EFFECT OF INSTITUTIONAL OWNERSHIP STRUCTURE ON EARNINGS MANAGEMENT OF THE NON-FINANCIAL COMPANIES LISTED IN NAIROBI SECURITIES EXCHANGE, KENYA

BY

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DECLARATION

Declaration

I declare that this research project is my original work and has never been previously published or submitted elsewhere for assessment or award of a degree in any institution of higher learning other than Maseno University.

Sign……..…… Date……

Agutu Beatrice Otieno

MSC/BE/00086/2018

Approval

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

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DEDICATION

I dedicate this work to my beloved parents Charles and Anne for the great affection and support they have continually given. Frank, Daisy and Esther for being my biggest cheerleaders. Giovanni for being my inspiration.

ABSTRACT

Earnings management has emerged as an imperative issue in the Nairobi securities exchange. The recent fall of Chase bank which was placed under receivership in 2016, Nakumatt in 2019, Dubai bank in 2015, Imperial bank in 2015 and Uchumi in 2006 with the retailors not paying up to 75% of the trade credit while the fallen banks could not pay up to 85% of the depositors' savings. One of the ways of reducing earnings management in financial reports is to increase the voting rights of institutional owners who are known to be more vigilant than the ordinary shareholder. They have the capacity and the expertise to supervise the actions of managers. Despite the relative importance of these investors, little was known on their role in the Kenyan context. Most of the studies which was done in Kenya had concentrated on the impact of organizational governance structure on income normalization rather than looking at effect of institutional ownership structure on aggressive accounting practices. Moreover, studies on the effects of institutional structure on creative accounting had found inconsistent and conflicting results. Some have found a positive relationship while others have found a negative relationship yet other have found no relationship. Furthermore, they have not investigated the effect of Bank, Insurance, pension fund and government ownership on earnings management. Therefore, the purpose of the study was to determine the impact of institutional ownership structure on earnings management of listed non-financial companies at the Nairobi Securities Exchange. Specifically, the study sought to: determine the effect of bank ownership on earnings management of the non-financial companies listed in the NSE, Kenya, determine the effect of insurance ownership on earnings management of the non-financial companies listed in the NSE, Kenya. Assess the effect of pension fund ownership on earnings management of the non-financial companies listed in the NSE, Kenya, and determine the effect of government ownership on the earnings management of non-financial companies listed in the NSE, Kenya. This study was anchored on the agency theory, the bonus maximization theory, active monitoring theory and the passive hand theory. A census study was done comprising of the entire population of 38 listed non-financial companies for a period of five years 2014-2018. The study analyzed the data using the SPSS software, the analysis included the descriptive statistics, correlation and the regression analysis. The study found a statistically significant negative relationship between bank ownership and earnings management(coefficient = -0.276, $p<0.05$). Insurance ownership and earnings management was found to have a positive relationship (coefficient = 0.345,$p<0.05$). Pension fund ownership was found to have a negative but non-statistical relationship with earnings management (coefficient = -0.141,$p>0.05$), while government ownership and earnings management was found to have a negative relationship but not statistically significant (coefficient = -0.019,$p>0.05$). Thus implying that bank ownership and insurance ownership have an effect on earnings management while pension fund ownership and government ownership have no effect on earnings management. The study recommends that the minority shareholders should consolidate their investments through a special purpose investment vehicle to enable them elect a representative who can champion their interest at the board level. Based on the foregoing, the researcher proposed that a study be conducted in order to determine the impact of institutional ownership on financial reporting transparency in East Africa.

TABLE OF CONTENTS

ABBREVIATIONS AND ACRONYMS

DA: Discretionary Accruals

UK: United Kingdom

USA: United States of America

OLS: Ordinary Least Square

NSE: Nairobi securities Exchange

OPERATIONAL DEFINITION OF TERMS

Earnings Management: Material alteration of information contained in the financial statements with the intention of skewing decision making.

Institutional ownership structure: Is the proportion of ownership in a firm or company which is controlled by artificial persons. These artificial owners are commercial banks, risk Underwriting companies, fund Managers and government.

Bank Ownership: This is the shareholding power of commercial banks over the strategic and operations of the company they have invested in.

Pension Fund managers: Is the proportion of a company ownership held by pension fund managers.

Insurance Ownership: This is the amount of control exercised over the affairs of a company by insurance companies which has invested in it.

Government Ownership: This is the amount of control exercised over the affairs of a company by central government, parastatals and county governments which has invested in it.

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

This section highlights the rationale for conducting this research, a brief background detailing the summary of relevant literature will be looked at. The academic problem will also be discussed in great details comprising mainly the research gaps which have been identified. Finally, this section will provide the scope of this study and present the pictorial representation of how the variables relate with each other.

1.1 Background of the Study

The fall of banks such as Chase bank, Imperial bank, Dubai Bank and the retailors like Uchumi and Nakumatt is a reminder that public companies which are under the watch of both the auditors and regulators can also fail. These corporate failures also confirmed the assertions that managers who are entrusted with the running of the affairs of the companies cannot be expected to discharge their managerial duties without monitoring. These failures had far reaching implications, for example up to 75% of the trade credit could not be paid by Uchumi and Nakumatt. While the depositors of the Chase Bank, Dubai bank and imperial bank could not recover up to 85% of their savings immediately (Waguma, 2019). In all these cases the financial statements were falsified to achieve a predetermined objective; to portray a good picture of the financial health of the organizations.

Amar (2014) defined earnings management as the biased discretionary application of judgment applied by managers in preparation and reporting the results of an enterprise. The accounting standards allows preparers of financial statements to exercise judgment when coming up with estimates and selecting accounting policies to be applied in book keeping. However, the conceptual framework limits this judgment within the bounds of faithful representation and relevance; whatever choice that is made in the selection and application of

accounting estimate/principle/policy should lead into a more faithful depiction of economic facts as they occurred during the accounting period.

Zhang and Kyaw (2017) defined institutional ownership as the portion of ownership stake which is controlled by companies such as commercial banks, underwriters and fund managers. The presence of these owners in an organization is likely to change management behaviors and organizational culture. Institutional owners come with experience and expertise which increase the shareholders monitoring and advisory roles. Hadani, Goranova, Khan and Raihan (2011) concluded that institutional owners are more incentivized to monitor the operations of the organizations because they usually have high stakes as compared to other ordinary shareholders. These investors are usually more exposed because of the huge investments they place in the company.

Previous research work is in conflict; they have not agreed on whether commercial banks reduce earnings management in these companies that they invest in or not. Ceccobelli and Giosi (2019) using ordinary least square regression methodology, concluded that there is a positive association between bank ownership and earnings management, their study explained that the selected banks did not have a long-term goal in the companies they invested in and as such they tend to encourage aggressive accounting in order to maximize the short-term gains. On the other hand, Bouvatier, Lepetit and Strobel (2014) used a fixed effect regression model and concluded that bank ownership and earnings management has a negative relationship. Their study explained that bank owners enhance the supervisory role thus minimizing the chances of earnings management.

From the above discussions, some studies have found that bank owners actually encourage aggressive accounting while other studies found a negative relationship, thus no consensus have been achieved. The supporters of a positive association claims that financial institutions

may not have the time to monitor the activities of the companies they own and as such this may lead to increased earnings management. Additionally, these studies found that bank owners are short term investors who encourage creative accounting with the intention to offload their stake once the share price has increased. On the contrary, proponents of a negative relationship maintain that bank owners are sophisticated investors capable of monitoring the aggressive use of discretions designed to distort faithful representation of financial facts. The current study aimed to determine the effect of bank ownership on earnings management of the non-financial companies listed in the NSE, Kenya.

Previous research work linking insurance ownership to earnings management have yielded both positive and negative results. Choi and Wang (2019) used generalized method of moments to investigate the role of underwriting companies in promoting or discouraging income smoothing practices in Australia. The results indicated that there was a positive relationship, that the insurance companies encourage creative accounting in the companies they invest in. Whereas, using the fixed effect regression methodology, Luo, Tang and Tong (2015) assessed the role of insurance ownership in earnings management. Their study concluded that there is a negative relationship, the insurance owners discourage creative accounting in the companies they invest in.

From the above studies, the debate about the role played by insurance companies in managing earnings or discouraging the practice has yielded conflicting results revealing that consensus has not been reached. This is because some studies reported that insurance companies reduce earnings management in the companies they invest in while others postulate that insurance companies encourage the practice. The studies which found a positive relationship explained that insurance companies invest their additional liquidity on companies' stock with an intention of making short term gains (usually within one accounting period). On the other hand, studies which found negative relationship explained

that insurance owners are long term investors who are more likely to increase financial transparency and reduce earnings management. Thus this current study sought to determine the effect of insurance ownership on earnings management of non-financial companies listed in the NSE, Kenya

The role of pension fund ownership in promoting or discouraging income normalization has been investigated by some researchers. However, similarly these studies also have posed mixed results. Deng and Tang (2010) examined whether pension fund ownership reduces earnings management or not. Using regression analysis, they reached the conclusion that pension fund managers actually encourage income smoothing practices. Yunhao, Dongmin and Li (2013) used random effect regression methodology and found that the inclusion of pension fund managers in the ownership structure of a company reduces the practices of earnings management. Their study similarly concluded that most of the pension fund managers have long term investment objectives and as a result are more expected to discourage earnings management.

From the above, empirical evidence linking pension fund managers and willful alteration of financial statements have produced conflicting views. Proponents of a positive relationship reason that pension fund managers are under pressure to meet certain performance level to give their members confidence thus they are likely to smoothen the earnings of the companies they control in order to meet the profitability expectation. On the other hand, proponents of a negative association propose that pension fund investors have the capacity to watch over the activities of internal management and prevent earnings management practices. The increased monitoring action leads to prudent financial practices and an increase in financial transparency. Therefore, the current study sought to assess the effect pension fund ownership on earnings management of the non-financial companies at the NSE.

The association of government ownership and creative accounting had also not been documented by many studies. The proponents of a negative relationship claimed that government ownership enhances cooperate governance and reduces earnings management activities (Ika, Rachmanti, Nugroho & Putri, 2021)., These companies owned by governments are not under any pressure to meet analysts focus since they are supported financially by the central government. They therefore lack the motivation of managing earnings (Bisogno & Donatella, 2021). On the other hand, some studies concluded that government managed cooperation suffer from political interference. This incentivizes the internal management to engage in creative accounting to reduce the impact of political exploitation from the books of accounts (Cohen, Bisogno & Malkogianni, 2019). The political interference weakens corporate governance and consequently this encourages aggressive application of accounting standards (Capalbo, Frino, Mollica & Palumbo, 2014).

From the above reviewed literature, proponents of positive relationship postulated that the government is big enough to hire professionals to represent them in companies' boards and hence this reduces earnings management on the contrary, those of negative relationship postulate that companies where the government have a controlling shareholding have more incentives to manage earnings. Furthermore, this is a subject which had not been looked at by many authors in the Kenyan market context. Consequently, the study aimed to determine the effect of government ownership on earnings management of the non-financial companies listed in the NSE, Kenya.

Most of the studies linking institutional ownership structure directly to earnings management have been done in mature financial markets with strong market efficiency, (Taiwan, Jordan, USA) Additionally, studies done in east Africa have examined the role of corporate governance in managing aggressive accounting they did not assess the role of bank, insurance, pension fund and government ownership in reducing or encouraging earnings

management in the firms where they have invested. Therefore, this study examined the effect of institutional ownership structure on earnings management of the non-financial companies listed in Nairobi securities exchange in Kenya.

1.2 Statement of the Problem

The failure of the commercial banks and big retailors confirms that companies can fail even under the watch of regulators and auditors. These failures destabilized the business ecosystem since suppliers of the retailors could not be paid their dues, moreover the customers of commercial banks did not receive their savings. The occurrence of these events also confirmed that managers of corporates are likely to misuse their privileged position to falsify the financial reports for their own benefit instead of running the affairs of the firm to maximize shareholder's wealth. Specifically, the fall of Dubai bank, Chase bank, Imperial bank, Uchumi and Nakumatt were been blamed on earnings management. Chase bank which was placed under receivership in 2016, Dubai bank in 2015, Imperial bank in 2015, Nakumatt in 2019 and Uchumi in 2006 has decreased investors' confidence and increased inspection from the regulator. The retailors could not pay up to 75% of the trade credit while the collapsed banks could not pay up to 85% of the depositors' savings. Even with the relative importance of these investors, little is known on their role in the Kenyan context. A number of studies done in Kenya have looked at impact of organizational governance structure in enhancing the quality of reported accounting information rather than looking at effect of institutional ownership structure on aggressive accounting practices. Other previous studies on institutional ownership structure does not agree on the role of institutional owners in enhancing or reducing earnings management. These studies have ineffectively addressed the problem of earnings management because they have shown conflicting results. Furthermore, none of these studies have actually broken down the various classes of institutional owners rather they have looked at them without regard to their specific characteristics. Therefore, this

study sought to determine the effect of institutional ownership structure on earnings management of the non-financial companies listed in Nairobi securities exchange in Kenya.

1.3 Objective of the Study

The main objective of the study was to determine the effect of institutional ownership structure on earnings management of the non-financial companies listed in Nairobi securities exchange in Kenya.

1.4 Specific Objectives

i. Determine the effect of bank ownership on earnings management of the non-financial companies listed in the NSE, Kenya.
ii. Determine the effect of insurance ownership on earnings management of the non-financial companies listed in the NSE, Kenya.
iii. Assess the effect of pension fund ownership on earnings management of the non-financial companies listed in the NSE, Kenya.
iv. Determine the effect of government ownership on earnings management of the non-financial companies listed in the NSE, Kenya.

1.5 Hypothesis of the Study

This study looked for evidence to enable rejection or the non-rejection of null hypotheses elucidated below.

i. Ho_1: Bank ownerships has no significant effect on earnings management of the non-financial companies listed in the NSE, Kenya.
ii. Ho_2: Insurance ownerships has no significant effect on earnings management of the non-financial companies listed in the NSE, Kenya.

iii. Ho_3: Pension fund ownerships has no significant effect on earnings management of the non-financial companies listed in the NSE, Kenya.

iv. Ho_4: Government ownerships has no significant effect on earnings management of the non-financial companies listed in the NSE, Kenya.

1.6 Justification of the Study

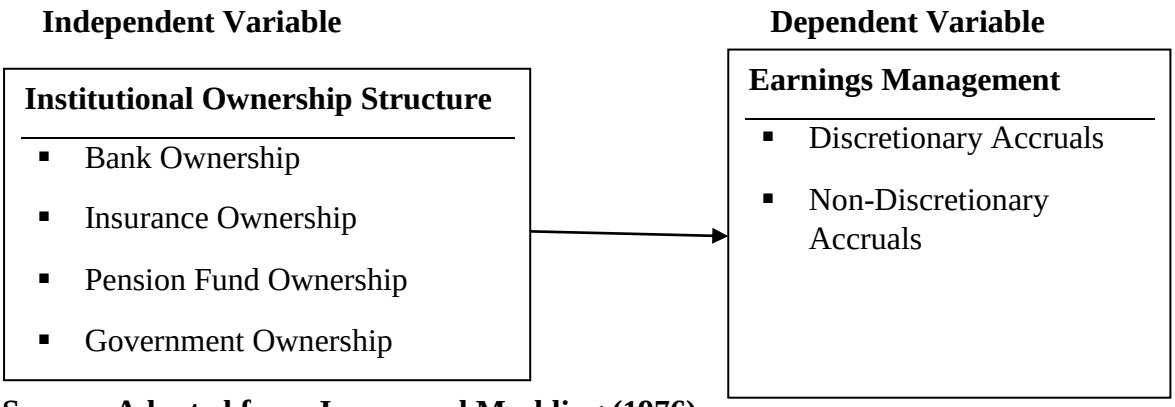
The results derived from this study contributed to policy development, specifically the capital markets authority and the central bank of Kenya may formulate specific policies relating to ownership structure of the companies under their regulatory mandate. The study findings can assist the present and potential investors to detect earnings management and take corrective actions. Additionally, the study contributed to academia by providing information using recent data. The study has also contributed towards theoretical development. The results from the study has either validated or failed to validate the assumptions of the anchoring theories.

1.7 Scope of the Study

The scope of this study focused on three thematic areas; subject matter, area and time. The study was therefore limited to the subject area of finance. Area or geographical scope served as the second aspect of the scope, the study focused on all the 38 publicly listed non-financial companies at the NSE, Kenya (Appendix 3). The time scope of the study covered five years (2014-2018) using secondary data from the 38 publicly listed non-financial companies and thus cross-sectional research design was used.

1.8 Conceptual Framework

The framework is a visual depiction of how the variables relate; it shows how earnings management relates with institutional ownership structure (Bank owners, insurance owners, pension fund owners and government ownership) visually. Figure 1.1 illustrate the inter-relationship amongst the variables.



Source: Adapted from Jensen and Meckling (1976)

Figure 1.1: The relationship between institutional ownership structure and earnings management.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section presents previous studies that were conducted on the subject matter, literature detailing how institutional investors manage the financial reporting of the investee companies is critically analyzed. This section also analyzed the theories which form part of the study assumptions.

2.2 Theoretical Review

This sub-section will analyze theories which support the possibility of a relationship between the variables. The assumptions and critique of the theories will be discussed in this section. Additionally, the empirical evidence supporting the assertions of the theory will also be presented in this sub section. Therefore, this section provides a theoretical guide on how the variables should relate.

2.2.1 The Agency Theory

The traditional agency theory was proposed by Jensen and Meckling (1976) as an improvement of the seminal work conducted by Smith (1776). The theory postulates that managers who are hired to run the affairs of the organization are more likely to serve their interest first as opposed to making decision s which maximize the organization wealth. The theory makes the following assumptions, That the management of the organization is different from the ownership of the company (Fama, Jensen, 1983), the theory also assume that human beings are inherently lazy and would not naturally complete tasks without proper supervision Fama (1980). The theory also assume that the owners of the company know what they want to achieve (wealth maximization) and that they have communicated their

objectives to the senior managers. The theory assumes the managers have their personal interest of maximizing their own wealth and this clash with those of the owners.

The theory states that there are conflicts points created by the modern organizations when ownership is separated from management. These conflicts are engineered by the natural tendencies inherent in mankind (laziness and greed). Human beings are presumed to be naturally lazy and would not want to deliver their full potential whenever they are given work (Ferrell, Fraedrich & Ferrell, 2014). Moreover, managers would prefer to enrich themselves instead of making decisions which are geared towards optimizing the owners' wealth, finally managers are likely to lie about their ability to manage the organization, this therefore leads to adverse selection by the shareholders. Shareholders are not likely to gauge correctly the ability of a manager and his/her ability to be faithful in discharging their duties (Josh, Muldoon, Liguori & Davis, 2016).

The goal incongruence demonstrated above incentivizes managers to falsify financial reports with the aim of meeting the contractual goals. According to Teshima and Shuto (2008), agency problems are compounded if top team managements' salaries are tied to certain performance matrices. Managers are therefore likely to select accounting policies and estimates which will lead to maximization of the bonuses earned during that accounting period. The theory therefore proposes enhanced monitoring of the managers. Active monitoring from the owners is likely to ensure that the contract between the managers and the owners is enforced. It increases the chances that the agent performs as expected thus reducing the chances of misreporting. Eventually these monitoring efforts lead to the production of financial statements which represent faithfully the occurrence of economic substance as they transpired in the organization (Roodposhti & Chashmi, 2011).

Mitra (2002) concluded that institutional owners have more knowledge in running the affairs of the organization as compared to the individual owners. They are therefore likely to use their experience and expertise to detect earnings management more than normal ordinary shareholders. Moreover, institutional shareholders are usually long-term investors; they also usually get a seat at the board of directors to protect their interest. They utilize voting power to control the affairs of the organization including the preparation of financial statements. Therefore, financial transparency can be enhanced through their involvement. These arguments therefore support the supposition that institutional ownership reduces earnings management in the organization (Wang, 2014).

The theory proposes that an organization should have an optimal mix of both individual owners and company owners because the institutional owners are assumed to be sophisticated in nature; Having professionals who assist them in monitoring managements behaviors. They can also hire competent auditors to help them detect creative accounting (Shah, Zafar & Durrani, 2009). Therefore, the theory links the monitoring behavior of institutional owners to earnings management. The institutional owners are also more likely to put management to account for their actions and thus ensure that managers perform as expected thus leading to shareholder wealth maximization. This theory explains the role of monitoring in eliminating income smoothing.

2.2.2 Active Monitoring Theory

The active monitoring theory was proposed by Koh (2003) in an attempt to explain the role of monitoring the managements activities in ensuring that they prepare financial statements which represent a faithful view. The theory assumes that institutional owners are long term investors and as such they are concerned with the overall wellbeing of their investments. The theory also assumes that institutional investors are more informed on issues of organizational

management. The third assumption is with regards to the financial muscle possessed by the institutional owners which enable them to hire competent analysts who will be able to provide them with advisories based on expert assessment needed to monitor the financial operation of the organization. Because of their expertise and experience the theory further assumes that institutional owners are likely to perform extreme due diligence before they invest their money in a company. Finally, the theory assumes that institutional investors will always have huge investments which enable them to get a seat at the board of management.

It is clear from the foregoing discussions that those institutional investors enhance financial transparency and reduce the use of discretionary accruals. These class of owners are well equipped in detecting earnings management better than normal ordinary shareholders. They can also use their monitoring role at the board level to control the aggressive behaviors of managers thus limiting the chances of creative accounting. Moreover, institutional managers have an in-depth understanding of how organizations operate; these experts are therefore less likely to be fooled by the discretionary accruals. They have the capacity to read, analyze and understand the financial statements thus eliminating the chance of being fooled by internal management based on discretionary application of accounting policies and estimates.

Empirical evidence supporting the theory is inconclusive; there are some studies which have agreed with the assumptions of the theory while other studies have disagreed with the assumptions of the theory. Chen, Weng and Fan (2016), Suyono and Eko (2018) and Ahmed, Mohamed and Tamer (2018) examined the role of non-individual investors in enhancing financial reporting transparency in three countries (Egypt, Taiwan and Indonesia). The results obtained from these studies indicate that the monitoring role played by institutional ownership enhances financial transparency. Hence these studies support the assertions of the active monitoring theory.

The theory opines that close monitoring of managements' action reduce the chances of aggressive reporting. Therefore, the theory concludes that a rise in the shareholding of institutional shareholders reduces aggressive use of accounting judgements hence leading to proper book keeping. This is because institutional owners are believed to improve shareholder monitoring role, hence these institutional owners help in detecting and deterring earnings management The active monitoring assumptions is significant to the study because it explains the nexus between active shareholder monitoring on the behaviors of managers and creative accounting.

2.2.3 Bonus Maximization Theory

The seminal works of Hearly (1985) on the intentions of investors produced this theory. The theory has five assumptions the first assumption posit that investors have short term goals; Maximization of short run returns such as dividends. The second assumption postulates that investors are concerned more in the short-term marginal increases in the stock prices as opposed to long run huge increases in the share price. This is because their investment goals do not allow them to take long term risk in a business venture. Most of the clients of the institutional owners require returns within an accounting period and as such institutional investors care more about what can increase profit.

According to this theory, managers are likely to engage in creative accounting under two circumstances; when there is a lot of earnings in a particular year, they normalize the profits in order to save the surplus earnings above the expected growth rate to be used during bad years. Managers will also manage earnings when the company performs below target, in this case they will engage in aggressive recognition of revenue and utilize previous years gains to smoothen the earnings. Given the above assumptions the theory therefore postulates that investors are likely to engage in income smoothing if doing so will increase the short-term

gains. The theory therefore postulates that investors are likely to encourage income normalization.

The legitimacy of these assumptions is actually anchored on the fact that there are some empirical studies which have found that the interest of institutional investors hardly outlives one year (Cheng & Reitenga ,2009). This short investment horizon does not therefore allow them to engage in the active monitoring of managements actions. Their sole interest is therefore fixed on maximizing the returns which they can achieve from their investments. The assumptions of the bonus maximization theory help in the understanding of the behaviors of the institutional owners. The theory postulates that institutional owners are short term investors because of their need for dividends from their customers. This theory is relevant as it also explains the specific characteristic of the investors which is likely to cause them to influence the preparation of less faithful financial reports of the companies they invest in.

2.2.4 The Passive Hand Theory

This theory explains the nexus between institutional investment and creative accounting. The theory assumes that investors are generally driven by profit motives and as such will only engage in activities which are deemed to be profit maximizing. The theory also assume that institutional investors are cautious on costs and are unlikely to invest in hiring professionals to monitor the behaviors of management. They would rather save that cost and earn more dividends than employ additional auditors to monitor management. Their interest is to maximize their short-term goal which is in terms of small capital gains and the annual dividends received from the companies they invest in. The theory also postulates that investors who are solely driven by profit motive will actually promote earnings management practices if by doing so their wealth will be maximized.

The theory therefore links investors to management behaviors thus supporting the notion that institutional investors can participate in earnings management so long as it maximizes their earnings (Parveen, Malik, Mahmood & Ali, 2016). Therefore, the theory asserts that institutional investors are more likely to increase aggressive accounting so as to maximize their gains. Outa, Eisenberg and Ozili (2017) actually confirm these assertions. This theory is important to the study to the extent that it challenges the agency theory and the active monitoring theory. This theory assumes that investors will play a passive role while the agency theory assumes that the investors will play an active monitoring role. The conflicting assertions therefore provide a provides a ground for conducting this research to confirm the assumptions which hold true based on a recent evidence. thus creating a good academic gap which needs to be researched further.

2.2.5 Concepts of Earnings Management

Earnings management is the provision of a piece of financial information that does not represent faithfully the financial transactions with the intention of misleading users of this information to arrive at a particular decision (Gonzalez & Garcia ,2014). Earnings management occurs when what is reported is substantially different from the economic reality of what transpired in the organization. This obviously leads to misrepresentation of facts and thus impairs the usefulness of financial statements. The true and fair position of what transpired during an accounting period is susceptible to willful manipulation if doing so is likely to influence the company valuation or better earnings for the agents.

Managers are incentivized to smoothen earnings if the future predictions reveal that the company will be making loses or that the current profits will deteriorate beyond expectations. In these circumstances the reporting of current profits will be postponed to a later time (Parveen et al., 2016). This strategy therefore allows the organization to report near equal

earnings from year to year. Earnings management is a multi-dimensional variable, there are several variables which affect the sanity of the reported figures. Some factors are internal, arising from corporate structure while others are external (Wang, 2014) created in the market through regulation and expectation of the potential investors.

2.2.6 Concepts of Pension Fund Ownership

Pension fund managers are representatives of the pensioners, these fund managers collect funds on behalf of their clients for investments purposes (Hadani, Goranova, & Khan, 2011). These investors are usually interested in long term returns and are usually heavily regulated. These investors bring with them experience and expertise which help the companies to grow. They also improve corporate governance within the organizations they invest in.

Odira, Miroga and Otinga (2020) avers that since pension fund managers act on behalf of the interest of retirees, they prefer to put their money on lesser risky ventures. Because of the sensitivity of their work, the government regulates the investment of pension fund through retirement Benefit Authority Act and investment policy statement which guides on the classes of assets which they can invest in. (Mungai & Ochieng,2018)

2.2.7 Concepts of Bank Ownership

Bank ownership is the portion of voting rights controlled by commercial banks in an investee company (Latif & Abdullah, 2015). The Kenyan banking sector is regulated by Central Bank of Kenya (CBK). This body provides the licenses to operate a deposit taking bank in Kenya. CBK has classified the banks in three tiers based on the asset base of the bank. Further classifications have been done to the Kenyan banks on the basis of the origin of the investors. (Appendix 4).

Ahn and Choi (2009) found that banks are sophisticated investors who have the capacity to know whether a company has smoothened their profits or not. Their skills and experience

play an important role in the financial reporting of investee companies. This class of investors have competent employees who are seconded to represent their interest at the investee company. These employees therefore monitor and actually influence the selection of accounting policies and how estimates are computed. This involvement therefore leads to a reduction in creative accounting and enrich the quality of financial material reported by the investee company.

2.2.8 Concepts of Insurance Ownership

Insurance ownership is level of control exercised by the risk underwriting companies on the investee. It is measured as a proportion of the voting shares owned by the underwriting companies. Insurance companies are regulated by the insurance regulatory authority. Insurance companies act as fund managers to their customers and as such they collect money and invest on behalf of their clients (Chen & Weng, 2016). They also invest the short-term excess liquidity in stock of companies with an intention of gaining from the marginal increase in stock prices and dividends.

2.2.9 Concepts of Government Ownership

Government is the amount of control exercised by the government agencies in a company (Capalbo et al., 2020). Government ownership can take three forms, one the government can own 100% stake in a company in this case this is called a parastatal, the government can also invest in a private company by buying its shares if it has a strategic interest and finally the government can sell part of its shareholding to private individuals and co own a company. In this study the government ownership will be computed as the composite value of all the shareholding by central government and county governments in a company.

2.3 Empirical Review

This part of the research proposal is dedicated to deal with the past studies conducted on the areas around the quality of financial reporting specifically on the problem of normalizing earnings by management. Therefore, this section will look at how the two main variables relate with each other based on the empirical evidence provided by other scholars. Similarities, differences and academic critique of the various research papers will be discussed to identify the gaps.

2.3.1 Effect of Bank Ownership on Earnings Management

Praveen (2016) looked at the impact of financial institution ownership in managing earnings management. Evidence was picked from 20 selected banks from Pakistan. The study covered the 12 financial years from 2000-2012.Fixed effect panel data regression technique was used to analyze panel data. Creative accounting was estimated using from the judgmental accruals. While bank ownership was assessed as the level of control exercised by financial institution in a company. The results indicate that the level of control exercised by commercial banks and the quality of financial reporting are not statistically related. This is a great departure from the assumption that institutional ownership increases monitoring and hence this leads to improved financial transparency.

Ajay and Madhumathi (2015) looked at bank ownership and earnings management practices using data from listed firms in India. Their study adopted the random effect regression methodology to analyze the analytical model. The level of discretion in estimating accruals was used to measure aggressive accounting practices. While institutional ownership was coded as a binary data (1 if the institutional shareholding is more than 20% otherwise zero). The study concluded that commercial banks reduce the aggressive accounting practices in the companies they invest in. Foreign shareholding was also found to promote faithful

representation of facts. This study confirms the assertions of active monitoring theory which stipulates that institutional ownership enhance the monitoring role of shareholders.

Ahn and Choi (2009) examined whether debt financing affect the quality of financial reporting. Their study was set to investigate whether banks exert pressure on their corporate borrowers to report faithfully what transpired in their company. The study adopted the use of random effect regression methodology to analyze the financial records of 840 borrowers for a period of ten years (1999-2008). This paper concluded that banks enhance the corporate governance mechanisms of the borrowers. Banks insist in good governance since it has a positive effect on the ability of the firm to repay its loan. Additionally, the study concluded that debt financing reduces the aggressive accounting practices because the banks monitor the activities of the borrower and also because the borrowers want to qualify for more financing in future.

From the above literature, it is apparent that the previous studies provide conflicting evidence on the direction of association between the level of control exercised by banks on their investees and aggressive accounting. Using a fixed effects regression model Praveen (2016) failed to find statistical evidence linking the control exercised by commercial banks in a company to faithful financial reporting. While Ajay and Madhumathi (2015) using a random effect regression methodology found a negative relationship. Yet, Ahn and Choi (2009) used the random effect regression design and found that commercial banks actually reduce earnings management practices of the borrowers they have advanced loans to.

The results of the literature reviewed shows that debate on the relationship between bank ownership and aggressive application of accounting estimates is yet to be concluded. Some scholars concluded that the commercial banks actually reduce earnings management in the

investee companies, while some scholars postulate that they increase earnings management practices in the investee companies, while others aver that there is no impact. These variant results are also supported by the existing theories. The studies which found a positive result support the assumptions of the bonus maximization theory while the negative results validate the assumptions of the active monitoring theory. This therefore justified the need to examine these factors further. Thus, one of the objective of the current study was to determine the effect of bank ownership on earnings management of the non-financial companies listed in the NSE, Kenya.

2.3.2 Effect of Insurance Ownership on Earnings Management

Chen, Weng and Fan (2016) examined whether institutional owners particularly insurance owners affect financial transparency. The paper classified these institutional investors as either long term investors or short-term investors. To this end the paper sough to find out if the investment period affects the monitoring role of institutional investors. Taiwanese companies were used as the unit of analysis for a 12-year period (2001-2012). The study adopted random effect method to conduct data analysis. The study concluded that the long-term institutional investors increased financial transparency in a company. While short term institutional investors encourage earnings management in a company.

Mafunga, Fwamba and Ondiek (2019) looked how managerial ownership affect the financial transparency of underwriting firms. The research was set to investigate whether the issuance of ownership stake to managers would affect the aggressive accounting practices in the insurance industry. Evidence was collected form six underwriting companies whose shares were publicly trading for a period of 8 years (2010 to 2017). The results found that managerial ownership increases earnings management. The study explained that when managers gain ownership of the company, they think about maximizing their own wealth.

One of the strategies employed by managers to create a false impression is to normalize earnings by creating a near constant stream of earnings by reducing or increasing the profit to achieve the analyst forecast and hence increase the share price.

The discussion on whether risk underwriters promote or discourage normalization of earnings is far from over. Evidence from previous research indicate that the insurance companies may either increase or decrease aggressive accounting practices in the investee company. Chen, Weng and Fan (2016) used fixed effects regression methodology to investigate whether underwriting companies increase or decrease aggressive accounting practices in the companies they have a controlling interest in. This study concluded that risk underwriters actually reduce earnings management practices. However, Mafunga, Fwamba and Ondiek (2019) using OLS regression methodology found that risk underwriters actually encourage earnings management practices.

The reviewed studies have used different approaches (ordinary least square regression methodology and fixed effect regression methodology) and found conflicting results. Some of the scholars found that risk underwriters actually increase the use of discretionary accruals in the financial reporting of their investee companies. On the other hands some studies concluded that insurance companies discourage normalization of earnings. It is therefore clear that there is a need to investigate further the reason behind the conflicting empirical evidence. Based on the above arguments, one of the specific objectives of this study was to examine the effect of insurance ownership on earnings management of the non-financial companies listed in the NSE, Kenya.

2.3.3 Effect of Pension Fund Ownership on Earnings Management

Njah and Trabelsi (2019) investigated whether large institutional investors encourage or discourage creative accounting. The study looked at 130 companies whose shareholding were predominantly held by pension fund managers and private equity funds. Data was collected for ten years from 2004-2015.The dependent variable was institutional ownership (A combination of pension fund managers and Private equity fund managers). The independent variables included earnings management, management structure and aggressive accounting. The study used cross sectional regression analysis to analyze the collected data. They used random effect regression methodology. The results showed that pension fund ownership reduces earnings management practices.

Theurillat, Corpataux and Crevoisier (2008) looked at the impact of pension fund ownership on the financial reporting activities of those companies they have a controlling interest in. The study collected data from 98 listed firms in Switzerland over a period of ten years from 1997-2007.Random effects regression methodology was used to analyze the impact of pension fund ownership on corporate governance and financial transparency. The results indicate that the pension fund managers use their power to ensure that there is financial transparency in the companies they own. This transparency is instituted through good corporate governance. Their study therefore concluded that there is a positive relationship between good corporate governance, financial transparency and pension fund ownership.

San (2018) looked at how fund managers influence the financial reporting activities of the companies they have invested in. Generalized method of moments was deployed to perform their study. Panel data was collected from sixty-seven companies whose stock are trading at the Mexican Stock Exchange for a period of ten years (2005-2015). Results indicate that the pension fund managers actually reduce earnings management practices in the firms where

they have a controlling interest. These results indicate that increasing the participation of the pension fund managers in a company leads to increased monitoring in the company and reduced aggressive accounting.

Most of the studies which have reviewed pension fund ownership and aggressive accounting have yielded divergent results. Some studies have found that the fund managers reduce creative accounting the companies they invest in. While other studies have found that fund managers actually encourage earnings management practices. Njah and Trabelsi (2019) used a random effect regression model to analyze the relationship between pension fund owners and creative accounting. Their results indicate that there was a decrease in the use of discretionary accruals in companies owned by these investors. However, Theurillat, Corpataux and Crevoisier (2008) used a random effect regression methodology and found a positive relationship. Additionally, San (2018) used a different methodology generalized methods of moments and found a negative relationship.

The studies used different regression methodologies (random effect and generalized methods of moments) and found conflicting results. The studies which found a positive relationship used the random effect regression methodology while the studies which found a negative relationship used both the random effect and generalized methods of moments. The current study therefore will use multiple OLS regression methodology. Additionally, most of these studies were done economies with strong market efficiency where stock prices reflect market information. These results were likely to be different in a market such as Kenya which operates in a semi strong market efficiency environment. Therefore, one of the study objective was to assess the effect of pension fund ownership on earnings management of the non-financial companies listed in the NSE, Kenya.

2.3.4 Effect of Government Ownership on Earnings Management

Emma (2021) looked at the impact of government ownership on earnings management using the Swedish companies. The study compared thirty-six real estate companies owned by private entities to thirty-two companies owned by the government and municipal counties. The study findings report a statistically significant negative relationship between government ownership and earnings management. Thus this means that government owned entities did not practice earnings management as compared to the privately owned companies. This study explained that government ownership enhances the corporate governance and encourages conservatism. The enhanced corporate governance therefore leads to better financial reporting.

On one hand, the central governments lack the expertise and the rigor which is needed to monitor the affairs of the internal management. They therefore lack the capacity to monitor effectively the affairs of the companies they invest in (Al-Janadi et al., 2016). There are empirical evidence supporting the positive relationship. Ben-Nasr et al. (2015) found evidence backing up the fact that firms which were state owned have more incentives to manage earnings than private owned organization. Their study found that these organizations manage earnings for political purposes. They must not show the true extent of political exploitation. Capalbo et al. (2020) also found evidence supporting the existence of a positive government ownership and earnings management relationship. Hence one of the objectives of this current study was to determine the effect of government ownership on earnings management of the non-financial companies listed in the NSE, Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section discusses logical steps followed to attain the desired objectives of the study. It discusses; Research design, area of the study, population targeted, the technique of sampling, procedures of collecting data, the instruments of data collection, data analysis and presentations.

3.2 Research Design

The research design is the logical stepwise methodology followed by the researchers to achieve the goals of the study (Mugenda & Mugenda, 2003). It is the science of doing the research based on a reasonable laid down procedure. This plan involves the comprehensive description of the steps to be followed in the entire process. Additionally, Cooper and Schindler (2008) concluded that the research methodology outlines how hypotheses will be built, the confidence level and how test for statistical significance will be done. The research design also details how data is collected and analyzed and how the results will be generalized to other circumstances (Cooper & Schindler, 2008).

This study employed the cross-sectional research design; because the data collected is a cross sectional data from the various non-financial companies over five years. The research relied mostly on secondary data from audited financial statements. Cross sectional survey is used to investigate cause and effect relationships. Additionally, Bryk and Raudenbus (1992) argued that cross sectional research methodology is relevant where the study investigates the panel data. The current study was a combination of cross-sectional data coming from different companies and time series data because data is collected over a period of five years. This

therefore forms a panel data which can be effectively handled through the cross-sectional research design.

3.3 Study Area

This study looked at the effect of institutional ownership structure on earnings management of the non-financial companies listed in the Nairobi Securities Exchange, Kenya. The independent variable of the study is institutional ownership structure quantified by the proportion of company ownership owned by other institutions; banks, insurance companies, pension fund owners and government. The study was based in Kenya at the NSE, using the population of all of the non-financial companies listed at the Nairobi Securities Exchange. Kenya is located within the coordinates 1°00′N 38°00′E, East of Africa, covering an area of 582,650km^2.

3.4 Population of the Study

The sum of the possible observations in a particular area is defined as population (Mugenda, 2007). The population consist of all the possible scenarios in a given circumstance or study. All the publicly quoted non-financial enterprises at the NSE as at 31 December 2018 please refer to (Appendix 3) formed the population. The 38 listed non-financial companies are further subdivided into sectors as shown below in table 3.1.

Table 3.1: Population Frequency

#	Sector	No. of non-financial Companies	Percentage
1	Agricultural	6	16%
2	Automobiles and Accessories	1	3%
3	Commercial and Service	12	31%
4	Energy and Petroleum	5	13%
5	Manufacturing and Allied	8	21%
6	Telecommunications	1	3%
7	Construction and Allied	5	13%
	Total	**38**	**100%**

Source: NSE (2019)

The justification for selecting the listed companies is premised on the fact that data was publicly available. It is a requirement by the capital markets authority that the publicly listed companies must make their financial statements public. Additionally, Non-financial companies had been selected because the financial industry (which comprise banks and insurance companies) usually invest their excess liquidity in these companies to help in managing their liquidity and also to diversify their investments. Therefore, the choice of non-financial companies become reasonable to enable the study to verify the effect of institutional ownership structure on creative accounting. Finally, a census study was conducted which looks at all the variables under consideration. The choice for a census study was informed by the fact that the population consist of few observations (38 companies) moreover data was readily available through the published financial statements.

3.5 Data Collection Methods

This section deals with the various methodologies to be used during the research, the section looked at the procedures of collecting data, sources of data, and the instruments of collecting data.

3.5.1 Sources of Data

The study used quantitative data extracted from the audited general-purpose financial statements. Specifically, this study extracted information from the income statements and the statement of financial position.

3.5.2 Data Collection Procedures

These are the steps taken to collect the required data from the data sources and authoritative sources such as journals, publications from regulators and audited financial statements. The research was quantitative in nature and as such most of the data was collected through a structured template (appendix 2) from the audited financial statements.

3.5.3 Data Collection Instruments

This study collected secondary data using a structured data template as shown in appendix 2. The template guided the researcher on the relevant data which was required to calculate earnings management, bank owners, insurance owners, pension fund owners and government owners.

3.6 Data Analysis and Presentation

This study used descriptive statistics (maximum, minimum, mean and standard deviation) to perm preliminary data analysis. The study used the Pearson correlation analysis to define the strength and direction of correlation between independent variables (bank, fund managers, insurance and government ownership) and dependent variable. The normality of the data set was tested using Shapiro–Wilk. Serial correlation among the variables was tested using the Durbin Watson test, Heteroskedasticity was tested using the Levine test. The problem of Multicollinearity was tested using VIF and tolerance. The first order conditions and second order conditions tested above gave assurance that the data set can be relied upon to infer about the general population.

The study also used OLS regression methodology to estimate the individual effect of the various independent variables (Bank owners, insurance owners, pension fund owners and government owners) on earnings management. The regression analysis helped to test the null hypotheses made in the research through the research questions. It answered the question as to whether the institutional ownership structure (bank, pension fund managers, insurance and government ownership) have a meaningful influence on creative accounting. The regression model tested the goodness of fit through the R-square, the ANOVA validated the model and the P -Value was used to validate the individual relationship of the independent variables using the unstandardized coefficients. Presentation of data was done using frequency tables.

3.6.1 Model Specification

The regression equation explains the estimated line of best fit which was proposed by the research, the equation contains both dependent and the independent variable. The sub-section deals with operationalization of the variables. Variables are defined and given operational meaning through a selected criterion guided by past similar studies.

$\mathbf{EM_{i-j\ t}}$ = Constant EM $+\boldsymbol{\beta_1}$ Bank $\text{Ownership}_{\mathbf{i-j\ t}}$ + $\boldsymbol{\beta_2}$ Insurance $\text{Ownership}_{\mathbf{i-j\ t}}$+ $\boldsymbol{\beta_3}$ Pension $\text{Fund Ownership}_{\mathbf{i-j\ t}}$ + $\boldsymbol{\beta 4}$ Government Ownership + $\boldsymbol{\varepsilon_{i-j\ t}}$

The regression equation was further reduced to a mathematical:

$$\mathbf{Y_{i-j\ t} = C + \beta 1 X1_{i-j\ t} + \beta 2 X2_{\ i-j\ t} + \beta 3 X3_{i-j\ t} + \beta 4 X4_{i-j\ t} + \varepsilon_{i-j\ t}}$$

Where:

Y= Earnings Management

C= Constant Term

β_1, β_2, β_3& β_4 = Coefficients

$X_{1=}$ Bank Ownership

$X_{2=}$ Insurance Ownership

$X_{3=}$ Pension fund Ownership

$X_{4\ =}$ Government Ownership

$_{\mathbf{i-j\ =}}$ Company i to j

$_{\mathbf{t=}}$ Current year

The variables were further defined in the analytical model as follows.

Table 3.2: The Regression Equation: Explanation of the Variables

#	Symbol	Variable	Explanation/Measurement Criterion
1	Y	Earnings Management	DA based on Jones (1995) (Appendix 1)
2	C	Constant Term	This is the elective accruals which is not independent of any other variable under consideration.
3	β_1, β_2, β_3& β_4	Coefficients	Regression coefficient of the Independent Variable used to gauge the individual effect of Bank ownership, Insurance ownership, Pension fund ownership and government ownership on earnings management
4	X_1	Bank Ownership	The level of shareholding control exercised by financial banks in a company (Total number of shares owned by banks /total ordinary shares)
5	X_2	Insurance Ownership	The proportion of voting rights in a company owned by underwriting companies. (Total number of shares owned by Insurance companies /total ordinary shares)
6	X_3	Pension fund Ownership	The portion of controlling interest owned by pension fund managers in a company. (Total number of shares owned by pension fund companies /total ordinary shares)
7	X_4	Government Ownership	Government ownership will be measured as the proportion of shares owned by the central government, parastatals and county governments. This ownership will be combined into one variable. (Total number of shares owned by Government /total ordinary shares)

Source (Research,2021)

3.6.2 The Analytical Model and Hypothesis Testing

This portion describes the holistic view of how the research objectives relate to the statistical hypotheses and the analytical models related to each of the research question. It defines the research objective, the relevant hypothesis for the individual explanatory variable and the relevant analytical model for the independent variable.

Table 3.3: Study Objectives, Hypotheses, and Analytical Models

Objective	Hypotheses	Analytical Model
Determine the effect of Bank ownership on earnings management	Bank ownership and earnings management have no significant relationship	Y_t= f (Earnings Management) $Y_t = \beta_0 + \beta_1 X_{1\,t} + e$ Where Y_t =Earnings management; β_0, β_1, are coefficients; X_1t= bank ownership; e = error term
Determine the effect of Insurance ownership on earnings management	Insurance ownership and earnings management have no significant relationship	Y_t = f (Earnings Management) $Y = \beta_0 + \beta_2 X_{2\,t} + e$ Where Y_t = Earnings management; β_0, β_2, are coefficients; $X_{2\,t}$ = Insurance ownership; e =error term
Assess the effect of Pension fund ownership on earnings management	Pension ownership and earnings management have no significant relationship	Y_t = f (Earnings Management) $Y = \beta_0 + \beta_3 X_{3\,t} + e$ Where Y_t = Earnings management; β_0, β_3, are coefficients; $X_{3\,t}$ = Pension fund ownership; e =error term
Determine the effect of Government ownership on earnings management	Government ownership and earnings management have no significant relationship	Y_t = f (Earnings Management) $Y = \beta_0 + \beta_4 X_{4\,t} + e$ Where Y_t = Earnings management; β_0, β_4, are coefficients; $X_{4\,t}$ = government ownership; e =error term

Source (Research,2021)

3.6.3 Test of Significance

The study used P-statistic to verify the statistical association between the variables. The used statistical significance level is 95% while the confidence level (Alpha) is set at 5%. since the study examined relationships which can take either direction. The null hypothesis which was set as a negative statement is rejected if the probability of its occurrence is greater than 5%. These standards were used for testing the overall model validity and the individual statistical significance of the individual independent variable.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND INTERPRETATION

4.1 Introduction

This chapter presents the findings of the study by data analysis and the related interpretation which help in policy development. The chapter analyzes the response rate, the descriptive statistics based on the selected variables, correlation analysis to look at the probable direction of association and the regression analysis to establish the true statistical relationship of the variables.

4.2 Descriptive Statistics

The descriptive statistics are the preliminary analysis which describes the data generally, these statistics help the researcher to have summarized view of the data in order to identify whether there are outliers. The selected statistics for this analysis include minimum statistic indicating the minimum value of a variable, maximum statistic indicating the maximum value of a variable, the mean statistic indicating the mean of the variable and standard deviation indicating the standard deviation from the mean score.

Table 4.1: Descriptive Statistics

		Earnings	Bank	Pension	Insurance	Government
#	Details	Management	Ownership	Ownership	Ownership	Ownership
1	Minimum	-0.0322	0.0004	0.0000	0.0288	0.0000
2	Maximum	285.4027	0.0938	0.0987	0.3281	0.7509
3	Mean	4.1096	0.0427	0.0215	0.1128	0.49655
4	Std. Deviation	21.9494	0.0259	0.0207	0.0415	0.1968
5	Skewness	10.7760	0.2280	1.5800	1.2850	2.1460
6	Std. Error Skewness	0.1690	0.1690	0.1690	0.1690	0.1690
7	Kurtosis	133.5750	-1.0850	2.1850	3.5790	3.2150
8	Std. Error Kurtosis	0.3370	0.3370	0.3370	0.3370	0.3370

Source (Research Findings,2021).

Table 4.1 shows the results of the descriptive statistics, earnings management had a minimum value of - 0.0322 and a maximum value of 285. 4027.This means that the least value of earnings management is - 0.0322, while the maximum value of earnings management is 285. 4027.The average earnings management is 4.1096 while the deviation from the mean score is 21.9494.This implies that there is an outlier in the variables on both sides. On the positive side the maximum value of EM is way far from the mean score of 4.1096 while on the lower side there is a big difference between the minimum of -0.0322 and the mean. These differences explain the high standard deviation of 21. 9494.These variables will therefore be replaced by the mean score in order to eliminate the impact of outliers in the analysis.

The variable bank ownership has a minimum statistic of 0.0004 this implies that the minimum bank ownership level is 0.04%. On the other hand, the maximum statistic is 0.0938, this implies that the maximum bank ownership level is 9.38%. The mean value is 0.0427 which implies that on average commercial banks own 4.27 % of the shares of the companies they invest in. The standard deviation from the mean score of 0.0259implies that the deviations from the mean score are not very large meaning that there are no outliers in the data. This is a preliminary indicator that the data is normally distributed.

The minimum statistic for pension ownership is 0.0000, thisimplies that there is at least one company in the data set where there is no pension fund ownership. This is particularly true because pension fund managers are guided by laws on where to invest and where not to invest the pensioners' money. It is therefore possible that some non-financial companies do not meet the criteria for investment by pension funds particularly if they have poor performance. The maximum statistic is 0.0987 this implies that the maximum level of investment by pension fund is 9.87% of the total shares of the company. Additionally, on average the pension fund invest 2.15% of their investments in the non-financial companies.

The standard deviation of 0.0207 indicates that there are no outliers and hence a preliminary assumption of normality.

The variable insurance ownership has a minimum statistic of 0.0288 this means that the minimum shareholding of insurance companies is 2.88%. The maximum statistic is 0.3281, this implies that the maximum ownership for the insurance companies is 32.81%. On average insurance companies own 11.28% (0.1128) of the shareholding of the non-financial companies. The standard deviation for this variable is 0.0415, this implies that there are no outliers and that the variable is normally distributed.

Government ownership has a minimum statistic of 0.0000, this means that the government has not invested in some of the listed non-financial companies. This is true because the government has only invested in a few companies but not all. The maximum statistic is 0.7509 this means that the government owns 75.09% of shares in one of the listed non-financial companies in Kenya. However, the mean score is 0.49655, meaning that on average the government owns 49.65% of the shareholding. In most cases the government owns a majority of shareholding in the companies they invest in so that they can have a controlling interest. The standard deviation of 0.1968 implies that there are no outliers in the data set since most of the data are around the mean score.

4.3 Pearson Correlation

Pearson correlation isa statistic which is designed to show the probable relationships between the independent variables and the dependent variable. It is an indicator of how the variables are likely to be related. However, this statistic does not show the relationship between the variables but how one variable behaves as compared to the other. The statistic run from -1 to + 1, where +1 indicates that there is a perfect positive correlation while -1 indicate that there is a perfect negative correlation and 0 indicate no correlation.While a correlation coefficient

of between 0 to +2.4 and 0 to -2.4 indicates no correlation, a coefficient of +2.5 to +0.4 indicate a weak positive correlation and a coefficient of -0.25 to -0.4 indicates a weak negative correlation. Positive moderate correlation ranges between 0.45 to 0.75 while moderate negative correlation ranges between -0.45 to -0.75. A strong correlation ranges between 0.75+ or – to 1 for positive and negative correlations respectively.

Table 4.2: The Pearson Correlation Statistics

#	Variables	Earnings Management	Bank Ownership	Pension Ownership	Insurance Ownership	Government Ownership
1	Earnings Management	1				
2	Bank Ownership	-0.259	1			
3	Pension Ownership	0.279	-0.471	1		
4	Insurance Ownership	0.259	0.023	0.548	1	
5	Government Ownership	-0.06	0.362	-0.09	0.132	1

Source (Research Findings,2021).

Table 4.2 indicates that earnings management and bank ownership has a weak negative correlation (coefficient of -0.259). This implies that there is likely to be a negative association between earnings management and bank ownership; one variable increases while the other variable decreases. The correlation coefficient of earnings management and pension Fund ownership is 0.279 this implies that there is a weak positive correlation between the variables. This means that the variables move in the same direction; one variable increases as the other increases or one variable decreases as the other variable decreases. The table 4.2 above also indicate that there is a weak positive correlation between insurance ownership and earnings management (0.259). This means that the variables move in the same direction. Finally, the results indicate that earnings management and government ownership has no correlation (coefficient of -0.06).

4.4 Diagnostic Tests

Diagnostic tests are conducted to determine if the data can be relied upon while making inferences to the population. Diagnostic test checks the normality of the data set, linearity of the data set, it also determines whether the independent variables are related with each other and the homogeneity of the data set. These tests are important since they provide assurance that the results will be accurate and that those results can be used to infer about the characteristics of the population.

4.4.1 Normality Tests

Normality tests are done to check if the data set is normally distributed, these checks investigate whether the data sets have outliers, that most of the data are around the mean score. This study has adopted two statistical tests for normality; Kolmogorov-Smirnova and Shapiro-Wilktest. These two tests are robust in determining the normality of a data set statistically. The null hypothesis which is tested by this statistic avers that the data set is normally distributed. Therefore, a data set which has a significance value which is more than 0.05 is assumed to have come from a normal distribution; The distribution is assumed normal if Sig value is greater than 0.05.

Table 4.3: Kolmogorov-Smirnova and Shapiro-Wilk Test of Normality

#	Details	Kolmogorov-Smirnova Sig.	Shapiro-Wilk Sig.
1	Earnings Management	0.45	0.53
2	Bank Ownership	0.43	0.45
3	Pension Ownership	0.48	0.45
4	Insurance Ownership	0.59	0.23
5	Government Ownership	0.52	0.54
6	a Lilliefors Significance Correction		

Source (Research Findings,2021).

Table 4.3 shows the results of the normality tests; these results indicate that the dataset comes from a normally distributed distribution. This is because the SIG values for both the Kolmogorov-Smirnova and Shapiro-Wilk test indicate that the Sig values are more than 0.05. The study therefore concludes that the distributions come from a normally distributed data.

4.4.2 Test of Multicollinearity

Multicollinearity tests whether the independent variables are not related with each other. This test is important because if the variables are related with each other, then the regression model will provide inaccurate results.

Table 4.4: Test of Multicollinearity

#	Details	Variance Proportions	Condition Index	Eigenvalue
1.	Bank Ownership	0.00	2.025	0.865
2.	Pension Ownership	0.01	2.756	0.467
3.	Insurance Ownership	0.43	6.923	0.074
4.	Government Ownership	0.55	8.547	0.049

Source (Research Findings,2021).

There are three parameters which are used to test whether the variables are related to each other or not. These tests include eigenvalue test, Variance Proportions and the Condition Index. Therefore, multicollinearity is assumed absent if the following conditions are true (if eigenvalue value is less than 1, if the condition index is less than 30 and if variance proportions is less than 0.9). Based on these parameters we conclude that there is no multicollinearity; all the variance proportions are less than 1, all the condition indexes are less than 10 and the all the eigenvalues are less than 1.

4.4.3 Test of Serial Correlation

Serial correlation is a problem which occurs in time series data, it occurs if the collected data about a variable is a subset of the same variable in future. Serial correlation is the correlation between the variable and itself due to time. Therefore, the serial correlation test checks whether the variables are not correlated with themselves. The Durbin-Watson statistic is used to test for serial correlation.

Table 4.5:The Durbin-Watson Test of Serial Correlation

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.350a	0.123	0.105	20.76178	1.631

a Predictors: (Constant), Government Ownership, Pension Ownership, Bank Ownership, Insurance Ownership
b Dependent Variable: Earnings Management

Source (Research Findings,2021).

The Durbin Watson statistic which tests for serial correlation runs from 0 to 4. The statistic is interpreted as follows; if the statistic is between 1.5-2.5 then it is presumed that there is no autocorrelation. The values between 2.5 to 4 indicate the presence of negative autocorrelation and if the statistic is less than 1 then there is a positive autocorrelation. Table 4.5 indicate that there is no serial correlation since the statistic is within 1.5 to 2.5 (1.631).

4.5 Regression Analysis

This section provides the details of the regression analysis;however, the model summary and the analysis of variance has been discussed before the main regression estimates are presented.

4.5.1 Model Summary

The model summary estimates the proportion of the dependent variables which is explained by the model. It shows how the variables jointly affect dependent variable. The statistics uses the adjusted R square to estimate the proportion of the dependent variable which is explained by the predictor variables. Table 4.6 shows the results of the model summary. The adjusted R square of 0.105 indicates that the selected predictor variables (government ownership, pension ownership, bank ownership, insurance ownership) explain 10.5% of the changes in the dependent variable (earnings management). The remaining 89.5 % are explained by other variables which are not subject to this study.

Table 4.6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.350a	0.123	0.105	20.76178	1.631

a Predictors: (Constant), Government Ownership, Pension Ownership, Bank Ownership, Insurance Ownership

b Dependent Variable: Earnings Management

Source (Research Findings,2021).

4.5.2 Analysis of Variance (ANOVA)

This statistic is used to establish if the model as set out in the study is statistically significant in explaining dependent variable. This statistic looks at the joint impact of the explanatory variables on the dependent variables. Specifically, for this model the Analysis of variance statistic looks at the joint effect of government ownership, pension ownership, bank ownership, insurance ownership on earnings management.

Table 4.7: Analysis of Variance (ANOVA)

ANOVA[a]		Sum of Squares	Df	Mean Square	F	Sig.
Model	Regression	12122.95	4	3030.739	7.031	.000 [b]
	Residual	86641.37	201	431.052		
	Total	98764.33	205			

a Dependent Variable: Earnings Management

b Predictors: (Constant), Government Ownership, Pension Ownership, Bank Ownership, Insurance Ownership

Source (Research Findings,2021).

This statistic uses both the Sig value to assess whether the independent variables have a joint impact on the dependent variable. The null hypothesis for this test avers that there is no statistically significant joint impact of the independent variables on the dependent variable. The Sig value provides the probability that the null hypothesis is true. Therefore, we reject the null if the Sig value is less than 0.05 and collude that there is a joint impact of the predictor variables on the dependent variable. Table 4.7 indicate that the selected predictor variables explain the changes in the dependent variable. This is because the Sig value is 0.00. we therefore reject the null hypothesis and conclude that the model is statistically significant in explaining the changes in earnings management.

4.5.3 Regression Model

The model shows the relationship between the variables under consideration, it establishes the relationship between earnings management and government ownership, pension ownership, bank ownership, insurance ownership. The regression statistic uses the confidence level to establish whether the relationship is statistically significant relationship between the independent variables and the dependent variable. The null hypothesis for this test states that there is no statistically significant effect. The Sig value provides the probability that the null

hypothesis is true. Therefore, the null is rejected if the Sig value is less than 0.05 otherwise, we fail to reject the null hypothesis.If the null hypothesis is rejected, we conclude that there is a statistically significant relationship between the variable.

Table 4.8: Regression Model

#	Coefficients [a]	Standardized Coefficients	Std Error	T	Sig.
1	(Constant)		4.900	-0.628	0.531
2	Bank Ownership	-0.276	72.093	-3.245	0.001
3	Pension Ownership	-0.141	102.388	-1.462	0.145
4	Insurance Ownership	0.345	45.342	4.025	0.000
5	Government Ownership	-0.019	7.976	-0.261	0.795

a Predictors: (Constant), Government Ownership, Pension Ownership, Bank Ownership, Insurance Ownership

a Dependent Variable: Earnings Management

Source (Research Findings,2021).

Table 4.8 shows the results of the regression analysis the results indicate that there is no constant earnings management (Sig is 0.531 which is higher than 0.05). This means that earnings management has to depend on something it is not a standalone variable. Bank ownership has a negative statistically significant relationship with earnings management (coefficient = -0.276), Sig = 0.001 this is less than 0.05 we thereforereject the null and conclude that the variable is significant). A change in bank ownership causes a change in earnings management by -0.276. Pension fund ownership has a negative relationship with earnings management. However, this relationship is not statistically significant (coefficient = -0.141, Sig = 0.145 this is more than 0.05 we therefore fail to reject the null and conclude that the variable is not significant). Because the variable is not statistically significant the research cannot comment on the extent of relationship.

The table also indicate that Insurance ownership and earnings management have a statistically significant positive relationship (coefficient = 0.345, Sig = 0.000 this is less than 0.05 we therefore reject the null and conclude that the variable is significant). This implies that a change in the insurance ownership causes a change in earnings management by 0.345. Government ownership and earnings management have a negative relationship however this relationship is not statistically significant (coefficient = -0.019, Sig = 0.795 this is more than 0.05 we therefore fail to reject the null and conclude that the variable is not significant). The research can therefore interpret the coefficient as zero since the variable is not significant. Therefore, the following equation is developed from the results (based on the variables which are statistically significant). The rest of the variables are excluded from the equation because they are not statistically significant.

$$\mathbf{Y_{i-j\,t} = C + \beta 1 X1_{i-j\,t} + \beta 2 X2_{\,i-j\,t} + \beta 3 X3_{i-j\,t} + \beta 4 X4_{i-j\,t} + \varepsilon_{i-j\,t}}$$

$$\mathbf{Y_{=}} -0.276\mathbf{X1_{i-j\,t}} + 0.345\mathbf{X2_{\,i-j\,t}}$$

4.6 Discussion of Research Findings

The results indicate that there is no constant earnings management, this implies that earnings management has to be inspired by other variables. These findings are consistent with the findings of (Njogu, 2016) who found that earnings management cannot be practiced for no sake. Nico and Hengky (2017) found that earnings could be managed in order to enhance the stock returns by meeting the analysts forecast. The falsification of financial statements is also performed so that the organization can pay less taxes (Noviana & Dewi,2018). Internal management also tamper with the true worth of a company in order to earn their performance-based bonuses (Kirubel &Akmel, 2019). These studies help in understanding the reason why there is no constant earnings management. It has to be inspired by something; it is not an accident rather a strategy used by management to achieve a predetermined goal.

The study also found that there is a statistically significant positive relationship between earnings management and insurance ownership. These results are consistent with the findings of Mafunga, Fwamba and Ondiek (2019) who used the OLS regression methodology and concluded that there is there is a positive relationship between insurance ownership and earnings management. However, these findings do not support the conclusions of Chen, Weng and Fan (2016) who used the fixed effects regression model and found that the inclusion of risk underwriters in the ownership structure actually does decrease the chances of creative accounting in the company. Additionally, these results support the bonus maximization theory (Hearly,1985)) which postulate that institution owners are profit maximizing agents who can encourage falsification of financial statements in order to maximize their interim gains.

Pension fund ownership and earnings management has been found not to have a statistically significant relationship with earnings management. These results do not support the findings of San (2018) who used the generalized methods of moments and found that pension fund ownership reduces earnings management. The results also disagree with the findings of Njah and Trabelsi (2019) who used a random effect regression and concluded that pension fund ownership increases earnings management. However, these results support the assumptions of the passive hand theory. This theory avers those institutional owners are profit seeking agents and as such they are less likely to have an active role in the management of the companies, they invest in. This is because monitoring comes with a cost which reduces their profits. Hence according to this theory there is likely to be no significant impact between pension fund ownership and the quality of information published on the financial statements.

Bank ownership has been found to have a statistically significant negative relationship with earnings management. This means that an increase in bank ownership leads to a decrease in earrings management. These findings are consistent with the results of Ajay and Madhumathi

(2015) who used the random effect regression methodology and found a negative relationship. Ahn and Choi (2009) used the random effect regression design and found that commercial banks actually reduce earnings management practices of the borrowers they have advanced loans to. However, this result disagrees with the findings of Praveen (2016) who used fixed effects regression and concluded that there was no relationship between bank ownership and earnings management. These findings also support the assumptions of the active monitoring theory (Koh,2003) and agency theory (Jensen and Meckling,1976) which avers that institutional ownership increases the shareholders monitoring role and thus this leads to enhanced quality of the financial information and reduced earnings management.

Government ownership and earnings management have been found to have no statistical relationship. These results agree with the findings of Al-Janadi et al., (2016) who found that most governments lack the technical expertise to monitor the affairs of corporate companies. This study concluded that the rigor required to run a corporation requires specialized skills which most central governments have. Therefore, this study concluded that there is no significant relationship between government ownership and earnings management. These results do not agree that with the findings of Emma (2021) who found a negative relationship between EM and government ownership. These results also disagree with the Capalbo et al. (2020) who found a positive relationship between government ownership and EM. These results therefore support the passive hand theory which avers that institutional owner play a passive role in the management of the companies they invest in. This therefore means that they are incapable of influencing polices of the companies they have invested in.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

The study sought to find the effect of institutional ownership structure on the earnings management. The study used the linear regression analysis to establish the relationship between the variables. This chapter details the summary of the research findings based on the four key objectives of the under the study, the conclusions drawn from the analysis of the data, policy recommendations and suggestions for further research.

5.2 Summary

The first objective of the study was to establish the relationship between bank ownership and earnings management. Preliminary analysis using the descriptive statistics reveal that the variable is normally distributed since there were no outliers. The variable has a weak negative correlation with earnings management. Finally, this variable has a statistically significant negative relationship with earnings management. An increase in bank ownership leads to a decrease in earnings management practices. This is because bank owners have the capacity to supervise the operations of the investee company. The influence from the banks therefore leads to an increase in financial reporting transparency and consequently this decreases the chances of managing the earnings.

The second objective of the study was to establish the relationship between insurance ownership and earnings management. The descriptive statistics indicate that the variable is normally distributed. This was derived from the standard deviation from the mean score which revealed that most of the data point are around the mean. The variable has a weak positive correlation with earnings management. Additionally, the regression output indicate that this variable has a positive relationship with EM, this means that an increase in the

Insurance ownership stake leads to an increase in the earnings management stake in the investee company. Most of the insurance companies have obligations which are short term in nature. Because of this they are likely to encourage earnings management in order to gain from the incremental increases in the share price which are associated with increased earnings.

The third objective of the study was to find the relationship between pension fund ownership and earnings management. The descriptive statistics indicate that the variable is normally distributed. The variable has a weak positive correlation with earnings management. The regression results indicate that the pension fund ownership have no relationship with earnings management. This is because most of the pension fund companies do not have controlling interest in the investee companies. The law specifies the maximum exposure that a pension fund can have in a listed firm. Additionally, that maximum allowable exposure is shared amongst different companies this therefore dilutes the investment per company. Pension funds managers are therefore not able to control the financial reporting activities of the investee company.

The fourth objective was to determine the effect of government ownership on earnings management. The descriptive statistics indicate that the data is normally distribute. Additionally, the results indicate that the government have a controlling interest in most of the investee companies. However, the study found that government ownership and earnings management are not correlated. Consequently, the regression results indicate that there was no relationship between government ownership and earnings management. These results imply that the government does not influence the affairs of the investee companies despite the fact that they have a controlling interest in those companies.

5.3 Conclusions

On objective one, the study concludes that there is a negative relationship between earnings management and bank ownership. An increase in the bank ownership leads to a decrease earnings management. Bank ownership has therefore been found to increase the quality of financial reporting. Additionally, the study concludes that the bank owners are long term investors who are interested in the long-term wellbeing of the company. These investors have the capacity and the will to improve the quality of financial reports through their monitoring role.

On objective two, the study concludes that insurance owners encourage earnings management practices. The results indicated that there is a positive significant relationship between earnings management and insurance ownership. Thus implying that an increase in the insurance ownership increases the earnings management practices. The reason behind this is based on the fact that insurance companies liquidate their investments every year in order to repay their investors. Most of the investments are short term in nature and therefore what matters is the marginal incremental gains on the share price. Therefore, these types of investors are more likely to encourage earnings management in order to increase the stock prices in the short run.

Based on objective three of the study, the study concludes that pension fund managers do not have significant influence in the investee companies because the study found that there is no statistical relationship between pension fund managers and earnings management. One of the reasons behind this is that most of the pension fund managers have investments which do not qualify them to have a controlling interest or a significant influence on the policies of the company. Pension fund managers have to invest in several companies in order to spread the risk. Therefore, due to lack of significance influence the study further concludes that pension

fund ownership has no significant influence on the financial reporting policies of the investee company.

Based on objective four of the study, the study concludes that government ownership has no effect on earnings management. The study also found no statistical relationship between government ownership and earnings management. Even though government owns a controlling interest in most of the business ventures, the results indicate that they do not have control of the financial reporting of the investee companies. Most of the government agencies lack the technical expertise to supervise the actions of internal management who usually are professional managers.

5.4 Recommendation

On objective one, the study recommends that potential investors should look for companies which are co-managed by bank owners. This is because these classes of owners have the capacity and the will power to influence the investee companies to do the right things. The enhanced corporate governance and financial reporting transparency also leads to increased performance over time. Therefore, it is important for potential investors to assess the ownership structure of companies and select the ones which are co-managed by commercial banks.

On objective two, the study recommends that the insurance regulatory authority and the capital markets authority should increase their surveillance on the insurance companies. Prohibitive policies against earnings management can then help to reduce the financial improprieties. The study found that insurance ownership actually does encourage earnings management. This means that insurance companies use their power in the investee company to manage earnings. The falsified reports are designed to influence other decision makers (potential investors) to buy the shares of the company, an increase in the demand for these

shares leads to an increase in the share price, the insurance companies therefore gain by selling their stake at prices which are higher than the acquisition price.

On objective three, this study recommends that the various pension fund managers should consolidate their ownership stake within the organizations they invest in through a special purpose investment vehicle. The idea is to consolidate the various investments in order to gain control of the company affairs and consequently protect the interest of the investors. The study found no relationship between earnings management and pension fund ownership. This implies that pension fund managers do not influence the policies of the companies they invest in. This could be attributable to the fact that pension fund managers tend to spread their risk by investing in many companies. This means that most of the pension fund companies will not have a controlling interest on the various companies they invest in.

On objective four of this study, the study recommends that the ministry of finance should hire competent experts to manage the affairs of the companies they invest in. This will enhance the governance of those companies and increase the quality of the financial information being published. The increased oversight role will also increase tax compliance since there will be little or no falsification of financial records hence leading to increased tax revenue.

5.5 Limitation of the Study

The study faced the challenge of data collection particularly in the segmentation of the various institutional ownership. Some companies had this information on the financial statements while others did not. The researcher however resolved the problem of missing variables by reaching out to the capital markets authority to corroborate the missing data. This posed another challenge because of the Covid 19 pandemic. Most of the managers in the research and analytics department were hesitant to meet physically. However, this problem

was solved by agreeing to host the meeting on the online zoom platform. These meetings enabled the researcher to fill in the missing data.

5.6 Suggestion for Further Studies

The study found no statistical relationship between EM and government ownership; this could be attributable to the fact that the government has only invested in seven companies. This study therefore suggests that a study be conducted to find out the impact of government ownership on earnings management within all the business units of the government. The study will therefore consider all the parastatals plus the companies where the government have a controlling interest in. A comparative study can then be done to find out if the earnings management within the government agencies is significantly different from the earnings management in the private sector. This will therefore immensely contribute to literature because it will identify the earnings management practices within the two sectors.

The study found that only bank ownership reduces the earnings management however this study was limited to Kenya. The study therefore proposes that a study should be conducted to determine if there is a difference between the behaviors of the institutional shareholders in East Africa. This will contribute immensely to the existing literature since it will reveal the differences in the characteristics of the investors in the various countries in East Africa. Additionally, the study can compare the impact of institutional investors in east Africa with those in the developed countries such the United States or the United Kingdom. Researchers, regulators and practicing managers will draw valuable information on how investors in developing and developed nations differ. A natural gap analysis will therefore be depicted in the study.

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APPENDICES

APPENDIX 1: CALCULATION OF EARNINGS MANAGEMENT (JONES,1995)

Creative accounting will be computed through discretionary accruals as proposed by Jones (1995).

Equation 1;How to Compute Discretionary Accruals

DAi, t= (Accrual)/TA - NDA

Where

#	Symbol	Explanation
1.0	DAi,t	Current year discretionary accruals
2.0	TA	Previous year total assets
3.0	NDA	Non-discretionary accruals for the year

Source (Modified Jones Model,1995)

Equation 2; Modified Jones Model (1995) for measuring non-discretionary accruals

$$NDA_t = \alpha_1\left(\frac{1}{A_{t-1}}\right) + \alpha_2\left(\frac{\Delta REV_t - \Delta REC_t}{A_{t-1}}\right) + \alpha_3\left(\frac{PPE_t}{A_{t-1}}\right)$$

Where

#	Symbol	Explanation
1.0	NDAt	Current year non-discretionary accruals.
2.0	ΔREVt	change in revenues (Current year revenue – previous year revenue)
3.0	ΔREC	changes in receivables (Current year accounts receivable - previous year accounts receivable)
4.0	Δ PPE	(current Year fixed assets -previous year fixed asset)
5.0	α1, α2 and α3	Regression coefficients standardized beta coefficients

Source (Modified Jones Model, 1995)

Equation 3: Modified Jones Model (1995) for measuring Total Accruals

Total Accruals = Net profit – Operating Cashflow

APPENDIX 2: DATA TEMPLATE

#	Details	2018	2017	2016	2015	2014
1	Company Name					
2	Revenue					
3	Cash flow from operations					
4	Net Profit					
5	Total Accruals					
6	Non-Current Assets					
7	PPE					
8	Total Assets					
9	Accounts receivable					
10	Ordinary share capital					

APPENDIX 3: THE LIST OF LISTED NON-FINANCIAL COMPANIES IN KENYA AS AT 31 DECEMBER 2018

#	Name	Code
1	Eaagads Ltd	EGAD
2	Kakuzi	KUKZ
3	Kapchorua Tea Kenya Plc	KAPC
4	Limuru Tea Plc	LIMT
5	Sasini Tea and Coffee Ltd	SASN
6	Williamson Tea Kenya Plc	WTK
7	Car and General (K) Ltd	CGEN
8	Deacons (East Africa) Plc	DCON
9	Eveready East Africa Ltd	EVRD
10	Express Ltd	XPRS
11	Kenya Airways Plc	KQ
12	Longhorn Publishers Plc	LKL
13	Nairobi Business Ventures Ltd	NBV
14	Nation Media Group Plc	NMG
15	Sameer Africa Plc	SMER
16	Standard Group Ltd	SGL
17	TPS Eastern Africa (Serena) Ltd	TPSE
18	Uchumi Supermarket Ltd	UCHM
19	WPP ScanGroup Plc	SCAN
20	ARM Cement Ltd	ARM
21	Bamburi Cement Ltd	BAMB
22	Crown Berger Ltd	CRWN
23	East African Cables Ltd	CABL
24	East African Portland Cement Ltd	PORT
25	Kenya Electricity Generating Company Plc	KEGN
26	Kenya Power and Lighting Ltd	KPLC
27	Total Kenya Ltd	TOTL
28	Umeme Ltd	UMME
29	Home Afrika Ltd	HAFR
30	Olympia Capital Holdings Ltd	OCH

31	BAT Kenya Plc	BAT
32	BOC Kenya Plc	BOC
33	Carbacid Investments Plc	CARB
34	East African Breweries Ltd	EABL
35	Flame Tree Group Holdings Ltd	FTGH
36	Kenya Orchards Ltd	ORCH
37	Unga Group Ltd	UNGA
38	Safaricom Plc	SCOM

Source (NSE, 2018)

No	Company Name	Year	Revenue	CFO	Net Profit	Non-Current Assets	PPE	Total Assets	Accounts receivable
1	ARM Cement Plc	2,014	13,743.19	650.80	1,493.39	28,706.80	28,257.42	36,912.58	3,745.70
2	B.O.C Kenya Plc	2,014	1,296.68	103.33	229.63	1,117.16	723.01	2,300.32	320.96
3	Bamburi Cement Ltd	2,014	36,029.00	5,921.00	3,903.00	25,446.00	24,263.00	40,991.00	2,209.00
4	British American Tobacco Kenya Plc	2,014	21.03	4,781.11	4.26	9,285.86	9,273.86	17,988.99	2,495.52
5	Car & General (K) Ltd	2,014	8,298.56	(197.15)	278.36	3,126.75	913.70	8,152.81	2,010.56
6	Carbacid Investments Plc	2,014	826.36	533.34	439.59	481.76	9.00	1,213.72	19.20
7	Crown Paints Kenya Plc	2,014	6,039.06	(278.85)	19.72	986.17	936.76	3,852.81	1,198.99
8	E.A.Cables Ltd	2,014	5,098.42	470.39	341.15	4,041.70	3,548.93	7,888.50	2,918.71
9	E.A.Portland Cement Co. Ltd	2,014	9,057.29	438.42	(386.63)	12,393.20	7,591.94	15,564.65	845.22
10	Eaagads Ltd	2,014	95.63	(0.06)	(41.68)	421.16	420.94	547.10	9.13
11	East African Breweries Ltd	2,014	60,748.89	6,193.29	6,858.61	43,058.79	37,254.79	62,865.94	7,716.62
12	Eveready East Africa Ltd	2,014	1,209.29	(121.47)	(162.56)	173.44	26.54	942.13	224.58
13	Express Kenya Ltd	2,014	173,032.50	(84,551.66)	(18,308.52)	402,898.68	402,898.68	477,922.10	42,202.06
14	Flame Tree Group Holdings Ltd	2,014	1,764.85	(11.21)	153.13	203.85	203.85	1,009.57	601.83
15	Kakuzi Plc	2,014	1,689.92	492.76	160.21	2,589.13	1,930.62	3,857.45	129.89
16	Kapchorua Tea Kenya Plc	2,014	1,192.49	(100.55)	125.99	1,307.54	396.14	1,929.16	263.78
17	KenGen Co. Plc	2,014	17,423.77	12,107.02	2,826.32	222,574.88	209,235.82	250,205.52	-
18	Kenya Airways Ltd	2,014	106.01	2.74	(3.38)	119.02	88.39	148.66	13.71
19	Kenya Orchards Ltd	2,014	58,062.20	(282.72)	(25,156.17)	21,004.80	20,707.38	50,202.18	23,864.38
	Kenya Power &	2,014	105,395.71	19,272.53	6,994.49	170,407.75	162,713.97	220,926.51	

20	Lighting Co Ltd								25,256.56
21	Longhorn Publishers Plc	2,014	1,396.83	68.98	95.25	198.71	165.09	747.53	233.75
22	Nairobi Business Ventures Ltd	2,014	71,972.16	(8,284.37)	7,771.28	15,266.87	3,096.87	79,493.57	27,926.21
23	Nation Media Group Plc	2,014	13,351.30	2,545.30	2,410.20	4,569.30	2,589.40	11,944.30	2,853.90
24	Safaricom Plc	2,014	144,672.48	51,133.19	23,017.54	106,279.48	97,710.54	134,600.95	7,746.62
25	Sameer Africa Plc	2,014	3,777.15	148.17	(59.67)	985.28	529.66	3,857.39	941.50
26	Sasini Plc	2,014	2,762.55	315.16	45.42	13,684.49	8,362.36	14,929.58	582.49
27	Standard Group Plc	2,014	4,782.65	484.05	220.51	2,610.73	2,266.95	4,101.75	1,250.32
28	The Limuru Tea Co. Plc	2,014	92.25	16.54	(0.33)	175.65	170.28	307.65	123.98
29	Total Kenya Ltd	2,014	155,101.69	(7,083.44)	1,424.09	10,301.66	8,619.68	32,541.80	8,608.97
30	TPS Eastern Africa Ltd	2,014	6,337.21	645.80	274.42	13,712.00	11,186.63	11,923.14	1,321.13
31	Umeme	2,014	977,664.00	143,205.00	70,493.00	726,465.00	107,489.00	1,211,939.00	283,712.00
32	Unga Group Ltd	2,014	17,002.30	469.49	468.49	2,541.40	2,442.91	8,026.58	1,717.83
33	Williamson Tea Kenya Plc	2,014	3,512.09	273.18	740.72	5,819.76	1,794.30	8,539.20	860.01
34	WPP Scangroup Plc	2,014	5,125.16	1,140.62	1,164.12	2,360.95	517.25	13,284.10	6,765.23
35	ARM Cement Plc	2,015	14,735.94	(190.04)	(2,890.84)	44,168.41	43,657.04	51,936.66	3,535.64
36	B.O.C Kenya Plc	2,015	1,186.42	207.10	148.60	1,068.70	761.80	2,320.96	359.60
37	Bamburi Cement Ltd	2,015	39,200.00	6,267.00	5,872.00	23,897.00	22,897.00	42,030.00	2,945.00
38	British American Tobacco Kenya Plc	2,015	22.26	3,930.35	4.98	9,099.92	9,087.92	17,991.16	3,389.35
39	Car & General (K) Ltd	2,015	9,929.19	404.59	127.15	3,711.46	1,035.42	8,988.05	1,968.68
40	Carbacid Investments Plc	2,015	809.72	560.38	393.32	1,854.04	991.46	2,968.73	168.66
	Crown Paints	2,015	6,737.11	339.53	30.75	1,245.64	1,177.78	4,539.15	

41	Kenya Plc								1,260.26
42	E.A.Cables Ltd	2,015	3,724.21	144.63	(741.20)	5,439.07	3,917.31	8,384.14	2,013.71
43	E.A.Portland Cement Co. Ltd	2,015	8,417.62	(397.03)	7,157.07	19,955.25	8,687.86	23,112.58	1,089.45
44	Eaagads Ltd	2,015	101.47	2.74	197.37	599.70	599.49	732.55	6.76
45	East African Breweries Ltd	2,015	64,420.46	13,559.14	9,574.91	40,117.90	35,580.38	65,155.96	9,113.81
46	Eveready East Africa Ltd	2,015	1,124.58	14.17	(18.40)	771.82	718.05	1,365.16	249.79
47	Express Kenya Ltd	2,015	123,850.91	(18,196.26)	(60,088.51)	333,196.90	332,952.10	441,897.93	53,754.09
48	Flame Tree Group Holdings Ltd	2,015	2,283.15	130.97	178.85	273.03	251.04	1,326.53	771.26
49	Kakuzi Plc	2,015	2,481.84	630.01	459.71	2,817.37	2,128.74	4,458.08	255.69
50	Kapchorua Tea Kenya Plc	2,015	1,073.99	(10.65)	(22.79)	1,338.98	519.99	1,983.24	397.96
51	KenGen Co. Plc	2,015	25,602.04	12,525.69	11,517.33	321,151.02	305,378.76	342,520.00	8,716.68
52	Kenya Airways Ltd	2,015	110.16	1.21	(25.74)	141.01	125.42	182.06	14.82
53	Kenya Orchards Ltd	2,015	60,974.31	(271.64)	28,915.65	44,619.34	20,025.58	78,731.22	32,165.81
54	Kenya Power & Lighting Co Ltd	2,015	106,763.53	27,610.08	7,431.96	206,223.61	196,301.33	272,286.08	25,823.28
55	Longhorn Publishers Plc	2,015	848.38	5.19	63.06	225.84	182.43	689.32	305.72
56	Nairobi Business Ventures Ltd	2,015	74,139.62	(32,070.43)	2,742.99	29,410.40	18,406.34	111,760.04	7,427.24
57	Nation Media Group Plc	2,015	12,339.50	2,925.50	2,071.10	5,171.80	3,479.20	12,696.70	2,938.50
58	Safaricom Plc	2,015	163,364.12	61,002.56	31,871.30	124,367.07	107,756.92	156,957.63	10,301.64
59	Sameer Africa Plc	2,015	3,363.98	305.05	(44.00)	985.68	483.02	3,751.23	691.97
60	Sasini Plc	2,015	2,786.13	128.14	1,101.21	13,985.86	8,770.71	16,044.53	510.11
61	Standard Group Plc	2,015	4,488.40	(112.24)	(289.60)	2,651.17	2,029.43	4,355.61	1,502.43

62	The Limuru Tea Co. Plc	2,015	122.37	9.61	2.55	150.20	144.84	313.77	154.57
63	Total Kenya Ltd	2,015	120,253.99	7,827.49	1,615.00	10,766.84	8,942.78	34,225.04	9,418.30
64	TPS Eastern Africa Ltd	2,015	6,189.36	383.98	(280.61)	13,303.93	10,976.21	11,923.14	1,170.62
65	Umeme	2,015	1,161,008.00	234,332.00	105,857.00	1,358,555.00	313,960.00	1,774,869.00	337,768.00
66	Unga Group Ltd	2,015	18,723.25	505.45	611.89	3,182.41	2,906.97	8,635.13	2,028.39
67	Williamson Tea Kenya Plc	2,015	2,590.42	37.66	(227.64)	5,782.41	4,123.34	8,558.56	1,142.54
68	WPP Scangroup Plc	2,015	5,022.41	619.42	550.61	2,331.58	492.43	12,468.48	5,469.70
69	ARM Cement Plc	2,016	12,823.83	(1,279.02)	(2,800.18)	42,773.13	42,168.15	51,058.80	4,619.37
70	B.O.C Kenya Plc	2,016	1,076.72	84.60	126.32	1,014.24	773.12	2,223.84	320.28
71	Bamburi Cement Ltd	2,016	38,281.00	3,949.00	5,890.00	21,811.00	21,093.00	40,811.00	5,529.00
72	British American Tobacco Kenya Plc	2,016	19.85	5,161.44	4.85	9,535.80	9,523.80	18,320.25	2,418.33
73	Car & General (K) Ltd	2,016	9,735.79	(223.22)	88.87	4,038.35	1,417.61	9,705.20	1,830.00
74	Carbacid Investments Plc	2,016	831.76	374.07	375.57	1,893.51	981.26	3,081.77	178.22
75	Crown Paints Kenya Plc	2,016	7,347.56	330.31	131.80	1,277.28	1,214.15	5,059.03	1,468.85
76	E.A.Cables Ltd	2,016	3,650.45	597.03	(582.60)	5,318.84	4,075.42	7,548.41	1,353.89
77	E.A.Portland Cement Co. Ltd	2,016	8,871.46	358.35	4,145.76	25,727.27	8,464.91	27,842.12	525.57
78	Eaagads Ltd	2,016	126.01	(2.13)	36.90	644.78	644.57	761.17	8.61
79	East African Breweries Ltd	2,016	64,322.22	18,577.24	10,270.81	44,127.33	35,606.81	65,683.61	11,572.15
80	Eveready East Africa Ltd	2,016	553.31	(117.75)	(230.70)	814.73	18.29	1,078.10	94.81
81	Express Kenya Ltd	2,016	62,816.77	(11,321.88)	(96,938.84)	281,811.39	281,627.79	379,575.82	23,472.46
82	Flame Tree Group Holdings	2,016	2,544.63	39.91	144.98	380.78	290.86	1,521.19	787.78

	Ltd								
83	Kakuzi Plc	2,016	2,651.20	701.64	562.43	3,015.07	2,309.71	5,064.41	266.15
84	Kapchorua Tea Kenya Plc	2,016	1,209.13	146.83	106.10	1,249.01	991.62	2,144.59	464.26
85	KenGen Co. Plc	2,016	36,399.51	29,256.01	6,743.49	344,821.95	320,932.98	366,738.37	9,347.41
86	Kenya Airways Ltd	2,016	110.81	6.36	(26.23)	125.98	120.87	155.69	15.08
87	Kenya Orchards Ltd	2,016	64,586.48	(1,974.35)	3,763.11	42,271.78	19,409.17	89,241.63	45,444.31
88	Kenya Power & Lighting Co Ltd	2,016	108,374.61	25,677.04	7,196.56	242,264.56	233,714.59	289,582.80	29,893.93
89	Longhorn Publishers Plc	2,016	1,503.51	(530.46)	100.81	498.96	230.36	1,866.94	644.78
90	Nairobi Business Ventures Ltd	2,016	85,107.96	(6,472.87)	4,423.13	48,489.21	38,648.27	155,413.96	24,565.97
91	Nation Media Group Plc	2,016	11,324.80	2,458.40	1,634.70	5,010.80	3,195.10	12,174.10	2,480.70
92	Safaricom Plc	2,016	195,685.22	64,603.47	38,104.29	131,523.19	113,419.40	159,182.58	20,622.99
93	Sameer Africa Plc	2,016	2,882.23	(592.38)	(657.25)	1,000.59	281.95	3,290.87	716.46
94	Sasini Plc	2,016	3,570.63	428.91	576.99	10,095.86	8,888.27	13,106.14	456.08
95	Standard Group Plc	2,016	4,815.33	489.33	198.52	2,403.24	1,846.79	4,404.93	1,812.34
96	STANLIB FAHARI I0REIT.	2,016	337,576.49	83,438.36	106,000.29	2,439,729.98	2,345,995.95	3,715,011.41	102,059.05
97	The Limuru Tea Co. Plc	2,016	103.92	12.24	(19.07)	137.98	131.40	282.19	120.87
98	Total Kenya Ltd	2,016	89,060.92	3,600.99	2,234.29	10,805.92	9,008.72	36,185.37	8,714.09
99	TPS Eastern Africa Ltd	2,016	6,468.80	774.01	119.18	13,433.16	11,156.27	11,923.14	1,158.75
100	Umeme	2,016	1,358,206.00	234,484.00	138,834.00	1,750,352.00	363,025.00	2,226,053.00	388,994.00
101	Unga Group Ltd	2,016	18,947.94	666.29	494.58	2,531.79	2,070.15	8,351.55	2,072.42
102	Williamson Tea Kenya Plc	2,016	3,386.02	780.59	482.75	5,550.77	3,798.15	8,931.40	1,287.56
103	WPP Scangroup Plc	2,016	4,835.07	2.95	410.73	2,509.55	398.73	13,486.40	6,326.47

104	ARM Cement Plc	2,017	8,697.33	(522.89)	(6,549.81)	38,975.58	38,603.86	42,699.07	2,303.02
105	B.O.C Kenya Plc	2,017	967.63	175.54	39.38	1,022.51	803.93	2,228.67	259.60
106	Bamburi Cement Ltd	2,017	35,974.00	4,951.00	1,973.00	33,696.00	32,502.00	47,203.00	4,595.00
107	British American Tobacco Kenya Plc	2,017	18.67	4,713.47	3.34	9,140.34	9,133.89	17,805.59	2,803.04
108	Car & General (K) Ltd	2,017	9,635.15	599.74	79.84	4,587.79	1,408.21	9,267.54	1,452.97
109	Carbacid Investments Plc	2,017	757.05	327.11	428.28	2,267.67	977.39	3,306.97	147.68
110	Crown Paints Kenya Plc	2,017	7,351.33	(197.32)	223.29	1,326.24	1,281.12	5,871.61	1,764.68
111	E.A.Cables Ltd	2,017	2,345.09	120.07	(662.84)	4,661.86	3,798.82	7,038.42	901.21
112	E.A.Portland Cement Co. Ltd	2,017	6,928.31	(565.89)	(1,471.36)	25,408.29	8,352.68	27,357.39	401.75
113	Eaagads Ltd	2,017	140.22	0.07	156.37	775.26	775.05	922.80	9.22
114	East African Breweries Ltd	2,017	70,247.07	13,914.47	8,514.57	44,531.71	37,317.45	66,666.31	9,928.00
115	Eveready East Africa Ltd	2,017	338.93	(249.99)	273.91	194.79	9.31	771.10	149.24
116	Express Kenya Ltd	2,017	50,323.13	(49,682.66)	(90,349.26)	263,104.48	262,982.08	359,932.91	21,874.03
117	Flame Tree Group Holdings Ltd	2,017	2,425.09	142.94	39.75	539.17	334.34	1,680.77	784.34
118	Kakuzi Plc	2,017	2,823.93	924.95	591.64	3,338.92	2,419.38	5,746.13	291.51
119	Kapchorua Tea Kenya Plc	2,017	1,292.12	163.90	(51.77)	1,241.61	922.10	2,030.31	427.31
120	KenGen Co. Plc	2,017	43,431.92	13,200.81	9,006.22	347,090.21	323,843.36	376,729.58	15,751.94
121	Kenya Airways Ltd	2,017	105.08	5.95	(10.21)	121.61	109.88	147.62	11.81
122	Kenya Orchards Ltd	2,017	73,691.43	4,055.86	5,734.65	45,586.13	24,534.04	108,278.26	59,560.54
123	Kenya Power & Lighting Co Ltd	2,017	120,742.27	28,158.54	5,280.43	269,942.85	262,347.61	331,236.23	48,084.81
	Longhorn								

124	Publishers Plc	2,017	1,451.77	249.30	118.63	607.86	220.95	1,858.73	784.82
125	Nairobi Business Ventures Ltd	2,017	46,800.40	(26,445.26)	(32,848.02)	42,536.66	33,729.97	143,713.64	30,617.85
126	Nation Media Group Plc	2,017	10,624.90	1,695.30	1,350.90	5,009.20	2,398.30	11,320.30	2,262.40
127	Safaricom Plc	2,017	212,885.19	79,527.14	48,444.42	136,527.00	117,199.00	161,687.82	17,834.54
128	Sameer Africa Plc	2,017	2,626.98	560.67	2.66	1,271.38	552.14	2,969.87	800.48
129	Sasini Plc	2,017	4,201.20	(228.57)	339.41	10,210.86	8,827.71	13,196.03	997.22
130	Standard Group Plc	2,017	4,657.49	653.23	(210.84)	2,585.18	1,796.65	4,459.64	1,509.79
131	STANLIB FAHARI I0REIT.	2,017	270,689.18	46,955.07	171,126.41	2,464,138.73	2,379,739.91	3,761,627.66	80,298.72
132	The Limuru Tea Co. Plc	2,017	80.37	11.73	(22.13)	121.73	118.09	262.01	117.77
133	Total Kenya Ltd	2,017	111,423.55	381.14	2,738.22	11,533.59	10,781.17	38,012.12	9,759.03
134	TPS Eastern Africa Ltd	2,017	6,408.21	798.14	119.47	14,840.17	3,825.75	11,923.14	1,332.41
135	Umeme	2,017	1,485,202.00	353,148.00	35,494.00	1,918,553.00	394,985.00	2,349,433.00	317,392.00
136	Unga Group Ltd	2,017	19,528.79	1,595.32	(6.06)	2,855.95	2,611.57	9,455.32	2,440.70
137	Williamson Tea Kenya Plc	2,017	3,416.34	273.48	(261.59)	5,351.01	3,614.54	8,364.13	1,367.62
138	WPP Scangroup Plc	2,017	4,122.87	124.83	512.03	2,834.90	340.19	13,758.91	6,501.08
139	B.O.C Kenya Plc	2,018	966.54	4.05	65.58	969.70	789.59	2,141.75	306.23
140	Bamburi Cement Ltd	2,018	37,262.00	2,823.00	614.00	37,913.00	36,224.00	50,357.00	2,929.00
141	British American Tobacco Kenya Plc	2,018	20.75	5,300.23	4.08	9,122.68	9,097.41	18,338.26	2,824.41
142	Car & General (K) Ltd	2,018	10,079.73	538.63	225.72	5,144.26	1,507.05	10,173.51	1,696.75
143	Carbacid Investments Plc	2,018	753.16	296.69	298.53	2,305.84	951.00	3,371.23	146.61
144	Crown Paints Kenya Plc	2,018	8,315.91	35.35	183.81	1,581.87	1,501.81	5,475.69	1,249.59
	E.A.Cables Ltd	2,018	1,631.06	311.28	(568.38)	5,469.52	3,777.89	6,603.66	

145									531.71
146	E.A.Portland Cement Co. Ltd	2,018	5,182.72	(1,000.02)	7,797.55	36,041.88	7,843.59	38,027.52	632.36
147	Eaagads Ltd	2,018	83.70	(0.29)	(36.70)	786.97	786.75	905.90	10.59
148	East African Breweries Ltd	2,018	73,456.83	13,559.34	7,255.56	49,720.86	45,363.84	71,246.83	7,946.48
149	Eveready East Africa Ltd	2,018	251.72	(175.13)	(110.16)	251.50	7.59	573.77	155.16
150	Express Kenya Ltd	2,018	26,380.00	(81.16)	(69,690.00)	245,486.00	245,425.00	320,942.00	12,963.00
151	Flame Tree Group Holdings Ltd	2,018	2,488.61	23.01	33.79	706.12	529.07	1,839.27	735.81
152	Kakuzi Plc	2,018	3,152.83	361.19	481.59	3,624.13	2,705.52	5,941.04	360.79
153	Kapchorua Tea Kenya Plc	2,018	1,429.34	31.36	166.41	1,392.41	1,024.46	2,489.04	767.47
154	KenGen Co. Plc	2,018	45,289.66	17,509.82	7,890.63	347,940.94	328,082.46	379,353.01	21,883.28
155	Kenya Airways Ltd	2,018	114.19	6.38	(7.56)	108.66	99.84	136.63	14.44
156	Kenya Orchards Ltd	2,018	72,239.22	2,389.51	8,886.11	42,591.10	25,746.51	114,565.71	55,991.54
157	Kenya Power & Lighting Co Ltd	2,018	125,854.23	14,633.25	1,917.99	282,035.01	273,376.88	336,655.19	39,605.77
158	Longhorn Publishers Plc	2,018	1,696.32	449.44	172.94	753.70	207.49	2,407.53	793.65
159	Nairobi Business Ventures Ltd	2,018	18,153.86	(3,438.24)	(76,535.81)	15,750.60	7,864.72	85,975.58	20,505.70
160	Nation Media Group Plc	2,018	9,660.60	575.60	1,056.70	4,770.00	1,999.80	11,198.00	3,156.50
161	Safaricom Plc	2,018	234,227.00	91,960.00	55,289.00	139,977.00	121,709.00	167,439.00	15,857.00
162	Sameer Africa Plc	2,018	2,067.93	(325.06)	(540.12)	1,287.65	356.39	2,587.82	590.75
163	Sasini Plc	2,018	3,515.22	324.34	293.52	10,315.95	8,679.88	12,961.38	730.32
164	Standard Group Plc	2,018	4,836.03	288.41	261.29	2,684.54	1,818.88	4,676.13	1,608.12
165	STANLIB FAHARI I0REIT.	2,018	332,249.47	129,843.80	193,491.76	3,370,840.47	3,262,953.65	3,852,621.47	55,148.77

166	The Limuru Tea Co. Plc	2,018	108.77	2.29	2.55	108.73	105.91	268.26	137.68
167	Total Kenya Ltd	2,018	107,912.77	11,763.10	2,312.58	11,973.27	11,220.03	39,258.92	8,765.93
168	TPS Eastern Africa Ltd	2,018	6,593.44	639.27	179.01	15,483.11	2,067.18	11,923.14	1,267.72
169	Umeme	2,018	1,493,232.00	477,652.00	132,815.00	2,126,039.00	327,074.00	2,452,376.00	199,704.00
170	Unga Group Ltd	2,018	19,982.07	(236.73)	768.77	3,336.84	3,194.28	9,932.66	2,813.44
171	Williamson Tea Kenya Plc	2,018	3,984.97	297.90	502.77	5,847.94	3,968.78	9,505.07	2,093.45
172	WPP Scangroup Plc	2,018	4,504.90	1,058.28	612.21	3,184.25	361.61	14,425.20	5,637.22
173	B.O.C Kenya Plc	2,019	975.86	3.84	55.90	911.73	783.99	1,992.64	421.70
174	Bamburi Cement Ltd	2,019	36,796.00	3,119.00	633.00	36,993.00	36,447.00	49,085.00	2,594.00
175	British American Tobacco Kenya Plc	2,019	24,039.62	7,635.82	3,885.65	10,685.08	10,097.87	21,936.36	2,950.09
176	Car & General (K) Ltd	2,019	11,907.24	(286.87)	171.10	5,933.91	1,650.72	11,774.12	1,943.02
177	Carbacid Investments Plc	2,019	630.50	411.40	264.59	2,547.14	919.40	3,503.50	178.17
178	Crown Paints Kenya Plc	2,019	8,603.65	644.21	323.02	1,809.60	1,545.74	5,521.50	1,224.02
179	E.A.Cables Ltd	2,019	1,585.20	87.20	678.48	5,127.68	3,976.34	6,274.88	547.10
180	E.A.Portland Cement Co. Ltd	2,019	2,847.27	(1,671.03)	(3,361.89)	32,922.66	7,475.70	36,541.00	2,375.62
181	Eaagads Ltd	2,019	179.62	30.28	2.65	799.43	799.22	942.32	9.96
182	East African Breweries Ltd	2,019	82,543.24	22,565.80	8,877.79	57,463.00	53,037.81	87,065.63	7,506.67
183	Eveready East Africa Ltd	2,019	190.67	(4.47)	(303.54)	53.77	2.24	248.53	80.55
184	Express Kenya Ltd	2,019	20.22	(33.70)	(21.71)	395.83	395.83	471.74	45.45
185	Flame Tree Group Holdings Ltd	2,019	2,424.75	240.89	44.94	1,201.84	1,043.84	2,281.17	641.87
	Kakuzi Plc	2,019	2,888.66	785.58	713.44	3,868.02	3,633.39	6,461.04	

186									275.22
187	Kapchorua Tea Kenya Plc	2,019	1,421.27	496.53	(125.67)	1,160.78	1,139.72	2,033.17	191.30
188	KenGen Co. Plc	2,019	45,965.65	30,584.77	7,884.34	367,793,076.00	346,737.31	401,422.25	18,855.49
189	Kenya Airways Ltd	2,019	128,317.00	15,941.00	(12,986.00)	170,013.00	158,919.00	195,673.00	14,917.00
190	Kenya Orchards Ltd	2,019	60.01	2.40	8.43	42.78	23.83	136.00	71.83
191	Kenya Power & Lighting Co Ltd	2,019	132,281.20	26,750.72	261.55	283,783.99	277,066.96	328,004.93	28,219.61
192	Longhorn Publishers Plc	2,019	1,600.40	83.91	185.24	870.38	207.49	2,344.23	920.05
193	Nairobi Business Ventures Ltd	2,019	13,270.07	(23,118.05)	(34,726.91)	11,279.93	4,214.74	60,977.29	20,767.21
194	Nation Media Group Plc	2,019	9,050.90	1,448.40	849.30	5,184.70	3,176.80	12,096.70	3,696.30
195	Safaricom Plc	2,019	250,123.00	99,811.00	62,491.00	142,517.00	125,217.00	192,476.00	18,126.00
196	Sameer Africa Plc	2,019	1,757.35	128.67	(1,061.95)	663.75	60.51	1,491.45	756.58
197	Sasini Plc	2,019	2,794.83	(404.40)	(317.43)	12,787.48	12,756.01	14,674.36	544.73
198	Standard Group Plc	2,019	4,074.04	527.63	(429.48)	2,810.67	1,842.80	4,195.95	1,075.02
199	STANLIB FAHARI I0REIT.	2,019	353.89	115.34	175.23	3,472.22	15.62	3,878.45	71.25
200	The Limuru Tea Co. Plc	2,019	91.05	(1.09)	1.90	96.05	96.06	235.67	135.48
201	Total Kenya Ltd	2,019	111,876.93	(275.12)	2,534.53	13,759.84	12,712.52	37,564.70	12,855.07
202	TPS Eastern Africa Ltd	2,019	6,823.16	1,159.14	148.11	16,066.31	13,869.82	17,986.46	1,239.16
203	Umeme	2,019	1,776,597.00	194,205.00	139,152.00	1,991,698.00	327,570.00	2,541,774.00	216,309.00
204	Unga Group Ltd	2,019	17,895.67	708.87	342.15	3,969.43	3,767.39	10,646.07	3,083.22
205	Williamson Tea Kenya Plc	2,019	3,351.78	1,067.22	(164.41)	5,464.14	4,371.96	8,271.92	692.68
206	WPP Scangroup Plc	2,019	9,282.33	(361.15)	431.97	2,093.43	516.99	12,803.17	4,440.35

APPENDIX 4: THE DATA

#	Company Name	Year	EM	Bank	Pension	Insurance	Government
1	ARM Cement Plc	2014	0.0092	0.7655	0.1326	0.0175	0.0298
2	B.O.C Kenya Plc	2014	0.4821	0.3143	0.4439	0.1350	0.1747
3	Bamburi Cement Ltd	2014	0.0075	0.5919	0.0910	0.0748	0.0832
4	British American Tobacco Kenya Plc	2014	0.0470	0.5155	0.2691	0.1078	0.5151
5	Car & General (K) Ltd	2014	0.2763	0.1121	2.2005	0.2195	0.5204
6	Carbacid Investments Plc	2014	32.9554	0.0074	2.1334	28.3169	10.4169
7	Crown Paints Kenya Plc	2014	0.2776	0.2431	1.2799	0.1266	0.3187
8	E.A.Cables Ltd	2014	0.0812	0.4499	0.8224	0.0001	0.0364
9	E.A.Portland Cement Co. Ltd	2014	0.0338	0.4878	0.1113	0.0593	0.1087
10	Eaagads Ltd	2014	0.7502	0.7694	0.0217	0.0955	0.0989
11	East African Breweries Ltd	2014	0.0033	0.5926	0.2071	0.0425	0.0179
12	Eveready East Africa Ltd	2014	19.9048	0.0282	8.4634	7.9141	1.5488
13	Express Kenya Ltd	2014	0.0009	0.8430	0.1047	0.4394	0.1644
14	Flame Tree Group Holdings Ltd	2014	6.6378	0.2019	2.9524	0.6551	0.8062
15	Kakuzi Plc	2014	0.1425	0.5005	0.0673	0.0508	0.1723
16	Kapchorua Tea Kenya Plc	2014	0.7039	0.2053	0.6659	0.0494	0.5719
17	KenGen Co. Plc	2014	0.0024	0.8363	0.0000	0.0263	0.0444
18	Kenya Airways Ltd	2014	7.2631	0.5946	0.1551	0.0846	0.0692
19	Kenya Orchards Ltd	2014	0.0083	0.4125	1.1525	2.7637	1.2012
20	Kenya Power & Lighting Co Ltd	2014	0.0019	0.7365	0.1552	0.0300	0.0755
21	Longhorn Publishers Plc	2014	4.9202	0.2208	1.4160	0.3544	0.1592
22	Nairobi Business Ventures Ltd	2014	0.0366	0.0390	9.0176	0.0323	5.1845
23	Nation Media Group Plc	2014	0.1561	0.2168	1.1021	0.1820	0.0522
24	Safaricom Plc	2014	-0.0008	0.7259	0.0793	0.0205	0.2877
25	Sameer Africa Plc	2014	1.7565	0.1373	1.7776	2.6276	0.3924
26	Sasini Plc	2014	0.0344	0.5601	0.0697	0.0273	0.0323
27	Standard Group Plc	2014	0.1225	0.5527	0.5515	0.1803	0.1163
28	The Limuru Tea Co. Plc	2014	1.7086	0.5535	0.7281	0.1409	0.0991
29	Total Kenya Ltd	2014	-0.0322	0.2649	0.9988	1.1572	0.9870
30	TPS Eastern Africa	2014	0.0735	0.9382	0.1181	0.0163	0.0332

	Ltd						
31	Umeme	2014	-0.0208	0.0887	2.6395	0.2581	0.6765
32	Unga Group Ltd	2014	1.2438	0.3044	0.7032	0.1550	0.0004
33	Williamson Tea Kenya Plc	2014	0.1804	0.2101	0.4793	0.0244	0.2606
34	WPP Scangroup Plc	2014	0.5656	0.0389	13.0793	0.7325	0.0454
35	ARM Cement Plc	2015	0.0066	0.8406	0.0810	0.0113	0.0619
36	B.O.C Kenya Plc	2015	0.4934	0.3282	0.4720	0.1282	0.0768
37	Bamburi Cement Ltd	2015	0.0074	0.5448	0.1286	0.0793	0.0173
38	British American Tobacco Kenya Plc	2015	0.0491	0.5051	0.3730	0.1100	0.4319
39	Car & General (K) Ltd	2015	0.2339	0.1152	1.9013	0.1937	0.2680
40	Carbacid Investments Plc	2015	0.3050	0.3340	0.1701	0.2570	0.1685
41	Crown Paints Kenya Plc	2015	0.2172	0.2595	1.0700	0.3022	0.2622
42	E.A.Cables Ltd	2015	0.0747	0.4672	0.5141	0.0323	0.2261
43	E.A.Portland Cement Co. Ltd	2015	0.0299	0.3759	0.1254	0.0518	0.8695
44	Eaagads Ltd	2015	0.5233	0.8184	0.0113	0.0671	0.3247
45	East African Breweries Ltd	2015	0.0031	0.5461	0.2561	0.0444	0.1120
46	Eveready East Africa Ltd	2015	0.7436	0.5260	0.3479	0.2925	0.0454
47	Express Kenya Ltd	2015	0.0015	0.7535	0.1614	0.5317	0.1258
48	Flame Tree Group Holdings Ltd	2015	4.0518	0.1892	3.0723	0.5320	0.1907
49	Kakuzi Plc	2015	0.1288	0.4775	0.1201	0.0460	0.0800
50	Kapchorua Tea Kenya Plc	2015	0.5432	0.2622	0.7653	0.0376	0.0233
51	KenGen Co. Plc	2015	0.0021	0.8916	0.0285	0.0180	0.0033
52	Kenya Airways Ltd	2015	6.2049	0.6889	0.1182	0.0597	0.2149
53	Kenya Orchards Ltd	2015	0.0096	0.2544	1.6062	2.8578	1.4575
54	Kenya Power & Lighting Co Ltd	2015	0.0017	0.7209	0.1315	0.0249	0.1028
55	Longhorn Publishers Plc	2015	4.7473	0.2646	1.6758	0.8017	0.3172
56	Nairobi Business Ventures Ltd	2015	0.0025	0.1647	0.4035	0.9779	1.8914
57	Nation Media Group Plc	2015	0.1484	0.2740	0.8446	0.1355	0.2456
58	Safaricom Plc	2015	-0.0012	0.6865	0.0956	0.0186	0.2703
59	Sameer Africa Plc	2015	2.0861	0.1288	1.4326	2.8813	0.7226
60	Sasini Plc	2015	0.0328	0.5466	0.0582	0.0260	0.1109
61	Standard Group Plc	2015	0.1385	0.4659	0.7403	0.2014	0.0874
62	The Limuru Tea	2015	1.9921	0.4616	1.0672	0.1657	0.0488

	Co. Plc						
63	Total Kenya Ltd	2015	-0.0157	0.2613	1.0532	1.1154	0.6947
64	TPS Eastern Africa Ltd	2015	0.0624	0.9206	0.1067	0.0166	0.0605
65	Umeme	2015	-0.0078	0.1769	1.0758	0.0884	0.4092
66	Unga Group Ltd	2015	1.3166	0.3366	0.6978	0.1302	0.0366
67	Williamson Tea Kenya Plc	2015	0.0812	0.4818	0.2771	0.0106	0.0643
68	WPP Scangroup Plc	2015	0.5823	0.0395	11.1076	0.7694	0.1397
69	ARM Cement Plc	2016	0.0071	0.8259	0.1095	0.0228	0.0361
70	B.O.C Kenya Plc	2016	0.4688	0.3477	0.4143	0.1263	0.0540
71	Bamburi Cement Ltd	2016	0.0085	0.5168	0.2621	0.0860	0.0920
72	British American Tobacco Kenya Plc	2016	0.0447	0.5199	0.2539	0.1050	0.5414
73	Car & General (K) Ltd	2016	0.1737	0.1461	1.2909	0.1414	0.2202
74	Carbacid Investments Plc	2016	0.3085	0.3184	0.1816	0.2597	0.0015
75	Crown Paints Kenya Plc	2016	0.2095	0.2400	1.2098	0.2931	0.1635
76	E.A.Cables Ltd	2016	0.0717	0.5399	0.3322	0.0311	0.2894
77	E.A.Portland Cement Co. Ltd	2016	0.0304	0.3040	0.0621	0.0532	0.4474
78	Eaagads Ltd	2016	0.4920	0.8468	0.0134	0.0624	0.0606
79	East African Breweries Ltd	2016	0.0034	0.5421	0.3250	0.0444	0.2333
80	Eveready East Africa Ltd	2016	28.7954	0.0170	5.1826	11.4798	6.1745
81	Express Kenya Ltd	2016	0.0019	0.7420	0.0833	0.6286	0.3040
82	Flame Tree Group Holdings Ltd	2016	2.8325	0.1912	2.7084	0.4591	0.3612
83	Kakuzi Plc	2016	0.1189	0.4561	0.1152	0.0424	0.0603
84	Kapchorua Tea Kenya Plc	2016	0.2848	0.4624	0.4682	0.0395	0.0411
85	KenGen Co. Plc	2016	0.0020	0.8751	0.0291	0.0486	0.0701
86	Kenya Airways Ltd	2016	6.9476	0.7764	0.1248	0.0619	0.2696
87	Kenya Orchards Ltd	2016	0.0118	0.2175	2.3414	2.9485	0.2956
88	Kenya Power & Lighting Co Ltd	2016	0.0015	0.8071	0.1279	0.0209	0.0791
89	Longhorn Publishers Plc	2016	3.9467	0.1234	2.7991	1.1827	2.7404
90	Nairobi Business Ventures Ltd	2016	0.0026	0.2487	0.6356	0.4657	0.2819
91	Nation Media Group Plc	2016	0.1641	0.2625	0.7764	0.1475	0.2578
92	Safaricom Plc	2016	-0.0018	0.7125	0.1818	0.0177	0.2336
93	Sameer Africa Plc	2016	3.9111	0.0857	2.5411	4.9361	0.2301
94	Sasini Plc	2016	0.0318	0.6782	0.0513	0.0257	0.0167

95	Standard Group Plc	2016	0.1542	0.4193	0.9813	0.2213	0.1575
96	STANLIB FAHARI I0REIT.	2016	0.0012	0.6315	0.0435	1.4832	0.0096
97	The Limuru Tea Co. Plc	2016	34.6857	0.4656	0.9198	0.1826	0.2383
98	Total Kenya Ltd	2016	-0.0025	0.2490	0.9673	1.1072	0.1517
99	TPS Eastern Africa Ltd	2016	0.0508	0.9357	0.1039	0.0163	0.0587
100	Umeme	2016	-0.0081	0.1631	1.0715	0.0764	0.2635
101	Unga Group Ltd	2016	2.1546	0.2479	1.0011	0.1829	0.0829
102	Williamson Tea Kenya Plc	2016	0.0878	0.4253	0.3390	0.0231	0.0784
103	WPP Scangroup Plc	2016	0.7346	0.0296	15.8665	0.9502	1.0227
104	ARM Cement Plc	2017	0.0077	0.9041	0.0597	0.0249	0.1561
105	B.O.C Kenya Plc	2017	0.4360	0.3607	0.3229	0.1214	0.1694
106	Bamburi Cement Ltd	2017	0.0062	0.6886	0.1414	0.0558	0.0916
107	British American Tobacco Kenya Plc	2017	0.0481	0.5130	0.3069	0.1095	0.5157
108	Car & General (K) Ltd	2017	0.1726	0.1520	1.0318	0.1424	0.3692
109	Carbacid Investments Plc	2017	0.3110	0.2956	0.1511	0.2607	0.1035
110	Crown Paints Kenya Plc	2017	0.1994	0.2182	1.3775	0.2778	0.3283
111	E.A.Cables Ltd	2017	0.0773	0.5397	0.2372	0.0333	0.2061
112	E.A.Portland Cement Co. Ltd	2017	0.0313	0.3053	0.0481	0.0539	0.1084
113	Eaagads Ltd	2017	0.3996	0.8399	0.0119	0.0519	0.2017
114	East African Breweries Ltd	2017	0.0025	0.5598	0.2660	0.0424	0.1447
115	Eveready East Africa Ltd	2017	60.0737	0.0121	16.0261	22.5515	56.2614
116	Express Kenya Ltd	2017	0.0021	0.7306	0.0832	0.6731	0.1546
117	Flame Tree Group Holdings Ltd	2017	2.2596	0.1989	2.3459	0.4394	0.3086
118	Kakuzi Plc	2017	0.1132	0.4210	0.1205	0.0405	0.1378
119	Kapchorua Tea Kenya Plc	2017	0.3067	0.4542	0.4634	0.0424	0.2339
120	KenGen Co. Plc	2017	0.0020	0.8596	0.0486	0.0509	0.0130
121	Kenya Airways Ltd	2017	7.7031	0.7443	0.1075	0.0530	0.1470
122	Kenya Orchards Ltd	2017	0.0104	0.2266	2.4277	2.3326	0.0684
123	Kenya Power & Lighting Co Ltd	2017	0.0015	0.7920	0.1833	0.0186	0.0872
124	Longhorn Publishers Plc	2017	4.2032	0.1189	3.5520	1.2330	0.5914
125	Nairobi Business Ventures Ltd	2017	0.0078	0.2347	0.9077	0.6997	0.1898

126	Nation Media Group Plc	2017	0.1457	0.2119	0.9433	0.1966	0.1436
127	Safaricom Plc	2017	-0.0024	0.7248	0.1522	0.0171	0.2652
128	Sameer Africa Plc	2017	2.1481	0.1859	1.4498	2.5206	1.0106
129	Sasini Plc	2017	0.0318	0.6690	0.1130	0.0258	0.0643
130	Standard Group Plc	2017	0.1584	0.4029	0.8403	0.2275	0.4809
131	STANLIB FAHARI I0REIT.	2017	0.0013	0.6326	0.0337	1.4622	0.0522
132	The Limuru Tea Co. Plc	2017	37.5350	0.4507	0.9972	0.2032	0.2868
133	Total Kenya Ltd	2017	-0.0095	0.2836	0.9052	0.9252	0.2186
134	TPS Eastern Africa Ltd	2017	0.1715	0.3209	0.3483	0.0476	0.1774
135	Umeme	2017	-0.0092	0.1681	0.8036	0.0703	0.8042
136	Unga Group Ltd	2017	2.0178	0.2762	0.9346	0.1449	0.6132
137	Williamson Tea Kenya Plc	2017	0.0923	0.4321	0.3784	0.0242	0.1480
138	WPP Scangroup Plc	2017	0.8700	0.0247	19.1104	1.1137	1.1382
139	B.O.C Kenya Plc	2018	0.3333	0.3687	0.3878	0.1236	0.0779
140	Bamburi Cement Ltd	2018	0.0054	0.7193	0.0809	0.0501	0.0610
141	British American Tobacco Kenya Plc	2018	0.0501	0.4961	0.3105	0.1099	0.5822
142	Car & General (K) Ltd	2018	0.1606	0.1481	1.1259	0.1331	0.2076
143	Carbacid Investments Plc	2018	0.3206	0.2821	0.1542	0.2680	0.0019
144	Crown Paints Kenya Plc	2018	0.1665	0.2743	0.8321	0.2370	0.0989
145	E.A.Cables Ltd	2018	0.0795	0.5721	0.1407	0.0335	0.2328
146	E.A.Portland Cement Co. Ltd	2018	0.0340	0.2063	0.0806	0.0574	1.1216
147	Eaagads Ltd	2018	0.3833	0.8685	0.0135	0.0511	0.0463
148	East African Breweries Ltd	2018	0.0019	0.6367	0.1752	0.0349	0.1390
149	Eveready East Africa Ltd	2018	77.8998	0.0132	20.4401	27.6643	8.5592
150	Express Kenya Ltd	2018	0.0023	0.7647	0.0528	0.7213	0.2836
151	Flame Tree Group Holdings Ltd	2018	1.2694	0.2877	1.3908	0.2776	0.0204
152	Kakuzi Plc	2018	0.1010	0.4554	0.1334	0.0362	0.0445
153	Kapchorua Tea Kenya Plc	2018	0.2780	0.4116	0.7491	0.0382	0.1318
154	KenGen Co. Plc	2018	0.0020	0.8648	0.0667	0.0503	0.0293
155	Kenya Airways Ltd	2018	8.3742	0.7307	0.1446	0.0583	0.1396
156	Kenya Orchards Ltd	2018	0.0097	0.2247	2.1747	2.2228	0.2523
157	Kenya Power & Lighting Co Ltd	2018	0.0013	0.8120	0.1449	0.0178	0.0465

158	Longhorn Publishers Plc	2018	4.8002	0.0862	3.8250	1.3130	1.3326
159	Nairobi Business Ventures Ltd	2018	0.0379	0.0915	2.6073	3.0007	9.2944
160	Nation Media Group Plc	2018	0.1243	0.1786	1.5784	0.2357	0.2406
161	Safaricom Plc	2018	-0.0030	0.7269	0.1303	0.0165	0.3013
162	Sameer Africa Plc	2018	3.6027	0.1377	1.6576	3.9050	0.6035
163	Sasini Plc	2018	0.0324	0.6697	0.0841	0.0263	0.0036
164	Standard Group Plc	2018	0.1552	0.3890	0.8841	0.2247	0.0149
165	STANLIB FAHARI I0REIT.	2018	0.0012	0.8469	0.0169	1.0664	0.0195
166	The Limuru Tea Co. Plc	2018	57.0068	0.3948	1.2999	0.2266	0.0024
167	Total Kenya Ltd	2018	-0.0082	0.2858	0.7813	0.8890	0.8423
168	TPS Eastern Africa Ltd	2018	0.3138	0.1734	0.6133	0.0881	0.2227
169	Umeme	2018	-0.0129	0.1334	0.6106	0.0848	1.0543
170	Unga Group Ltd	2018	1.7702	0.3216	0.8808	0.1185	0.3148
171	Williamson Tea Kenya Plc	2018	0.0842	0.4175	0.5275	0.0221	0.0516
172	WPP Scangroup Plc	2018	0.8048	0.0251	15.5891	1.1951	1.2336
173	B.O.C Kenya Plc	2019	0.3422	0.3934	0.5379	0.0249	0.0664
174	Bamburi Cement Ltd	2019	0.0054	0.7425	0.0712	0.0100	0.0682
175	British American Tobacco Kenya Plc	2019	0.0359	0.4603	0.2921	0.0099	0.3714
176	Car & General (K) Ltd	2019	0.1994	0.1402	1.1771	0.0243	0.2774
177	Carbacid Investments Plc	2019	0.3392	0.2624	0.1938	0.2772	0.1597
178	Crown Paints Kenya Plc	2019	0.1607	0.2799	0.7919	0.2302	0.2078
179	E.A.Cables Ltd	2019	0.0760	0.6337	0.1376	0.0637	0.1487
180	E.A.Portland Cement Co. Ltd	2019	0.0376	0.2046	0.3178	0.0602	0.2262
181	Eaagads Ltd	2019	0.3566	0.8481	0.0125	0.0503	0.0346
182	East African Breweries Ltd	2019	0.0012	0.6092	0.1415	0.0149	0.2581
183	Eveready East Africa Ltd	2019	285.4027	0.0090	35.9777	93.7919	133.5735
184	Express Kenya Ltd	2019	0.6955	0.8391	0.1148	0.1205	0.0303
185	Flame Tree Group Holdings Ltd	2019	0.2569	0.4576	0.6149	0.1407	0.1877
186	Kakuzi Plc	2019	0.0756	0.5624	0.0757	0.0000	0.0199
187	Kapchorua Tea Kenya Plc	2019	0.2484	0.5606	0.1678	0.0069	0.5459
188	KenGen Co. Plc	2019	0.0019	0.8638	0.0544	0.0476	0.0655
189	Kenya Airways Ltd	2019	0.0013	0.8122	0.0939	0.0358	0.1820

190	Kenya Orchards Ltd	2019	39.4280	0.1752	3.0143	0.5401	0.2530
191	Kenya Power & Lighting Co Ltd	2019	0.0010	0.8447	0.1019	0.0070	0.0956
192	Longhorn Publishers Plc	2019	5.1605	0.0885	4.4342	1.7750	0.4884
193	Nairobi Business Ventures Ltd	2019	0.0739	0.0691	4.9273	9.1583	2.7544
194	Nation Media Group Plc	2019	0.0712	0.2626	1.1635	0.0653	0.1886
195	Safaricom Plc	2019	-0.0034	0.6506	0.1448	0.0160	0.2980
196	Sameer Africa Plc	2019	22.2067	0.0406	12.5034	4.5999	19.6764
197	Sasini Plc	2019	0.0226	0.8693	0.0427	0.0179	0.0068
198	Standard Group Plc	2019	0.1558	0.4392	0.5834	0.0444	0.5194
199	STANLIB FAHARI I0REIT.	2019	18.3920	0.0040	4.5615	11.5858	3.8342
200	The Limuru Tea Co. Plc	2019	2.8687	0.4076	1.4104	0.0250	0.0311
201	Total Kenya Ltd	2019	-0.0070	0.3384	1.0112	0.0398	0.2210
202	TPS Eastern Africa Ltd	2019	0.0458	0.7711	0.0893	0.0131	0.0729
203	Umeme	2019	-0.0161	0.1289	0.6603	0.2146	0.1681
204	Unga Group Ltd	2019	1.7759	0.3539	0.8184	0.0201	0.0973
205	Williamson Tea Kenya Plc	2019	0.0736	0.5285	0.1584	0.0040	0.2817
206	WPP Scangroup Plc	2019	0.5248	0.0404	8.5889	0.8359	1.5341