretionary Accruals</b>	<b>X2- Market to Book Value Ratio</b>	<b>X3- Firm Size</b>	<b>Yt- Stock Returns</b>

### Appendix 3: Data Summary Sheet

	<b>Year</b>	<b>Firm</b>	<b>X1- Accruals</b>	<b>X2- MBV Ratio</b>	<b>X3- Firm Size</b>	<b>Yt- Stock Returns</b>
1	2013	BARCLAYS	(19.684)	0.084	26.055	0.146
	2014	BARCLAYS	23.226	0.071	26.143	(0.012)
	2015	BARCLAYS	17.910	0.068	26.209	(0.138)
	2016	BARCLAYS	23.699	0.064	26.283	(0.250)
	2017	BARCLAYS	21.668	0.062	26.328	0.140
2	2013	BRITAM	22.036	0.011	24.571	1.537
	2014	BRITAM	20.443	0.009	25.006	0.971
	2015	BRITAM	(18.973)	0.110	25.075	(0.609)
	2016	BRITAM	(20.672)	0.110	25.150	(0.207)
	2017	BRITAM	21.572	0.009	25.319	0.436

	<b>Year</b>	<b>Firm</b>	<b>X1- Accruals</b>	<b>X2- MBV Ratio</b>	<b>X3- Firm Size</b>	<b>Yt- Stock Returns</b>
3	2013	CENTUM	22.821	0.056	23.486	1.672
	2014	CENTUM	23.395	0.016	24.111	0.848
	2015	CENTUM	23.038	0.009	25.003	(0.238)
	2016	CENTUM	22.490	0.008	24.666	(0.202)
	2017	CENTUM	23.067	0.006	25.205	0.185
4	2013	CIC	20.360	0.326	23.559	0.707
	2014	CIC	23.395	0.363	23.880	0.960
	2015	CIC	(21.306)	0.334	23.939	(0.317)
	2016	CIC	(18.907)	0.350	24.016	0.008
	2017	CIC	21.230	0.342	24.141	0.573
5	2013	CO-OP				

	<b>Year</b>	<b>Firm</b>	<b>X1- Accruals</b>	<b>X2- MBV Ratio</b>	<b>X3- Firm Size</b>	<b>Yt- Stock Returns</b>
			22.896	0.113	26.167	0.430
	2014	CO-OP	19.849	0.117	26.368	0.332
	2015	CO-OP	22.316	0.098	26.560	(0.077)
	2016	CO-OP	23.888	0.123	26.586	(0.234)
	2017	CO-OP	22.953	0.107	26.681	0.480
6	2013	DTB	22.517	0.037	25.838	0.670
	2014	DTB	19.559	0.030	26.078	0.271
	2015	DTB	21.365	0.025	26.328	(0.204)
	2016	DTB	24.005	0.023	26.516	(0.305)
	2017	DTB	22.780	0.021	26.619	0.628
7	2013	EQUITY	23.681	0.040	26.350	0.308



	<b>Year</b>	<b>Firm</b>	<b>X1- Accruals</b>	<b>X2- MBV Ratio</b>	<b>X3- Firm Size</b>	<b>Yt- Stock Returns</b>
	2014	EQUITY	(24.253)	0.006	26.344	0.635
	2015	EQUITY	24.304	0.002	26.783	(0.189)
	2016	EQUITY	(24.621)	0.006	26.884	(0.235)
	2017	EQUITY	(23.460)	0.004	26.986	0.335
8	2013	HF GROUP	20.702	0.244	24.568	1.055
	2014	HF GROUP	(24.339)	0.177	24.834	0.462
	2015	HF GROUP	19.596	0.164	24.995	(0.425)
	2016	HF GROUP	22.441	0.155	24.999	(0.356)
	2017	HF GROUP	(20.273)	0.153	24.936	(0.155)
9	2013	HOME AFRIKA	20.064	0.498	21.843	0.695
	2014	HOME				

	<b>Year</b>	<b>Firm</b>	<b>X1- Accruals</b>	<b>X2- MBV Ratio</b>	<b>X3- Firm Size</b>	<b>Yt- Stock Returns</b>
		AFRIKA	(19.032)	0.443	22.037	(1.555)
	2015	HOME AFRIKA	(27.293)	(9.716)	22.075	(0.452)
	2016	HOME AFRIKA	26.332	2.425	20.834	(0.977)
	2017	HOME AFRIKA	(27.079)	(1.035)	22.222	(0.166)
10	2013	I&M BANK	22.132	0.017	25.673	0.002
	2014	I&M BANK	(20.441)	0.014	25.896	0.027
	2015	I&M BANK	21.709	0.015	25.828	(0.185)
	2016	I&M BANK	22.385	0.001	25.928	(0.098)
	2017	I&M BANK	20.044	0.001	25.938	0.413
11	2013	JUBILEE	(22.735)	0.148	21.792	0.619
	2014	JUBILEE	22.925	0.018	25.034	0.608

	<b>Year</b>	<b>Firm</b>	<b>X1- Accruals</b>	<b>X2- MBV Ratio</b>	<b>X3- Firm Size</b>	<b>Yt- Stock Returns</b>
	2015	JUBILEE	22.364	0.016	25.135	0.184
	2016	JUBILEE	22.005	0.015	25.229	0.013
	2017	JUBILEE	(21.702)	0.013	25.377	0.121
12	2013	KCB	23.325	0.047	26.692	0.597
	2014	KCB	(22.914)	0.040	26.918	0.213
	2015	KCB	(22.515)	0.037	27.048	(0.225)
	2016	KCB	24.142	0.032	27.112	(0.327)
	2017	KCB	23.428	0.029	27.195	0.498
13	2013	KENYA RE	21.883	0.098	24.063	0.458
	2014	KENYA RE	(19.326)	0.088	24.194	0.109
	2015	KENYA RE				

	<b>Year</b>	<b>Firm</b>	<b>X1- Accruals</b>	<b>X2- MBV Ratio</b>	<b>X3- Firm Size</b>	<b>Yt- Stock Returns</b>
			21.598	0.080	24.306	0.239
	2016	KENYA RE	22.092	0.073	24.374	0.079
	2017	KENYA RE	22.105	0.064	24.478	(0.187)
14	2013	LIBERTY	20.012	0.094	24.172	1.277
	2014	LIBERTY	20.611	0.087	24.226	0.553
	2015	LIBERTY	(19.878)	0.086	24.265	(0.161)
	2016	LIBERTY	21.558	0.079	24.276	(0.326)
	2017	LIBERTY	21.377	0.072	24.337	(0.046)
15	2013	NBK	(22.775)	0.003	25.251	0.672
	2014	NBK	22.203	0.111	25.536	(0.139)
	2015	NBK	(22.229)	0.139	25.555	(0.300)

	<b>Year</b>	<b>Firm</b>	<b>X1- Accruals</b>	<b>X2- MBV Ratio</b>	<b>X3- Firm Size</b>	<b>Yt- Stock Returns</b>
	2016	NBK	23.580	0.003	25.471	(0.543)
	2017	NBK	(22.134)	0.005	25.423	0.427
16	2013	NIC	22.616	0.155	25.520	0.572
	2014	NIC	22.062	0.137	25.705	0.084
	2015	NIC	22.913	0.121	25.834	(0.243)
	2016	NIC	(20.673)	0.105	25.856	(0.391)
	2017	NIC	23.024	0.092	26.052	0.303
17	2013	STANBIC	24.150	0.073	25.919	1.073
	2014	STANBIC	23.881	0.064	25.922	0.429
	2015	STANBIC	(23.465)	0.062	26.063	(0.329)
	2016	STANBIC				

	<b>Year</b>	<b>Firm</b>	<b>X1- Accruals</b>	<b>X2- MBV Ratio</b>	<b>X3- Firm Size</b>	<b>Yt- Stock Returns</b>
			23.519	0.059	26.092	(0.139)
	2017	STANBIC	21.388	0.055	26.240	0.155
18	2013	STANCHART	23.304	0.004	26.119	0.295
	2014	STANCHART	(22.532)	0.038	26.128	0.103
	2015	STANCHART	(23.862)	0.037	26.178	(0.414)
	2016	STANCHART	23.509	0.039	26.247	0.081
	2017	STANCHART	23.044	0.038	26.378	0.105
19	2013	TRANS- CENTURY	20.784	0.005	23.895	0.238
	2014	TRANS- CENTURY	21.235	0.006	23.692	(0.327)
	2015	TRANS- CENTURY	(22.703)	0.020	23.806	(0.574)
	2016	TRANS- CENTURY	18.166	0.018	23.663	(0.176)

	<b>Year</b>	<b>Firm</b>	<b>X1- Accruals</b>	<b>X2- MBV Ratio</b>	<b>X3- Firm Size</b>	<b>Yt- Stock Returns</b>
	2017	TRANS- CENTURY	22.324	0.010	23.245	(0.118)