# DETERMINANTS OF EARNINGS MANAGEMENT OF FIRMS LISTED AT NAIROBI SECURITIES EXCHANGE

 $\mathbf{BY}$ 

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# A RESEARCH PROJECT PRESENTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE, SCHOOL OF BUSINESS UNIVERSITY OF NAIROBI

**JUNE 2022** 

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I do hereby declare that this is my orig	ginal work and has not been submitted to any institution of
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#### **ACKNOWLEDGEMENT**

Glory to the Living God for the opportunity, grace and mercies bestowed on me to complete this study with good health and peace of mind. My special and immensurable appreciation to Dr. Winnie Nyamute for timely response, wisdom and knowledge that kept me scaling higher. Additionally, her sacrifices and invaluable advice.

I extend my deepest gratitude to my moderator Dr. Kennedy Okiro for his wonderful and plentiful experience that boost this research. I cannot end without the mention of Prof. Iraya inputs, and analytical skills which fueled this research.

# **DEDICATION**

It is my honor to recognize my parents for their steadfast, daily prayers and checking on my progress to ensure that I was on track. I sincerely thank all friends and the colleagues who supported this journey in any way within their means. The process was tough and through but with your support, the academic soaring became easier.

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#### LIST OF ABBREVIATIONS

**AFS** Audited Financial Statement

**ANOVA** Analysis of Variance

**CBK** Central Bank of Kenya

**CEO** Chief Executive Officer

**CMA** Capital Markets Authority

**EM** Earning Management

**GAAP** Generally Accepted Accounting Principles

**GDP** Gross Domestic Product

**IPO** Initial Public Offer

**KSE** Karachi Stock Exchange

**LGD** Lagged

**NPV** Net Present Value

**NSE** Nairobi Securities Exchange

**OLS** Ordinary Least Square

**ROA** Return on Asset

**ROE** Return on Equity

**VIF** Variance Inflation Factor

WC Working Capital

WCM Working Capital Management

#### **ABSTRACT**

Earnings management has become the subject for discussion due to its significance in the operation and management of the companies. The objective of the research was to examine the determinants of earning management. The study used both descriptive and inferential computations. The research was undertaken in the period interval of 2016-2021. The secondary data were obtained to enhance the research findings. Moreover, multicollinearity, autocorrelation and normality tests were undertaken. The findings indicated R of 0.733 while R Square was 0.537. This posit that all the repressor variables maximized in the study that included executive compensation, firm size, financial leverage and performance accounted for 53.7% of all the variables affecting earning management. Therefore 46.3% were the variable excluded in the study. Moreover, the findings denoted that, a single positive increment in the firm size caused an increase of earning management by 0.3%, all factor remain constant. Additionally, a unitary increase in financial leverage translated to a decrease in earning management by 27.9% whenever all other factors are kept constant. Further to the findings, an increment in performance by one unit triggered an increment in earning management by 9.6% and while a single unit increase in the executive compensation triggered an increment in earning management by 1.6 when all factors are kept constant. From 95% confident interval, it is worth stating that firm size (t=1.128, p=0.260), performance (t=15.383, p=0.000) and executive compensation (t=1.740, p=0.260)p=0.083) have positive effect on earning management while financial leverage (t=-5.678, p=0.000) has negative effect on earning management. The research recommended for quality booking and accountability.

#### **CHAPTER ONE: INTRODUCTION**

# 1.1 Background of the Study

Earning management incorporates the utilization of accounting policies and principle to arrive at certain objective. The management maximizes the accounting loopholes to generate certain outcomes (Scott, 2015). EM occurs in cases of the judgmental decisions through reorganization of transactions leading to adjustments in the financial statements hence influencing the contractual outcomes that solely rely on accounting information. Furthermore, it misguides the stakeholders in their decision-making process. Earning management has been attributed to flexible accounting standards hence providing gaps for the management to expedite fictitious accounting figures. The deviations from the accuracy to artificially generated numbers is misleading to the investors and the shareholders (Nyatichi, et al. 2021).

The theory underpropping this study include positive accounting theory, agency theory and stewardship theory. Watts and Zimmerman (1978) blueprinted the opportunity given to management in choosing the appropriate accounting method. Positive accounting theory enhance the management and governance in adopting best accounting methods to enhance transactions. Jensen and Meckling (1976) advocated for maximization of value to shareholders and elimination of contradictory and egocentric pursuits. Donaldson and Davis (1989) advocated for the management of companies resources based on the trust, reputational reinforcement, high professionalism, aligning personal needs with organizational demands and reciprocity. The stewards are driven by both intrinsic and extrinsic motivation to safeguard wealth and maximize value.

Globally, earning management has been center of controversy. The collapse of giant company such as Worldcom and Enron subjected the EM to various analysis. Hung, Thi and Dung (2020)

explored the effects caused to the firm value by the earning quality. The study indicated that gearing, growth in sales and book value were negatively associated with earning quality. Aduda, Chogii and Magutu (2013) opined that board composition was critical in the earning management. Irakya et al. (2015) earning must be given comprehensive attention to avoid collapse of industries. Iqbal, Zhang and Jebran (2016) posit that management has no association with the earning management. The research advocated for CEO duality in the companies to avoid fictitious accounting.

# 1.1.1 Determinants of Earning Management

Determinants of earning management are factors that enhance the alteration and change of accounting by the management (Wangururo, 2014). It entails utilization of loopholes to instigate falsification of accounting to mislead the investors on the accuracy of the financial performance of the firm. The motivation behind this is to reap big from the contractual agreements (Wangui, 2017). The practice is a window allowing adjustment while at the same time conforming to the requirements of GAAP (Ijeoma, 2014). The severity of EM contradicts accountability and transparency. Furthermore, it goes against the integrity of financial statement, increase losses and eliminate the shareholders confidence. In a nutshell, determinants of earning management are factors that causes the application of specific accounting policies or cessation of application.

The determinants of earning management are very important in digging deeper to accounting loopholes. The rampant ways of earning management include revenue and expense recognition. The firms may go further to amend dates in the books of accounts (Mboko, 2014). Furthermore, cookie jar, smoothing and big bath are critical aggressive method that may sink the business. The business going concern must not be underestimated. Earning persistence portray the

sustainability of company's recorded net income. Licerna and Cano (2017) posit that absence of reliability, relevance and predictability, renders the financial reports invalid.

Nyatich (2021) assessed corporate governance, firm traits and executive compensation in the determination of earning management. The research was motivated by contrast, mixed and inconclusive research. Wangui (2017) analyzed earning management verse the return on assets. The study indicated that quality revenue management was statistically significant and positively associated with ROA. The study explored asset and liability, and expense management and opined that all the predictor variables were positive associated with the ROA. Were (2018) investigated corporate governance and earning management. The study optimized board independence, board size, ownership and the board activity. The aforementioned study have utilized divergent variables hence this study uses firm size, leverage and performance.

#### 1.1.2 Earning Management

Earning management include the utilization of accounting principles selectively to achieve desirable objectives. EM has been utilized in changing reports (Nyatich et al. 2021). The loopholes in GAAP motivates the management to alter the financial reports. The management can prioritize method that delay realization of expenses or advancing the recognition of revenues. The accountants can utilized discretionary traits to apply selective accounting principles suitable to their designs. The continuity of alteration is a recipe for fraud and misleading financial information. Scott (2015) opined that earning management is done under the accounting framework by maximizing on the gaps.

Earning management incorporate legal and sound judgment that strive to attain stable and expected financial outcomes. Li et al. (2014) stated that EM is concern with the allocation of

resources, efficiency and the value addition driving the company forward. Were (2018) indicated that decision making process involve management who are driven by internal target, external demands and result-oriented motivations. The management may engage in smooth and the window dressing objective for the purpose of bonus and the IPO. Oluch, Namusonge and Onyango (2015) emphasized that earning management is not good to the quality of financial reporting. The variance in the application of accounting principles distorts the financial statement, motivate management to deviate from quality reporting and engage in the manipulation of financial reports.

Earning management has been measured using different metrics. Many researchers have operational EM using discretionary accruals that is quantified using model such as Modified Jones (Nyatich, 2021). Some researchers have utilized Larker and Richardson Model that utilize the book value as well as the operational cash flows (Bekiris and Doukakis, 2011). Dechow-Dichew Model was the modified DD was optimized by Peni and Vihamaa (2010). Others have emphasized on the intercept and lagged returns relating to assets to approximate the returns. This study incorporates the modified Jones Model for the study.

#### 1.1.3 Earning Management and its Determinants

Earning management and its determinants have postulated some association based on the previous scholars. Irungu (2010) explored macroeconomics factors influencing EM. These factors included the inflation and foreign exchange. The research went ahead to expound the fundamental role of interest rate and the money supply on the EM. Outa (2013) opined that EM is lubricated by the desires and the concerns. The engine of EM listed include the desired

procedures, compensation to board, capital market rewards, sourcing external contracts and the incentives among others. The scholars emphasized on the presence of the certain driving force to encourage the EM.

Musa (2013) stated CEO objectives and the company size were critical in EM. Garane (2017) stated external motivations, bonus system, performance and the regulatory requirement were the driving force behind EM. Nyatich (2021) posit that firms' traits, compensation and the governance had an upper hand on the EM. Both local and international scholars have given divergent views on the determinants of EM. This research sought to expound the knowledge by looking at the CEO Duality, firm size and performance as the main lubricant of earning management.

# 1.1.4 Firms Listed at Nairobi Securities Exchange

NSE became fully licensed and registered under society acts in 1954. The capital market authority is the main regulatory body of NSE. CMA provides guideline on the operation and the minimum requirement. The guideline includes the publishing of financial information, governance compositions to blueprint the size and the independence. The firms listed at NSE have played significant role in the growth of the economy (Ngunjiri, 2017). The virtual platform has encourage innovation, collaboration and benchmarking. The developed and developing nation can share great ideas to promote smooth operation.

NSE enhance the mobilization of domestic savings. The main duty is buying, selling and issuance of shares (NSE, 2022). This is critical in the re-allocation of financial resources as well as making clients active from being dormant. Moreover, NSE play chief role in the conversion of

long-term investments to liquid. The open trading platform has enhance equity and equality in company ownership through the purchase of shares. Furthermore, the company can request for extra funding for development and enlargement. The firms listed at NSE have shaped the governance of other institutions. Hence, NSE increase the inflow of global capital. Empirically, CMA (2015) guides the remuneration of the board. Juma (2015) posit that there have continuous increment of ESOP from 8.2 billion to 8.5 billion in the years 2013 and 2014 respectively. Furthermore, CMA advocates for the voluntary disclosure and publishing of the financial reports. The firms listed at NSE have experienced significant growth in terms of assets, leverage, size, as well as the profitability (Chepkwony, 2018). In a nutshell, firms listed at NSE have exhibited superiority in their performance.

#### 1.2 Research Problem

Earning management has been subject of controversy for the global market. The determinants of earning management have associated with macroeconomic factors (Irungu, 2010). Outa (2013) postulated that there are crucial driving forces that enhance EM, which incorporates management bonuses, capital market rewards, contractual negotiations, and incentives. Yanthan et al. (2019) posit that earning quality influenced the market value. Earning management has found windows in the listed firms due to the loopholes in the accounting policies. Big bath, smoothing and cookie jar among other have been applied in the firm to arrive at the designed objectives. The alteration of financial statement increases the risk towards operational oblivion.

Kenya context has recorded major misfortunes due to EM. NBK experienced illiquidity due to the manipulation of financial figures to suit certain desires (Madiavale, 2011). Unga group, Tuskys, Nakumatt, CMC motors and Dubai Bank have recorded several predicaments associated with poor quality of financial statement. Meanwhile, Imperial Bank was put under statutory

receivership in 2015, thereafter, it was followed by Chase Bank in 2016. The uproar in the financial sector motivated forensic accounting and auditing that associated financial crisis with managements' fictitious figures. In Chase Bank, the loans to firm's director was 25% hence boosting illiquidity. Waweru and Riro (2013) indicated that firm engaging in the manipulations were mostly the highly leveraged. Wangururo (2014) emphasized on the negative correlation between board meetings, size and debt to asset verse EM.

Globally, Iqbal, Zhang and Jebran (2016) indicated that board size and audit committee presented an association with the EM. On the other hand, management were not related with EM. The mass failure of giant firms such as Enron and Worldcom were associated with severity in the alteration of financial statement (Wicaksana, Yuniash & Handayani, 2017). Jesus and Emma (2013) indicated a negative association between governance and EM. However, CEO duality reinforced earning management. Hung, Thi and Dung (2020) stated that earning quality had significant effect on the value of the firm. Firm size and dividend recorded a positive association. However, gearing and revenue growth moved in the opposite direction with EM. The study recommended for quality financial reporting.

Nyatich (2021) analyzed firms' traits and the compensation are key engine of EM. The findings states that board size impacted on EM. Moreover, governance influenced EM significantly while compensation had weak effect on EM. Aduda, Chogii and Magutu (2013) indicated that board composition were crucial in elimination of alteration of financial figures. Were (2018) posit that corporate governance influenced EM. Olange and Akenya (2017) postulated that working capital

played significant role in EM. Nyoka (2018) showed that management were negatively related with EM. Furthermore, age and independence registered weak impact on EM.

Empirically, the review highlight the conceptual gaps. Majority of the study has concentrated on corporate governance and working capital as the independent variables. Moreover, global studies done in Indonesian, US and Pakistan among others may not reflect the Kenyan contexts. In addition, the study have utilized different methods to measure earning management. Nyatich (2021) utilized Modified Jones Model. Bekiris and Doukakis (2011) used Larker and Richardson Model while Peni and Vihamaa (2010) concentrated on DD model. The difference in methodology might have caused controversy in findings. This research explains theoretical gaps by incorporating positive accounting theory, agency and stewardship theory. In summary, the study seeks to bridge contextual, conceptual, methodological and theoretical gaps by answering question: what are the determinants of earning management?

# 1.3 Research Objective

The objective of the study is to explore the determinants of earning management for firms listed at NSE in Kenya.

#### 1.4 Value of the Study

Regulators and the government will obtain relevance knowledge to assist in the policy formulation. The research will guide the government in sealing the accounting loopholes to eliminate alteration of the financial information. The findings blueprints the need for government intervention to promote business continuity. CMA and NSE will use the findings in emphasizing the need for quality financial reporting.

The study increase the prevailing knowledge. The study of leverage, firm size and performance add knowledge. It also bridge the theoretical, conceptual, methodological and contextual gaps. The research promotes the importance of stewardship, separation of duties and adherence to accounting principles. It reinforce in-depth knowledge necessary for smooth operation.

The study is important to scholars and management. The research optimizes it in referencing. Management uses it in their internal regulations and controls. In addition, the analytical skills can be used as the building blocks for the future research. The study is an eye-opener on the prevailing determinants of EM in Kenya. It also gives superior latitudes to relevance, validity, quality and prudent financial reports.

#### **CHAPTER TWO: LITERATURE REVIEW**

#### 2.1 Introduction

This chapter incorporates theories underpropping the study. Furthermore, it illustrates the determinants which are the cornerstone of the study. The research encapsulates empirical studies ranging from global, regional to local. The study also summarizes literature while highlighting the gaps to be bridge. The research utilizes flowchart as schematic representation portraying association between the regressor and the regressed variable.

#### 2.2 Theoretical Framework

The research utilizes positive accounting theory to highlight appropriate transactional ways. The study assesses its building blocks and criticism associated. The agency theory is important in demonstrating the role of executive in pursuing organizational goal to optimize the shareholders' value. The stewardship theory emphasizes on the paramount role of protecting shareholders wealth with ill motive of alteration.

#### 2.2.1 Positive Accounting Theory

The theory anchoring this study is positive accounting theory. Watts and Zimmerman (1978) indicated that organization makes decision based on the accounting principles. The method is critical in the reporting of earnings. The theory opined that management chooses the best suitable method that addresses their personal needs. The theory insinuated fundamental presuppositions including the bonus factors, political expenses as well as the financial leverage. The theory was formulated to address the controversy and gaps among investors, the shareholders, and other users verse management but in conjunction with the financial statements.

The criticism on the theory is the failure to provide the accounting solution to the highlighted problems. The explanation of accounting and prediction are not sufficient. It only gives the

freedom of executive in choosing the method that conform to the self-interest and the egocentric behavior. The opportunistic practice of engaging in EM can easily be eliminated through utmost accountability, due diligence and effective governance structures. The theory emphasize on the accounting methods utilize by the management in advancing EM although it fails to blueprint futuristic accounting policies to guide in the accounting related decision makings. The theory emphasize the opportunistic nature of the management in enhancing EM.

The theory is valid to leverage, size and performance. The firm is a system with nexus of contractual associations. Furthermore, accounting method is critical in reporting earnings. The reporting of financial and accounting performance is spearheaded by the method chosen. The accounting reports are critical in stipulating financial health of the company. The opportunistic practice are unwarranted in the situation where shareholders wealth is chief latitude of the company. The management must optimize accounting methods that provide true and fair picture of the company without alteration whatsoever. Profitability, size and leverage are crucial areas in accounting disclosures.

#### 2.2.2 Agency Theory

Agency theory reinforce the research by illustrating the link between the principal and the agent. Jensen and Meckling (1976) stipulated the agency-principal association. The theory advocated for the pursuit of principal's objective by the management. The agency are mandated to accomplish the task prioritized by the principal. The shareholders being the principal, expect the maximization of the value in order to have positive and significant return on their investment.

The separation of duties and responsibilities must be well documented to guide the management.

The managers should not pursuit their self-centered motives but firm's goals and objectives.

The criticism is based on the demands for the segregation of duties, monitoring, evaluation and auditing. The measures are very important in the balance-checking the operations. However, this practices create more agency cost. The higher the agency cost, the less the wealth to shareholders. The management should not engage in the activities that prioritize their needs over the organizational goals. The theory is one-sided by associating all the challenges facing the firm with the agents. The theory advocate for clear separation of duties and responsibilities to provide independence.

Empirically, it is relevant in advocating for segregation of duties to evade conflict of interest. The opportunistic and egocentric practices lead to EM. It postulates the effective and appropriate mechanisms that reduce agency problem. Monitoring, evaluation and auditing enhances accountability, integrity and professionalism. The agency problems can emanates from the performance, leverage or the size of the firm. The efficient mechanism put the firm on track as expected by the shareholders.

#### 2.2.3 Stewardship Theory

Donaldson and Davis (1989) coined stewardship theory. The theory sought to address wide array of issues in the economic and socio-political volatility. The theory advocate for professionalism, accountability and transparency in the management of firms. Sound stewardship is driven by the effective policies and accounting principles. It incorporates the safeguarding of firms' resource

to enhance continuity of the business to the unforeseeable future. The quality governance and sound decision making are great pillars towards stewardship.

The drawbacks of stewardship theory is the demand for transactional cost to solve emerging problems. The absence of auditing and monitoring departments may encourage management to alter financial statements to suit their needs. It enhance the conflict of interest, hence, governing board can exploit the shareholders in absence of control mechanisms. The theory promote the mutual trust without placing mechanisms to mitigate risks. Managers are expected to place collective and the pro-firms' objectives first and above their self-interest. The interest of management and organization must be convergent for the stewardship to progress.

The theory is supreme in this study since it advocate for convergent goals. It gives greatest latitude to trust and mutual respect. It postulate that low trust increase the transactional and agency cost. The reward of effective and efficient management is translated to reputation of management. The achievement of objective is through initial trust disposition. Furthermore, it coined the importance of responsibility, trust, autonomy and convergent of goals. The performance and governance of the organization are critical longevity operation of the firm. Moreover, stewardship theory indicates the importance of building sound business through honesty and integrity.

# 2.3 Determinants of Earning Management

The section highlights factors that influence earning management. The fundamental determinants in this research include firm size, leverage and performance. The three determinants are the predictor variables of the study.

#### 2.3.1 Firm Size

Firm size is critical in the research studies. The scholars have utilized wide array of perspective to spearhead the firm size which has incorporated total sales and even total assets. The earning management and firm size remain a major controversial area. Large companies are expected to have well functional systems. Furthermore, small firms are expected to be struggling to put in place effective to enhance their operations.

Firm is present an important aspect in the research study. The market size has been useful method portraying market capitalization. Nalarreason et al (2019) posit that earning management and firm were inversely associated. The study posit that the greater the size the lower the earning management and vice versa. Gaffar (2014) on the other hand stipulated a positive association between firm size and earning management. Nyatich (2021) insinuated a positive association amid firm size and the Earning management. Therefore, an increase in size caused an increment in the earning management. The presence of mixed findings demand for more research based in Kenya.

#### 2.3.2 Leverage

Leverage illustrates the use of debts and equity in financing the operation of the organization. The financing and sound decision rely on the optimum capital structure to run the operation. Some financial managers prefer sourcing funds through retaining earnings since it is cheaper. This is because it does not incorporate transaction and taxation cost. However, some managers prefer external sourcing to invest in mass projects with immense and positive NPV. Bashir, Mohamed and Garane (2017) stated the supremacy of financial leverage in credit rating. In

addition, the firms undergo credit evaluation before determination of credit suitability. Financial leverage entails the use of both equity and debts (Wanjohi, 2018). Financial leverage upgrade the utilization of assets to generate revenues. The managers need to be cautious while borrowing. The expenses relating to borrowing should be less than the benefits.

The utilization of borrowed funds is advantageous to the firm in reaping much from the speculative projects. The ability of the firm to remain competitive in the market can be associated with long term financial leverage emanating from investment in projects with positive NPV. Borrowed funds can cushion the company in the economic turbulence. Nalarreason et al (2019) stated that leverage has positive correlation with EM. Nevertheless, Latif and Abdullah (2015) stipulated that leverage has no effect on EM. Financial leverage reinforce the company to remain financially stable and fit to maximize the assets to generate revenue. It is critical in enhancing upfront investments. The payment of dividend is informed by the profitability of the business. Nonetheless, dividend payment is useful in attracting more investors. Notable, the findings provided mixed results. Financial leverage is critical and fundamental in the EM.

#### 2.3.3 Performance

The performance of the company is the roadmap demonstrating the financial soundness. The metric to gauge the maximization of wealth of organization is performance. The businesses use different parameters to measure performance. ROA and ROE are crucial indicators among others such as sales and net income. The financial performance has been critical in the study. Goel (2017) opined that profitability moderated earning management.

There are minimal studies regarding performance and EM. The analysis highly performing and lowly performance in comparative with earning management is an eye-opener. Mostafa (2019) indicated that low-performing firms were notorious in alteration and manipulation of financial reports. Highly-performing recorded minimal EM in their undertakings.

# 2.3.4 Executive Compensation

The executive compensation refers to the payment to the management in form of salaries, bonus and other related compensation (Were, 2017). Moreover, the remuneration include the perks, incentives and the insurance covers. The capital market authority stipulated the executive authority (CMA, 2015). Yatich, Iraya, Njihia and Mirie (2021) opined that managers compensation include the package, perks, incentives, and other benefits.

The board are motivated to upgrade their compensation to reach optimum level where they can earns bonuses periodically. Larker & Tayan (2016) opined that corporate governance can influence their pay. Executive compensation is the amount payable to top management team in exchange for the service rendered. The benefits can either be monetary or non-monetary. In a nutshell, shares, salaries, binding, contractual agreements, bonus and other stock base compensation amounts to executive compensation.

#### 2.4 Empirical Reviews

Bashir, Mohamed and Garane (2017) explored the EM. The research focal point was associated chain firms in the Nairobi County. The study attempted to expound on the private and public firms. The data collected was from both primary and secondary sources. The research utilized

multivariate regression model to provide a conclusive finding. The findings stated that contracting motivation as well as firm performance had positive though insignificant association with the EM.

Were (2018) analyzed corporate governance and the EM. The research concentrated on the 64 firms quoted at NSE. The study illuminated board independence and size. In addition, the scholar exploited ownership concentration as well as board meetings to explain the EM. The mediating variable was the firm size. The outcome stated negative association with the EM from board independence and board activity. Nevertheless, board size and the ownership concentration registered a neutral association.

Olowonoyi and Ojinike (2010) assessed determinants of stock returns. The study was done in a developing country of Nigeria. The scholar scrutinized 170 publicly registered firms. The data collected ranged from year 2000-2010. Panel data were computed and summarized using descriptive statistics. The findings posit that firm was positive linked to stock returns. The study recommended the use accounting methods that enhance integrity of financial reports.

Wangui (2017) studied EM and the financial performance. The study was built on the non-financial firms operational in the Nairobi City. The key areas under scrutiny included; revenue of management and the expenses. Moreover, the scholars analyzed asset-liability management. The research optimized primary data in conjunction with secondary data. Descriptive and inferential statistics appraised in the study. The research used stratified sampling and computed data

empirically using SPSS. The finding poised that revenue management enhanced profitability. Notably, asset-liability management and expense management increased profitability.

Wanjohi (2021) assessed working capital and EM. The research scrutinized 230 manufacturing firms in Kenya. The explanatory variables included; current ratio, leverage and company size. The study period spanned from 2016-2020. The scholar optimized secondary data while approaching the study with the descriptive cross-sectional method. Empirically, multiple regression was useful in demonstrating association. The data computation used SPSS. The outcome summarized positive and significant association relating to EM verse leverage and company size. Current ratio recorded insignificant association.

Arif (2020) analyzed earning quality verse the value of the market. The research spanned from 2009-2019 relating to 40 companies quoted at the NSE. The research used simple random sampling method to identify the firms. Descriptive statistics reinforced correlation analysis in the research. Furthermore, multiple regression was optimized to postulate association. The outcomes emphasized that market value and firm size registered weak positive correlation with EQ. Financial leverage recorded significant positive correlation.

Rekesten and Kristiansen (2011) explored the EM in Norway. The study focused on the determinants of dividend payout. The study sampled about 1.5 Million private limited firms. The research were built on primary data collection via interviews. Moreover, questionnaires were incorporated to create more insight to the study. The findings showed that EM is significant in the reduction of minimal losses in the financial statements.

Kerstein and Rai (2007) looked at 31, 894 data that incorporated years from 1982-2001. The study was determine to realize the association between accreditation and WC management. The firms was subdivided into four distinct groups; the first group had positive adjustment in revenues. The second group recorded negative adjust but in small earnings. The third group had positive changes in big earning and the last one posted negative changes in great earnings. However, the study utilized income variation to represent EM. The study did not give conclusive and comparative findings.

Li et al (2014) assessed WC and discretionary assets. The research optimized longitudinal technique to illuminate association. The correlation techniques enhanced determination of association between WC and discretionary assets. Research data classified into four distinct traits. The findings demonstrated a positive association between working capital management verse the quartile business that are greater than other quartile firms. The research did not provided conclusive position on the working capital management and the earning management. It presupposed that companies possessing strong working capital grew faster than their competitors due to cash flow retained.

Jesus and Emma (2013) investigated association between corporate governance and EM. The study was done in Latin America. The study countries in question combined; Argentina, Brazil, Chile as well as Mexico. The research period spanned from 2006-2009. The data was sourced from 435 firms after making 17400 observations. Descriptive analysis and regression were combined to reach key findings. Moreover, time series and cross-sectional analysis were done.

The metric used to measure EM was Modified Jones Model. The findings indicated that ownership concentration, institutional investors, and board independence as well as board meeting had negative correlation with earning management.

# 2.5 Conceptual Framework

Conceptual Framework is schematic representation highlighting the association in a snapshot. The flowchart has explanatory and explained variable. It enhance the understanding and greater insight. Conceptual framework summarizes brief account of the prevailing variables under investigation.

#### **Independent Variable**

# **Dependent variable**

#### **Determinants**

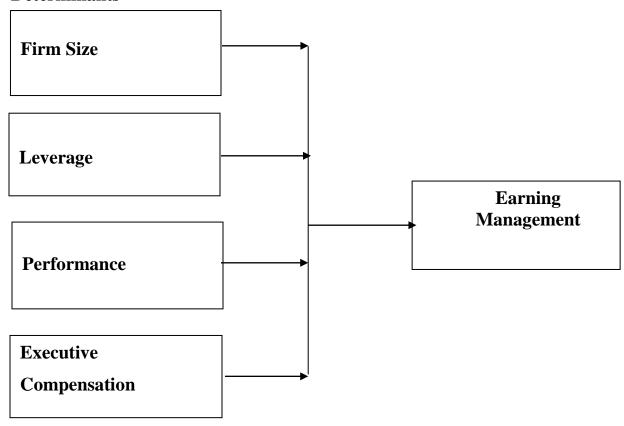


Figure 2.1: Conceptual Model Source: Researcher: 2022

# 2.6 Summary of Literature Review and Research Gaps

Aduda and Ongoro (2021) scrutinized WCM and EM. The research was informed by the link between the operational capital and EM. The study was motivated to bridge the knowledge gaps. Furthermore, the controversial and contradictory findings surrounding the previous studies encouraged more investigation. The study was supported by the need to have local research to blueprint or discredit the preceding findings. From the global studies analyzed, it identified contextual and methodological gaps. The local studies have indicated conceptual, methodological and theoretical gaps. Moreover, mixed findings spanning from positive, negative to neutral association encourage further exploitation of determinants of earning management.

Moreover, the existence of wide array of discrepancy based on concept, context, methodology and the theoretical foundation. The majority of the research have looked at working capital Li et al. (2014), Market value by Arif (2021), corporate governance by Nyatich (2021) and financial performance by Wangui (2017). The idea driving the preceding studies different from the prevailing research. Furthermore, global studies showed a different set-up, therefore, mandating the local study. In addition the different methodological and theories used motivate more studies on the determinants of EM.

#### CHAPTER THREE: RESEARCH METHODOLOGY

#### 3.1 Introduction

The chapter presents the research design useful to the research. Furthermore, it provide comprehensive statement on the population. Moreover, it highlighted data collection and the type. In addition, it discussed data analysis method and its empirical model. Notably, diagnostic and significance studies were evaluated.

#### 3.2 Research Design

Research design represents the layout that enhance the accomplishment of the objective in the investigation studies (Creswell, 2017). Bryman and Bell (2007) opines that design is the structure providing the roadmap in the implementation of research and preceding analysis. The layout appraises generation of binding evidence suitable to specific criteria and conform to research question. The study maximizes descriptive survey design to enhance comprehensive illustration of earning management verse the predictor variables such as firm size, leverage and performance.

# 3.3 Population

Population entails all the objects, individuals or elements that exhibit similarity in their traits. The study strived to assess all the 65 firms quoted at the NSE as at 31<sup>st</sup> December 2021. The chosen population represents a census and gives accurate accounts for generalizations. Population is aggregate items under the investigation. The published financial report having complete data for the firm size, leverage and the performance. Kothari (2004) indicates that population plays integral role in the study.

#### 3.4 Data Collection

The panel data was crucial for the research. The secondary data was sourced from published and audited reports. The study source the data already documented to make meaningful findings. The study period relates to 2016-2021. Data collection is the garnering and gathering raw data from divergent source for objective quantification and analysis (Creswell, 2017). To create insight and deep knowledge, the study assess firm size, leverage and performance. The data was sufficient for juxtaposition, presentation, inferences, description and interpretation.

# 3.5 Data Analysis

The data garnered was subjected to a thorough and comprehensive process. It entailed cross-checking to enhance accuracy, validity and relevance of the data. Furthermore, the data was edited, reviewed, coded and analyzed via SPSS. The multiple regression was crucial in creation of the association amid earning management verse firm size, leverage and performance. Descriptive analysis, tabulation and graphs aid the presentation and interpretation of the research.

# 3.5.1 Diagnostic Test

The analysis were undertaken to give greater knowledge concerning the magnitude and direction. Moreover, under multicollinearity the researcher used Durbin Watson while normality optimizes VIF and autocorrelation used Kolmogorov-Smirnova. It summarizes the type of association relating to the variables. Normality test is critical in the elaboration of data distribution pattern. Moreover, it gives greater latitude to the effect on the P-Value. Autocorrelation is supreme in the narration of lagged, randomness in even the past influence and design. The researcher can upgrade the model fit by capturing the structure and data. Multicollinearity presents the inter-

relation between the predictor variables. The presence of inter-association leads to elimination of highly associated regressor variable.

#### 3.5.2 Analytical Model

The multiple regression was useful in illustrating the association. The model highlights the association that combines all the variables. It links the variables by blueprinting the line of best in the approximation. Resnik (2003) stated the supreme role of linearity nature in defining association.

 $Y = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$ 

Whereby:

Y= Earning management (Modified Jones Model)

 $\alpha_0$ =y intercept of the regression (constant variable)

 $X_1$ =Firm Size (Natural log of total assets)

X<sub>2</sub>=Financial Leverage (Debt/Equity)

 $X_3$ = Performance (ROA)

 $X_{4=}$  Executive Compensation (Natural log of total executive compensation)

 $\varepsilon$ = error term

But EM (Modified Jones Model) is used to detect the dimension of the EM. The model was useful in the accomplishment of supreme performance in the industry approach in terms of the coefficient of stability and the robustness that is postulated the discretionary accruals (Yoon et al., 2012). Earning Management as stipulated by Modified Jones Model:

TAt/ REVt -1= 
$$\beta$$
0+  $\beta$ 1( $\Delta$ REV- $\Delta$ RECt-1)/REVt -1+  $\beta$ 2( $\Delta$ EXPt-1- $\Delta$ PAYt-1)/REVt-1 +  $\beta$ 3 ( $\Delta$ DEPt-1- $\Delta$ RETt-1)/REVt-1+  $\epsilon$ 

where

TA = total accruals measured by the difference between earnings and cash flow from operating activities

REV =LGD Revenue, controls heteroscedasticity

REC= LGD accounts receivables

DEP = LGD Depreciation expenses

EXP = LGD cost of sales and expenses excluding non-cash expenses.

PAY = LGD accounts payables

RET = LGD retirement benefits expenses

 $\Delta$  = change operator.

 $\varepsilon = \text{Error term}$ 

#### 3.5.3 Inferential Statistics

The data was quantified and computed to arrive conclusive findings and recommendation T-test and F-test were executed to show the level of significance. The test utilizes 5% and the 95% confidence level to giving far-reaching conclusion.

## CHAPTER FOUR: DATA ANALYSIS, PRESENTATION OF RESULTS AND DISCUSSION

#### 4.1 Introduction

This chapter is integral for data analysis, presentation and discussion. The descriptive computation tabulated below provides an outlook of the research outcome in terms of mean, minimum, maximum as well as standard deviation. The study goes further to table the inferential analysis with diagnostic test and regressions. The objective of the study is to examine the determinants of earning management. The study maximized secondary data to aid statistical computation.

## **4.2 Descriptive Statistics**

The table 4.1 provides the summary of data collected in snapshot hence promoting the research findings.

**Table 4.1 Descriptive Statistics** 

<b>Descriptive Statistics</b>					
	N	Minimum	Maximum	Mean	Std. Deviation
Earning Management	365	.47710	1.17610	.9045877	.13107467
Firm Size	365	.00000	6.52000	2.5615068	1.78534362
Financial Leverage	365	1.00000	1.79010	1.0553567	.10496052
Performance	365	4.76200	8.81100	7.2316575	.84836661
Executive Compensation	365	.00010	9.20470	.1513721	.52271552
Valid N (listwise)	365				

From the tabulation above, the minimum, maximum, mean and standard deviation of the variables were investigated and analyzed. The earning management displayed a mean of 0.9049 and standard deviation of 0.1311. Firm size portrayed a mean and standard deviation of 2.5615

and 1.7853 respectively. Financial leverage recorded a mean of 1.0553 and standard deviation of 0.1047. Moreover, the performance had the mean and standard deviation of 7.2317 and 0.8484 respectively. The last variable under study, executive compensation, had a mean of 0.1514 and 0.5227 standard deviation.

## 4.3 Correlation Analysis

Correlation analysis demonstrates an in-depth knowledge on the association. Correlation rubberstamps prediction and minimize the range of uncertainty by enhancing the reliability and the validity. Moreover, the study used correlation to show the magnitude and direction from the study as opined by Table 4.2.

**Table 4.2 Correlation** 

Correlations							
		<b>Earning</b>	Firm	Financial	Performance	Executive	
		Management	Size	Leverage		Compensation	
Famina	Pearson Correlation	1	100	450**	.698**	.074	
Earning Management	Sig. (2-tailed)		.055	.000	.000	.157	
	N	365	365	365	365	365	
	Pearson Correlation	100	1	065	254**	.014	
Firm Size	Sig. (2-tailed)	.055		.219	.000	.795	
	N	365	365	365	365	365	
Financial	Pearson Correlation	450 <sup>**</sup>	065	1	366**	.078	
Leverage	Sig. (2-tailed)	.000	.219		.000	.139	
	N	365	365	365	365	365	
	Pearson Correlation	.698**	.254**	366**	1	.045	
Performance	Sig. (2-tailed)	.000	.000	.000		.389	
	N	365	365	365	365	365	
Executive Compensation	Pearson Correlation	.074	.014	.078	.045	1	
	Sig. (2-tailed)	.157	.795	.139	.389		
	N	365	365	365	365	365	

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

**Source: Researcher Results 2022** 

From the above findings, firm size recorded a negative correlation towards the predicted variable that is earning management as shown by r=-0.100 and p=0.055. Financial leverage also posted a negative correlation towards earning management as poised by r=-0.450 and p=0.001. Both performance and executive compensation portrayed a positive correlation towards the regressor

variable of (r=0.698, P=0.001) and (r=0.074, p=0.157) respectively. Therefore, it summarize that firm size and financial leverage are inversely correlated based on this study while the performance and executive compensation move to the same direction with the earning management.

## **4.4 Diagnostic Test**

Diagnostic test were accomplished to display the nature, pattern and trend of data. Moreover, it was useful in blueprinting the correlation and randomness existing. Multicollinearity was undertaken via Variance Inflation Factor (VIF) normality was posted after maximization of Kolmogorov-Simonov and Shapiro-Wilk. Moreover, the researcher performed autocorrelation through the Durbin Watson.

## **4.4.1 Multicollinearity Test**

The multicollinearity test were performed to enhance the understanding of association among the predictor variables. Tolerance and VIF of the regressor variables fall within the required range. VIF less than 3 (VIF  $\leq$  3) is recommendable since it displays no multicollinearity. Moreover, the VIF of of  $\geq$  3 post collinearity while VIF of  $\geq$  10 signify a detrimental with multicollinearity according to Myers (1990). Notably, Tolerance computation were within the required range. The finding, theorefore, infers absence of multicollinearity among the variables.

**Table 4.3 Multicollinearity Results** 

Model		Collinearity Sta	Collinearity Statistics		
		Tolerance	VIF		
	(Constant)				
	Firm Size	.905	1.105		
1	Financial Leverage	.830	1.205		
	Performance	.782	1.278		
	Executive Compensation	.986	1.014		

**Source: Researcher Results 2022** 

## **4.4.2 Normality Test**

Table 4.4 analyzed the standard error and T-Tests enhance by the supposition on the error term that is consistent and acceptable in the study. The pattern of distribution of data was an eye-opener for conclusion on regularity distribution. The research maximized Kolmogorov-Smirnov.

**Table 4.4 Tests of Normality** 

	Kolmogo	rov-Smirn	OV <sup>a</sup>	Shapiro-Wilk		
-	Statistic	df	Sig.	Statistic	df	Sig.
Earning Management	.125	365	.000	.959	365	.000
Firm Size	.110	365	.000	.939	365	.000
Financial Leverage	.299	365	.000	.487	365	.000
Performance	.087	365	.000	.970	365	.000
Executive Compensation	.386	365	.000	.210	365	.000

## a. Lilliefors Significance Correction

**Source: Researcher Results 2022** 

From Table 4.4 above, the researcher optimized Kolmogorov-Smirnova and Shapiro-Wilk test to assess normality. From the values posted, the significance values of both Kolmogorov-smirnov

and Shapiro-walk test were less than 0.05. This insinuated normal distribution of data and thus prompted the rejection of null hypothesis the informative decision process. This was very fundamental for determination of links using the Pearson techniques.

#### 4.4.3 Autocorrelation

This test were performed success to aid the far-reaching results on the pattern of error terms posted within analysis timeframe. It is coined by the usage of Durbin Watson. It is critical in demonstrating successive residuals' appearance. From the findings tabulated, there is serial correlation as blueprinted by table 4.5.

**Table 4.5 Test for Autocorrelation Model Summary** 

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	<b>Durbin-Watson</b>
1	.733 <sup>a</sup>	.537	.531	.0897232	.530

a. Predictors: (Constant), Executive Compensation, Firm Size, Financial Leverage, Performance

b. Dependent Variable: Earning Management

**Source: Researcher 2022** 

Durbin Watson shows the correlation. From the findings above Durbin Watson value is 0.530.

This value is less than 2, thus falling within the normal range.

#### 4.5 Regression Analysis

Regression analysis is a procedural technique that incorporates the statistical computation integral in forecasting. From the study earning management (predicted variable), was regressed against all other independent variable executive compensation, firm size, financial leverage and the performance

## **4.5.1 Model Summary**

Table 4.6 Model Summary

Model	R	R Square	Adjusted R	Std. Error of the	<b>Durbin-Watson</b>
			Square	Estimate	
1	.733 <sup>a</sup>	.537	.531	.08972320	.530

a. Predictors: (Constant), Executive Compensation, Firm Size, Financial Leverage, Performance

b. Dependent Variable: Earning Management

**Source: Researcher 2022** 

From table 4.6 model summary above R (Correlation Coefficient) is 0.733, therefore, indicates a positive correlation between the variables. R Square is the coefficient of determination, which is 0.537. This indicates that 53.7% of the variation of Earning Management is explained by the predictor variables under study (Executive Compensation, Firm Size, Financial Leverage and Performance). The other remaining Percentage are factors not listed.

### **4.5.2** Analysis of Variance (ANOVA)

Table 4.7 ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	3.356	4	.839	104.209	.001 <sup>b</sup>
1	Residual	2.898	360	.008		
	Total	6.254	364			

a. Dependent Variable: Earning Management

Performance.

**Source: Researcher Results 2022** 

b. Predictors: (Constant), Executive Compensation, Firm Size, Financial Leverage,

From table 4.7, the researcher's findings published, the sum of squares computed from the regression was 3.356 while the mean square was 0.839 with 4 degrees of freedom. On the other hand, the sum of squares calculated after residual analysis is 2.898 while the mean square was 0.008 with 360 degrees of freedom. The significance value is 0.001. This value is less than p=0.05 indicating that the model is statistically significant. Hence it is integral in predicting the earning management by utilizing the executive compensation, firm size, financial leverage and performance.

#### **4.5.3 Coefficient of Determination**

**Table 4.8 Coefficients of Determination** 

Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig. 95.0% Confidence Interval for B	Collinearity Statistics

	В	Std. Error	r Beta		Upper Bound	Tolerance	VIF
(Constant)	.492	.084		5.873 .000.327	.657		
Firm Size	.003	.003	.043	1.128 .260002	.009	.905	1.105
Financial 1Leverage	279	.049	224	-5.678.000376	183	.830	1.205
Performance	.096	.006	.624	15.383.000.084	.109	.782	1.278
Executive Compensation	.016	.009	.063	1.740 .083002	.034	.986	1.014

a. Dependent Variable: Earning Management

Source: Researcher 2022

The researcher fact-finding process uncovered that if other factors remained unchanged (executive compensation, firm size, financial leverage and performance), then, the earning management autonomous value is 0.492. It is imperative to postulate that when all other predictor variables are maintained constant, a unitary positive adjustment in the firm size causes

an increase in earning management by 0.003. Additionally, a unit change in financial leverage translated to a reduction in earning management by 0.279 whenever all other factors are kept constant.

Further to the findings, an increment in performance by one unit triggers an increase in earning management by 0.096 and while an increment in executive compensation triggers an increase in earning management by 0.016 when all factors are kept constant. From this table above, at 95% confident interval, it is evident that firm size (t=1.128, p=0.260), performance (t=15.383, p=0.000) and executive compensation (t=1.740, p=0.083) have positive effect on earning management while financial leverage (t=-5.678, p=0.000) has negative effect on Earning Management.

Therefore, the analytical model summary is illustrated as:

Y = 0.492 + 0.003 Firm Size -0.279 Financial Leverage +0.096 Performance +0.016 Executive Compensation

The regression equation above can be used in modelling.

#### 4.6 Discussion of Research Findings

The predictor variables were executive compensation, firm size, financial leverage and performance. The mathematical analysis postulated that a change in firm size causes an increase in earning management by 0.3%. Notably, a single positive adjustment in the financial leverage brought about a decrease in earning management by 27.9% when all factors are kept constant. Further, a unitary change in performance reflects an increase in earning management by 9.6%

while an increment in executive compensation causes an increase in earning management by 1.6% when all the factors are kept constant.

Y = 0.492 + 0.003 Firm Size -0.279 Financial Leverage +0.096 Performance +0.016 Executive Compensation

From the equation above Y is the Dependent variable representing the Earning Management. The research study further utilized the Pearson Correlation. From the findings, Pearson Correlation Coefficient revealed a strong Positive correlation between the Performance and Earning management of (r=0.698, p=0.000). The study further denotes a weak positive correlation exists between executive compensation and earning management. Both firm size and financial leverage portray a negative correlation to earning management.

The model summary expound that the regressors variables including executive compensation, firm size, financial leverage and performance explained 53.7% of variation in the dependent variable as shown by R-square. This demonstrated that 46.3% of change in the earning management were caused by factors not mentioned in the study. This model was fit at 95% Confidence level with an F ratio of 104.29. Thus the multiple regression model generated can be used in predicting how independent variables selected affects ration of earning management of firms.

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

#### 5.1 Introduction

This chapter documents the summarized results, concludes on the fundamental factors, recommends the viable techniques and pinpoints areas for further studies. The research gives indepth knowledge relating to shortcomings while offering crucial solution to minimize problems. It is worthwhile to illustrate that this chapter contribute significantly to knowledge and the comprehension of the findings.

## 5.2 Summary of the Research Findings

The research was driven to analyze the determinants of earning management for firms quoted at NSE. The predictor variables were executive compensation, executive summary, firm size and performance. The data were source from CBK, NSE and CMA. The researcher was interested in PAFS with an interval of 5-years to enhance a far-reaching result. It denotes the importance of secondary information in explaining the pattern, trends and forecasting.

The earning management displays a mean and standard deviation of 0.9049 and 0.1311 respectively. The firm size blueprinted the mean and standard deviation of 2.5615 and 1.7853 in that order. The financial leverage exhibited a mean of 1.0553 and standard deviation of 0.1047 while performance indicated a standard deviation of 0.8484 and mean of 7.2317. Finally, the executive compensation posted a mean of 0.1514 as well as the standard deviation of 0.5227.

Furthermore, the model summary in table 4.6 bespoke about the R Square and R. Additionally, R coefficient is 0.733 signifying a positive link with other variables. Besides that, R Square

posted a coefficient of determination denoted by 0.537. This translates to 53.7 of variance of earning management being expounded by the executive compensation, firm size, financial leverage and performance.

#### **5.3 Conclusion**

The researcher's motivation to analyze the determinants of earning management factored in executive compensation, financial leverage, firm size and performance to illustrate the results. The autonomous value whenever all factors were maintained constant was 0.492. Additionally, a unit change in the firms size translates to increment of earning management by 0.003. In addition, a change in the financial leverage positively by one unit leads to decrease in the earning management by 0.279 only when other factors are maintained constant.

Moreover, an increase in the performance causes an increase in earning management by 0.096 in the same direction. In addition, an increase in the executive compensation causes a increase in earning management by 0.016 whenever other factors are retained as constant. Moreover, at the 95% level of confidence, it is worthwhile to summarize that firm size, performance, executive compensation reveals (t=1.128, p=0.260), (t=15.383, p=0.000) and (t=1.740, p=0.083) illustrates positive association. Contrary, financial leverage posts a negative correlation.

#### 5.4 Recommendation

This section denotes several recommendations that elaborates earning management. The earning management is associated with firm size, performance and executive compensation. The study recommends the efficiency and effectiveness among the firms to enhance performance, improve company size and translates to executive compensation. The greater performance, firm size and executive compensation translates to higher influence on the earning management.

The study recommends smooth operation of the business to simplify the procedure that results in business stability, performance and good compensation to management. The executives undertake key role in the organization to ensure firms are operating beyond the threshold line. The study advocates for benchmarking for empirical outcomes verse the real theoretical circumstances. The financial leverage indicated a negative correlation with the earning management. This pinpoint that financially challenged companies are less prone earning management.

In summary, the highly performing companies are motivated to engage in earning management. Likewise, the increase in firm size triggers the earning management. Moreover, executive compensation enhanced the demand for earning management. This study advocates for in-depth scrutiny of earning management verse the executive compensation. Empirically, researchers such as Iraya et al. (2015) as well as Kapour and Goel (2017) coined the many variables that directly and indirectly influence the earning management. From the window dressing, income smoothing, cookie jar to big bath, it is imperative to recommend for quality maintenance of books of accounts to enhance integrity and accountability.

#### 5.5 Limitation of the Study

The study analyzed the firms quoted at NSE hence locking out other firms.

Moreover, the study relied on historical data. The historical data at times can be misleading since it depends on the past information.

Additionally, the study analyzed only four variables and there is need for use of intervening, moderating as well as the predictor variable to explain the relationship. In summary, the findings need more critical analysis of several variables to inform the management on their decisions.

#### **5.6 Suggestion for Further Research**

The research suggests more studies to build strong cornerstone to the research. The researchers can analyze determinants of earning management and include capital structure, ownership concentration, age of the business, dividend policy and government regulations.

Moreover, the contradicting findings serves as a pointer for the research gaps, therefore, demanding for more studies.

In addition, the researchers can analyze the determinants of earnings management of specific sectors such as banking, insurance, construction, energy and petroleum among others.

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# APPENDICES Appendix I: Firms Listed at NSE

## **Company Name**

- 1 Eaagads Ltd
- 2 Kakuzi Plc
- 3 Kapchorua Tea Co. Ltd
- 4 The Limuru Tea Co. Plc
- 5 Sasini Plc
- 6 Williamson Tea Kenya Ltd
- 7 Car & General (K) Ltd
- 8 Barclays Bank of Kenya Ltd
- 9 BK Group Plc Ord
- 10 Diamond Trust Bank Kenya Ltd
- 11 Equity Group Holdings Plc
- 12 HF Group Plc
- 13 I&M Holdings Plc
- 14 KCB Group Plc
- 15 National Bank of Kenya Ltd
- 16 NIC Group Plc
- 17 Stanbic Holdings Plc
- 18 Standard Chartered Bank Kenya Ltd
- 19 The Co-operative Bank of Kenya Ltd
- 20 Deacons (East Africa) Plc
- 21 Eveready East Africa Ltd
- 22 Express Kenya Ltd
- 23 Kenya Airways Ltd
- 24 Longhorn Publishers Plc
- 25 Nairobi Business Ventures Ltd
- 26 Nation Media Group Ltd
- 27 Sameer Africa Plc
- 28 Standard Group Plc

- 29 TPS Eastern Africa Ltd
- 30 Uchumi Supermarket Plc
- 31 WPP Scangroup Plc
- 32 ARM Cement Plc
- 33 Bamburi Cement Ltd
- 34 Crown Paints Kenya Plc
- 35 E.A.Cables Ltd
- 36 E.A.Portland Cement Co. Ltd
- 37 KenGen Co. Plc
- 38 Kenya Power & Lighting Co Ltd
- 39 Kenya Power & Lighting Co Ltd
- 40 Kenya Power & Lighting Co Ltd
- 41 Total Kenya Ltd
- 42 Umeme Ltd
- 43 Britam Holdings Plc
- 44 CIC Insurance Group Ltd
- 45 Jubilee Holdings Ltd
- 46 Kenya Re Insurance Corporation Ltd
- 47 Liberty Kenya Holdings Ltd
- 48 Sanlam Kenya Plc
- 49 Centum Investment Co Plc
- 50 Home Afrika Ltd
- 51 Kurwitu Ventures Ltd
- 52 Olympia Capital Holdings ltd
- 53 Trans-Century Plc
- 54 Nairobi Securities Exchange Plc
- 55 B.O.C Kenya Plc
- 56 British American Tobacco Kenya Plc
- 57 Carbacid Investments Ltd
- 58 East African Breweries Ltd
- 59 Flame Tree Group Holdings Ltd

- 60 Kenya Orchards Ltd
- 61 Mumias Sugar Co. Ltd
- 62 Unga Group Ltd
- 63 Safaricom Plc
- 64 STANLIB FAHARI I-REIT
- 65 NEW GOLD ETF

**Appendix II: Data Collection Tool** 

Name of the	Earning	Firm Size	CEO	Performance	Executive
Firm/year	Management		Duality		Compensation
	l				1