BOARD STRUCTURE, EARNINGS MANAGEMENT, FIRM CHARACTERISTICS AND AUDIT OPINION IN COMMERCIAL STATE OWNED ENTERPRISES IN KENYA

MONGERI ORUKE

D80/64129/2013

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY IN BUSINESS ADMINISTRATION, FACULTY OF BUSINESS AND MANAGEMENT SCIENCES, UNIVERSITY OF NAIROBI

AUGUST, 2021

DECLARATION

I hereby declare that this PhD thesis is my original work and has not been presented for award of degree in any other university.

Date 25 -08- 2021.

Mongeri Oruke

D80/64129/2013

SUPERVISORS

This PhD thesis has been submitted with our approval as university supervisors.

Signed…………………… Date 30 August 2021………

Prof. Cyrus Iraya, PhD

Department of Finance and Accounting,

Faculty of Business and Management Sciences, University of Nairobi.

Signed… Date 25-08-2021

Dr. Luther O. Otieno, PhD

Department of Finance and Accounting,

Faculty of Business and Management Sciences, University of Nairobi.

Signed . Date 25-08-2021

Dr. Omoro N. Oluoch, PhD

Department of Finance and Accounting,

Faculty of Business and Management Sciences, University of Nairobi.

ACKNOWLEDGEMENTS

First of all, I would like to express my greatest gratitude to my supervisors, Professor Cyrus Iraya, Dr Luther Otieno and Dr Nixon Omoro for their guidance, encouragement, support and being a source of inspiration throughout the journey. Their diligent attitude, constructive reviews and profound insights kept me grounded and great source of motivation throughout the journey. Forever I will be indebted for their ingenious guidance.

Special thanks, to the office the auditor generally of Kenya for allowing me to access audit reports and audited annual reports that provided valuable basis for this study. In addition, the constant concerns captured in prior year reports on the state and reporting quality in commercial state owned entities in Kenya became a key source of motivation for this study.

I am deeply grateful to the Faculty of Business and Management Sciences University of Nairobi and fellow PhD students who in the last few years provided strong foundation that inspired great discussions. Without forgetting, the librarians at university of Nairobi for their friendly and valuable assistance in accessing critical literature material from books and journals.

DEDICATION

I dedicate this thesis to my loving family. My dear wife Catherine for the understanding and untiring support during this Journey. My children Nathan and Ivanna for their smiles and love they bring to my life. My parents Zachariah Oruke and Rebecca Kemunto whom from earlier stages in life instilled in me the values of hard work and self-discipline that proved valuable in the Journey.

TABLE OF CONTENTS

LIST OF TABLES

ABBREVIATIONS AND ACRONYMS

BS	Board Structure
BSE	Bombay Securities Market
CEO	Chief Executive Officers
DACC	Discretionary Accruals
EM	Earnings Management
FC	Firm Characteristics
GLM	Generalized Linear Model
GOK	Government of Kenya
IIA	Independent Irrelevant Alternative
INTOSAI	International Organization for Supreme Audit Institutions
LR	Logistic Regression
MAO	Modified Audit Opinion
MLR	Multinomial Logistic Regression
OAG	Office of the Auditor General
OECD	Organization for Economic Co-operation and Development
ROA	Return on Assets
ROE	Return on Equity
REC	Receivables
REV	Revenue
SAI	Supreme Audit Institution
SCAC	State Corporations Advisory Committee
SEC	Securities Exchange Commission
SOE	State Owned Enterprises
TACC	Total Accruals
US	United States of America
UK	United Kingdom
VIF	Variance Inflation Factors

ABSTRACT

To evaluate the state of accountability in commercial state owned enterprises in Kenya this study evaluated the relationship among board structure, earnings management, firm characteristics and audit opinion. This study aimed to address gaps in literature in public sector context on the state of accountability. This study adopted positivism research philosophy as the study relied on existing theories to explain the relationship among the variables of the study and formulate four hypotheses. The population in this study constituted all the (33) commercial and manufacturing sector state owned enterprises in Kenya based on classification by state corporations' advisory committee (SCAC). Data was analyzed using a multinomial logistic regression to draw conclusions. The study established that majority of commercial state owned entities in Kenya received modified audit opinion based on the auditor general audit reports. Qualified opinion accounting for 64.7 % of the audit opinions on commercial state owned entities, adverse opinion accounting 0.7% and 2.5% disclaimer opinion. Only 32.3% of firms received unqualified opinion or clean reports. Further, majority of firms had not complied with minimum requirements set out in the Mwongozo code on both board size and audit committee activity. The results on the first hypothesis indicate that board structure variables including; audit committee activity, board size, and board independence significantly influenced the odds of an entity receiving qualified opinion and unqualified opinion when compared with disclaimer opinion as reference category. On second hypothesis, the results indicated that earnings management did not mediate on the relationship between board structure and audit opinion. On the third hypothesis, the results revealed that firm characteristics variables firm size, firm age and liquidity significantly moderated on the relationship between board structure and audit opinion. In addition, jointly earnings management, board structure, firm characteristics significantly influenced the audit opinion. The findings will contribute significantly to knowledge in the public sector in Kenya, specifically the role of firm characteristics play in the audit opinion and board structure. Those charged with governance in state owned enterprises will also have to relook on how to improve accountability and effectiveness of state owned enterprises boards due to high percentage of firms receiving modified opinion pointing to low quality of financial information. These findings of both direct and indirect relationship will be useful in development of existing theoretical literature. These will particularly be useful to scholars and academicians interested in the developments on relationships among the research variables. Similarly, of interest will be the measurement and testing of these variables in public sector that has contributed toward research and methodology. The study relied only data from state owned entities in Kenya an emerging economy. Consequently, this study did not address the comparative aspects of governance issues from other emerging and developed economies. It will be important that future studies also cover other state owned enterprises that are not categorized as commercial to establish if the findings hold. In addition, it will be important in future to undertake comparative studies with the private sector entities to establish the differences that manifest between private owned companies and state owned enterprises. Researchers and scholars interested to further research in the in the topic, should consider the signaling effect of audit opinion and effect to; investors, lenders, donors, government funding and even management retention.

CHAPTER ONE: INTRODUCTION

1.1 Background of Study

The debate over transparency and accountability has gained significant attention both in the private and public sectors, as a response to a series of scandals in several corporations globally. The epicenter of this debate is the role the board of directors play through governance mechanisms to constrain these scandals and ensure transparency and accountability. Leading to the important question whether some boards were more prone to adverse audit opinions when compared to others? Through the modified audit opinion, the independent auditor could signal to investors and stakeholders lack of accountability and transparency in entities. In contrast, it's expected that well governed entities are more likely to receive clean audit reports. Because of this, different countries have attempted to enforce accountability and transparency through legislations and codes of governance.

In the year, 1991 United Kingdom established the Cadbury Committee to reexamine the roles of board of directors and transparency. The key recommendations of the Cadbury report (1992) centered on how boards could be structured to ensure effective governance. The Cadbury report proposed separation of roles of the chairman of the board and chief executive of the company. The report further recommended the inclusion of non-executive directors and their remuneration. Further, the report recommended the structure of audit committee to take charge of supervision of internal controls of entities. The Sarbanes Oxley act (2002) was enacted to address significant financial scandal in the United States of America. The act puts the responsibility of reporting quality on top management of all public listed companies. The board on the other hand, has the responsibility of validating the reporting quality. In addition, the board should establish internal control mechanism in ensuring quality financial reporting. The audit committee an important subcommittee of the board has duty of ensuring reporting quality (Sarbanes Oxley act,2002). In addition, the subcommittee engages with both external and internal auditors to promote accountability.

In South Africa, Matsiliza (2017) examined the state of corporate governance in state owned entities (SOEs). Significant improvement was noted in the level of accountability due corporate governance. Despite a significant a number of SOEs had implementing the recommendations in both Muswati II and III codes including practicing sustainable business practices. Still, a significant number of SOEs remained non-committal and had not complied with the governance codes. Hence, numerous SOEs were still grappling with several challenges including; underperforming boards, government interference and bail outs. Simpson (2014) examined boards in State owned enterprises in Ghana and concluded that the SOEs had made significant improvement in corporate governance in Ghana. However, dismal performance was noted in the area of board performance evaluation, political interference and board independence. Regarding theoretical framework guiding SOEs boards in Ghana, Simpson noted that boards appointments did not reflect representation of stakeholders as envisioned in the stakeholder's theory instead members were appointed arbitrary based on political interests thus making the boards to lack effectiveness. Mzenzi and Gaspar (2015) established that audit opinion had not significantly contributed in enforcing accountability in local authorities in Tanzania.

In Kenya a presidential report GOK (2013) established that SOEs in Kenya faced various challenges including governance, corruption and poor performance. In response Mwongozo (2015) code of corporate governance for state corporation was established to address these challenges. Mwongozo proposed board structure as a way of improving governance and performance in SOEs in Kenya. The Mwongozo code outlines areas of board structure to promoted accountability including; level of board activity to promote diligence, board independence and optimal board size.

Boards play a critical role on entities are directed and controlled. Tricker (1984) observed that boards were mainly entrusted with two key roles; advisory and supervisory. Through supervisory roles, the board aimed to ensure accountability and transparency. If done correctly through supervisions boards could ensure information presented by management both financial and non-financial was accurate. The audit opinion expressed by the independent auditor depends on quality of information presented by management. Consequently, lack of supervision could lead to modified opinion by independent auditors. As result governments through legislations, governance codes have attempted to influence boards to be more effective to ensure SOEs are more accountable, transparent. Good governance was predicted to lead entities to clean audit reports by independent auditors. As a result, this could bring trust and confidence among the investors resulting more needed investments leading to improved performance.

The relationships among key concepts of interest in this study including; board structure, earnings management and audit opinion were anchored on the agency theory as argued by Jensen and Meckling (1976). However, other theories offered supporting or diverse positions on the relationships among the variables. The agency theory argues that as result of separation of ownership and control, agency conflicts could arise due to information asymmetry. Through governance mechanisms including board structure and the independent auditor, through monitoring the self-seeking agent behavior could be controlled. Governance mechanisms may help to reduce the agency costs and constrain management self-interest motives including earnings management practices. The stewardship theory as argued by Donaldson and Davis (1991) offered a direct response to agency theory.

Contrasting the agency theory, the steward is held not to suffer from conflict of interests, instead there exists a convergence of interest with the principal. The steward favored organizational unity and will choose the principal position where it conflicts with personal interest. Consequently, the steward should be empowered as opposed to being controlled. Stewardship theory therefore favors corporate governance mechanisms that empowers the steward including board structure.

Stakeholder's theory by Freeman (1984) is a supporting theory to agency theory offering another perspective on relationship among the key variables in this study. The theory holds that's shareholders are not the only interested party to activities of the entity, on the contrary the agent manages the entity on behave of diverse stakeholders with an interest in the business. This theory favors a diverse board structure as governance mechanisms to protect the diverse interests of stakeholders.

Managerial hegemony theory is another key theory that offers an alternative perspective on governance mechanism as argued by (Mace,1971). The theory holds that management was key to governance mechanisms in an entity as opposed to board of directors. Consequently, the theory supports the argument that consumers of audit reports are professional managers as opposed to boards of directors, as professional managers were responsible for decision-making. The conclusion from the review of these theories was useful to this study, it aided in predicting the relationship among the research variable. The theories offered diverse positions and diverse predictions on the relationship among the research variables. These theoretical frameworks were useful in developing the conceptual arguments in this study.

State-owned enterprises have faced governance challenges similar to the ones experienced in private sector hence presented a perfect context for this study. The public sector has also attempted to address governance and accountability problems with mixed results. State owned entities play an important role, on average the sector accounted for twenty percent (20%) of investments and forty percent (40%) of outputs in critical sectors (World Bank, 2014). If, there are accountability and transparency issues they are likely to affect investors' confidence and prevent SOEs from accessing investments and funding. In contrast good governance could likely attract funding and investments from investors. The Mwongozo (2015) code of governance for state corporations explains how SOEs boards could play a leading role in monitoring and advisory. Consequently, resulting to quality financial information thus safeguarding accountability and transparency in SOEs. Audited financial statements are an indicator of good governance especially where firms receive unqualified opinion.

In Kenya the office of the auditor general is an independent supreme audit institution (SAI) mandated to audit all state owned entities and give assurance by expressing an opinion on correctness of the figures in the statements, fair presentation, strong internal controls and compliance with laws. In the recent past there have been various reports by the office of the auditor modifying various audit reports of major SOEs in Kenya bringing to doubt the effectiveness of various governance mechanism in these SOEs.

In conclusion evaluating how through board structures employed by SOEs transparency and accountability could be enhanced was a key motivator of this study. As based on theoretical framework an effective board could ensure quality of financial reporting thus attracting clean audit by independent auditors. Consequently, this will boost confidence among investors thus attracting much needed funding and investments.

State owned enterprises that that receive modified audit opinion signal to investors other stakeholders lack of accountability. This will attract negative consequences that may ultimately lead to corporate failure. This will negatively affect the citizens that pay taxes and rely on the entities for services. This subject therefore is of great interest to those charged with corporate governance, academicians and even the public. This was important and key motivation to undertake the study with the aim of establishing solution to the challenges of relating to accountability.

1.1.1Board Structure

From the theoretical perspective on governance mechanisms, the way a board was structured could have a significant impact governance issues. As results this could likely influence accountability and transparency in an entity. Chambers, Harvey, Mannion, Bond and Marshall (2013) defines the board structure in terms of; what the board does, board independence, size of the board and CEO duality. Furthermore, board dynamics focuses on behavioral dimension, including selection, experience and even gender balance. The Cadbury report (1992) placed the board at the epicenter of governance with the responsibilities of leadership, directing and supervising. OECD (2015) recommends, to effectively perform their functions SOEs boards to have necessary, competencies, authority, and objectivity. Through theory there are diverse perspectives on how boards should be structured to ensure effectiveness of the boards including; board diligence, board size, board independence, and expertise.

However, empirical evidence on effectiveness of the various board structures was not conclusive. The board optimal size was one aspect of board structure that had been examined in a number of studies but still remained a puzzle. Board size measured the number of board members in the board. Large boards based on agency theory, are expected to be more effective hence preferred to for effective of management. Stakeholder's theory on the hand contends that board size should depend on the diversity of stakeholders as all stakeholders should be represented in the board to protect their interest in decision making.

A number of studies concluding large boards brought more expertise hence were more effective while other studies contrasted this view. Ebaid (2011) established that large boards were more effective as responsibility of oversight was spread to many observers who may have had diverse skills and expertise thus ensuring better performance from the board of directors. Fodio, Ibikunle, and Oba (2013) established earnings was negatively related to board and audit committee sizes. In contrast, earnings management related positively to board independence. This means that this board independence did not constrain earnings management. This view was supported by other studies (Pearce & Zahra, 1992; Khalil & Ozkan, 2016).

In contrast De Andres, Azofra and Lopez (2005) argued that limiting the size of the board was important as large board were less effective. Smaller board were found to be more cohesive and enhanced participation and involvement thus smaller boards were deemed to be more effective. Jensen (1993) suggested that large boards were less effective when compared with smaller boards. In support of smaller boards, Dechow, Sloan and Sweeney (1996) held that in fact large boards were likely to engage in earnings management practices. Iqbal, Zhang and Jebran (2015) concluded that board size did significantly influence earnings management in Karachi. Gkliatis

(2014) recognized that smaller boards were more cohesive hence more effective. Mwongozo code recommends an optimal board size of seven (7) to nine (9) members.

Secondly, board independence was another aspect of board structure that also received contrasting debates in corporate governance literature. From the agency theory perspective non-executive directors are seen to be more independent. They were not likely to be controlled by the CEO because they did have conflicting interests. Agency theory advocates monitoring power of independent directors to control the agent. In contrast, stewardship theory favors boards dominated by executive directors. The aim is to empower management in the board to ensure maximizations of returns to shareholders. Mwongozo (2015) code of governance for state corporation in Kenya advocates that an effective board should at least have 30 percent non-executive directors. Mwongozo further, recommends that roles chairman of the board and chief executive position should be separated to promote accountability.

Empirical evidence on effectiveness of board independence based a number of studies was inconclusive. A number of studies examined the relationship board independence and earnings management. A number of studies established positive relationship with earnings management. Thus concluding that firms dominated by executive directors were likely to engage in manipulating earnings and fraud (Beasley, 1996; Uzun, Szewczyk &Varma, 2004; Farinha &Viana, 2009). In contrast, Khalil and Ozkan (2016) concluded board independence did not constrain earnings management in Egypt. However, impact of board independence on earnings management was contingent on ownership structure. Yasser and Mamun (2016) in support the view on the study on the relationship earnings management and leadership structure in Asia pacific countries. Ishak and Yusof (2015) observed that board independence significantly influenced modification audit opinion. From these studies it was clear that the matter of effectiveness of board independence remained unresolved.

Audit committee was another aspect of board structure listed in Mwongozo code as a mandatory sub committees of the board. It performs a delegated responsibility for the board of directors, most importantly, on oversight roles. Fama and Jensen (1983) argued that audit committee was important in the review of financial information. The number of audit committee meetings was an indicator of board diligence (Menon& Williams,1994). Diligence audit committee were likely to be active and meet regularly to effectively to perform oversight roles. Mwongozo (2015) code recommends regular meetings for audit committee at least meet quarterly for oversight functions.

Empirical evidence on audit committee relationship with other research variables was mixed and inconclusive. Salleh and Haat (2014); Nelwan and Tansuria (2019) observed that the level of earnings management practices was influenced by the effectiveness of audit committee competence, diligence and independence. Mishra and Malhotra (2016) established that frequency of audit committee meetings, and size constrained earnings management. Carcello and Neal (2000) established independent directors reduced the likelihood of an entity receiving modified opinion using listed firms at New York securities market. In addition, the study established that firm characteristics variables including financial distress in companies moderated on the relationship between independent directors and going concern audit reports. In contrast, Habbash, Sindezingue and Salama (2013) established no significant relationship between earnings management and audit committee. Farinha and Viana (2009) established that board diligence financial reporting quality resulting to unqualified audit opinion. The effectiveness of audit committee and its relationship with other study variables remains unresolved, this has led to the formulation of the hypothesis in this study, particularly on diligence of the audit committee in public sector context where minimal literature was available.

The board structure variables were operationalized and using three key variables. Firstly, board size was operationalized by measuring number of board members. Secondly, non-executive directors were measured as a proxy for board independence. Audit committee activity as a determinant of board diligence similarly measured based on number of audit committee meetings. The operationalization of variables was guided by Mwongozo (2015) code of corporate governance. Other additional guidance was obtained from empirical evidence from prior studies (Menon & Williams,1994; Farinha &Viana, 2009; Ishak & Yusof, 2015)

1.1.2 Earnings Management

The numerous financial scandals that have rocked corporate have been linked to earnings management practices. The concept is well defined by Healy and Wahlen (1999) as ways management intentionally alter financial reports by use of their judgement with the intention of misleading stakeholders on performance for contractual gains pegged on the accounting performance. Ronen and Yaari, 2008 differently argues, that earnings manipulation as a managerial decision was used to misrepresent financial information contrary to the correct position on value of the firm, with the intention of maximizing earnings. Hackenbrack and Nelson (1996) further explains that management through selective accounting principles aim to report strong performance or strong liquidity position, this was achieved through use of aggressive accounting to manage earnings. These definitions agree that, there exists various motivations for entities engaging in these financial malpractices. Various theories explain the motivations for firms engaging earnings management practices. Agency theory holds that due agency may consequently lead to earnings management. Jiraporn, Miller, Yoon and Kim (2008) supported the view agency conflicts was a key motivation for earnings management as managers to use earnings management to solve agency problems to due to flexible accounting rules. From stakeholders' perspective Hill and Jones (1992) argued that to meet expectations of diverse stakeholders' managers get motivations to engage in earnings management. Firms may aim to avoid reporting losses or not realizing targets due to economic consequences. Consequently, this may encourage managers to deliberately aim to report surplus or profits; this was common when there are institutional investors or bonuses based incentives (Matsumoto, 2002). However, in some instances it was beneficial for managers or entities to report decreasing profit or losses by use of conservative accounting principles (Pouciu, 1993). This was common in the government set up where companies that were funded by government. Entities may have reported losses intentionally to continue gaining government funding and assistance. Earnings management was likely to be achieved through accruals a view supported (Dechow et al.,1995). This was so as; through accruals, management could take advantage of accounting choices and estimation. Othman and Zeghal (2006) comparing motivation for earnings management both Canadian and French.The study oberved that intial capital offering was key motivator for Canadian Firms, while contractual agreement was key motivator for French firms.

Discretionary accruals approach technique has been used in various studies to predict and measure earnings management. Accruals were open to discretion and manipulation compared to cash. This means that accruals models were more accurate in estimation of earnings management (Dechow et al.,1995). The view was supported by various studies that that arrived at similar conclusion, that Jones Modified model was the most effective technique of estimating earnings management when compared to other techniques (Dechow, Hutton, Kim & Sloan, 2012; Capalbo, Frino, Mollica & Palumbo, 2014).

A number of studies tested the connection between earnings management, corporate governance and audit opinion with mixed and inconclusive findings. Abolverdi and Kheradmand (2017) established positive and significant connection between modified opinion and earnings manipulation in Tehran. Conversely, financial distress did not significantly influence the relationship. A number of studies agreed with the observations (Moazedi & Khansalar, 2016; Iqbal, Zhang, & Jebran, 2015). Sutrisno (2019) established no significant intervening effect of earnings management on CEO aggressiveness and audit opinion. Its apparent from the studies reviewed the relationship among earnings management and other research was inconclusive and remained unresolved.

1.1.3 Firm Characteristics

Based on empirical evidence reviewed, firm characteristics variables were generally used as control variables when examining the relationship among the study variables. Solakoglu and Demir (2016) defined firm characteristics as factors that were critical to a firm and likely to influence the performance and operations of the firm. On the other hand, Mgeni and Nayak (2016) defined firm characteristics as factors that related to organizational objectives and resources and could be categorized using various criteria namely; structural, capital and market. Firm age, size and ownership categorized as structural while industry defines the market, leverage and liquidity relate to capital.

The significance of firm characteristics variable in the relationship among variables has been tested in various studies with mixed results. Habib (2013) observed that firm size significantly influenced audit opinion, whereby smaller entries are hypothesized most at risk to receive a modified audit opinion. This was so, as smaller firms lacked the resources to develop and sustain strong corporate governance structures. Ali, Noor and Khurshid (2015) concluded that firms with large assets were more likely to receive pressure from investors thus resorting to earnings management. Swastika (2013) established that firm size and other corporate governance variables were significant in predicting earnings manipulation. The study also concluded that highly leveraged, segmented companies had a higher chance of receiving a modified opinion. The study conclusion was in agreement with the hypothesis that large firms were more likely to establish stronger governance mechanisms and attract competent and qualified independent auditors thus constraining earnings management hence resulting to a significant negative link with earnings manipulation. In contrast, Watts and Zimmerman (1986) established negative connection between abnormal accruals and firm size. This was in support of the argument that large firms engaged in earning manipulation due to political pressure. Leverage was another firm characteristics variable reviewed and hypothesized to put management under pressure and motivated agents to engage in earnings manipulation. Debnath and Roy (2017) established that control variables including age of the firm and size of the firm were statistically significant in influencing the relationship between earnings management and performance in Indian economy. Caramanis and Spathis (2006) concluded that firms that were experiencing financial problems reflected by poor liquidity ratios were likely to receive modified audit opinion. This means that management of poor performing companies were likely to engage in manipulation of accounting figures using earnings manipulation to impress the stock market. This likely resulting to qualifications of their financial statements by the independent auditors. Shaikh, Fei, Shaique and Nazir (2019) concluded that leverage had significant association with discretionary accruals in firms listed at Pakistan securities market. Size of the firm had a negative association with earnings management. However, the study did not establish significant association between the age of firm with earnings management. Ali, Noor, and Khurshid (2015) established positive relationship between firm sizes and earnings manipulation. The study also concluded that managers with large assets had more room to practice earnings management. Mutchler, Hopwood and McKeown (1997) examined the relationship between financially depressed companies and audit opinion decision in New York securities market. The study established that firms that were financially depressed as measured by negative working capital, default on debt repayment and operational financial losses were more likely to receive modified opinion. Size of the company was also established to be statistically significant to influence the type of audit opinion. Independent auditors were unlikely to issue modified reports to large companies possibly because of the confidence that large companies could resolve bankruptcy issues. Elliott (1982) examined audit opinion and abnormal returns outcomes and ambiguities in United States of America. The study established that subject to audit opinion reports had no significant impact on share prices. The study further established that subject to audit reports did not receive significant attention from the media hence their effect was minimal particularly in the short term. The study controlled for firm and industry characteristics. The study established that firm and industry characteristics influenced the type of audit opinion. Firms that received modified opinion were mainly from the same industry and faced similar challenges like decline in earnings.

Based on the empirical evidence firm characteristics was operationalized by measuring age since incorporation, firm size and liquidity. The age of the firm was measured as the age of the firm since incorporation, logarithm of total assets was used a measure of firm size and liquidity was operationalized by comparing the current assets to current liabilities. The operationalization of firm characteristics variables was based on prior studies that operationalized the variables in similar way (Ali, Noor & Khurshid, 2015; Oba, Tigrel & Sener, 2014; Habib, 2013; Farinha & Fiana, 2009). Based on empirical evidence and theoretical frameworks the relationship between firm characteristics and other study variables directly or indirectly was inconclusive and remain unresolved.

1.1.4 Audit Opinion

Audited financial statements may bring trust and confidence in financial information presented to shareholders and investors (Lee,1993). Auditing acts as a monitoring mechanism, as the independent auditor could detect and report material misstatements. The independent auditor normally, must state whether the financial statements are free from material errors and in agreement with rules when preparing financial statements. Fakhfakh (2014) defined audit opinion as a statement by an independent auditor that expressed agreement or disagreement with management on the reporting quality. Hsiao, Lin and Hsu (2010) pointed out that audit opinion could be modified in various ways including; disclaimer opinion, adverse opinion or qualified audit opinion. Similarly, guidelines on audit reports by Intosai (2010) states that the independent auditor could issue a modified audit opinion if based on evidence obtained, the financial reports were not free from material errors. In addition, if the misstatements from the evidence obtained were pervasive, the auditor could issue an adverse opinion. An auditor could disclaim an audit opinion due to lack of sufficient audit evidence. These guidelines points put the level of quality in financial information examined by the independent auditor.

The theoretical perspective of auditing could be explained through various theories. Jensen and Meckling (1976) reasoned that separation of control and ownership contributed to information asymmetry. Thus, creating and mistrust on information from agents as managers. Auditing is a governance mechanism through which agency conflict between management and shareholders could be mitigated. Audited financial information could be trusted leading to confidence in financial information. Stakeholders theory supporting the argument that through auditing the interest of diverse stakeholders could be protected. According to Schelker (2013) agency problems that shareholders faced were similar problems that voters faced in the public sector. Auditing offered credibility to financial information and reduced agency costs even in public sector.

In the public sector auditing has played a significant role and consequently, has gained significant attention especially reports by the auditor general. In public sector there exists a scenario where multiple stakeholders including voters, shareholders, the cabinet and parliament but with a single agent mainly the CEO (Schelker & Eichenberger, 2010). Further, they observed that audit reports generally were source of essential information, and thus improved transparency in governments and minimized wasteful expenditures in public sector. World Bank (2014) tool kit on SOEs governance argued that countries with improved transparency and accountability experienced higher investments and economic growth. Consequently, World Bank has been greatly involved in the empowerment of supreme audit institutions (SAIs) in various countries. Successfully SAIs were characterized by; independence, supportive environment, sufficient funding, clear mandate, adherence to international standards, staff, facilities and quality reporting. Sound accounting systems and auditing was good for the country. Government may have intentions of manipulating accounting data to achieve their intended purposes but will unlikely attempt, due to the watchdog by independent auditors (Kido, Petacchi & Weber, 2012). Auditing in public sector could help prevent governments from using manipulated or biased data (Streim, 1994). Without auditing governments and management could have serious challenges in accessing resources by attracting investors. In addition, management and government could have difficulties in convincing users and public about credibility of financial information. As a result, there were instances where the government agencies could seek for auditing services to use audit reports to get credibility especially sourcing for funding (Pallot, 2003). Governments were in need of credible information for planning purposes and decision making. In addition, governments also had to convince the public that public statements about their expenditure and investments in assets were credible. Public sector entities could also seek auditing services for control purposes or for fear of losing control. In the public sector the cabinet and other executives could use auditing reports to understand and get assurance on what is happening at all the corners of the entity.

There are various groups that indirectly benefited from audit reports in public sector even if they were not directly involved in selecting of the auditor. Accordingly, for the benefit of the society legislators imposed legal requirements for audit services and reports (Doty, 2014). In Kenya the public finance management act (2012) requires that the auditor general to audit all SOEs and submit the reports to parliament at close of every financial year. There was evidence to suggest that audit quality improved in cases where there an effective audit committee and independent auditors could lead to high quality reporting (Baber, Gore, Rich & Zhang, 2013).

Review of studies on audit opinion and other research variables has produced mixed results. Moazedi and Khansalar (2016) established a significant connection between audit opinion and earnings manipulation in Tehran listed firms. Abolverdi and Kheradmand (2017) examined the link between modified opinion and earnings manipulation Market. Similarly, the study established significant connection between modified audit opinion earnings management. In addition, financial distress did not significantly influence the relationship. However, other studies challenged the findings. Yasser and Mamun (2016) observed that in Asia Pacific board leadership structure influenced earnings management. The study concluded that board structure had not significantly influenced the financial reporting quality and performance. However, female CEO negatively influenced performance. It was hypothesized and tested that modified audit opinion negatively impacted share returns in Italy (Ianniello & Galloppo,2015). From the literature reviewed the evidence suggest the issues remained unresolved due to contrasting findings.

Further, based on empirical evidence audit opinion was operationalized through four unordered categories where unmodified opinion given a score of zero (0) while qualified opinion a score of one (1) adverse opinion a score of two (2) and disclaimer opinion score of three (3). Some prior studies restricted audit opinion only two unordered categories, where unmodified opinion was given a score of 0 and modified opinion given a score of 1 (Lin, Jiang & Xu, 2011; Chan, Lin & Wang, 2012; Ahmadi, Sedghiani & Jamali, 2014). However, other studies did not aggregate the modified audit opinion instead examined all the categories including; unmodified opinion, adverse opinion, qualified opinion and disclaimer opinion (Ianniello & Galloppo, 2015; Hsiao, Lin, & Hsu, 2010).

1.1.5 State Owned Enterprises

State-owned entities (SOEs) are defined as entities where the government exercises ownership and control or a case whereby there is a law stating that the entity is a state-owned enterprise (OECD, 2015). SOEs played an important role in various economies, given that on average the sector accounted for twenty percent (20%) investments and forty percent (40%) of outputs in critical sectors (World Bank, 2014). In addition, SOEs played other significant roles in order to achieve various objectives including; addressing economic, political and social problems. SOEs objectives also included; addressing perceived market failures and gaps, promoting growth, providing key services, investing in sectors whose risk or size could not be borne by private sector (World Bank, 2018). In Kenya SOEs are broadly grouped into eight functional categories; financial, public universities, training and research, commercial, regional development, tertiary education and service (SCAC, 2019).

According to OECD (2015) guidelines on corporate governance, SOEs should be held in the same standard as those of listed companies on matters relating to adequate accounting disclosures and auditing requirements. In addition, the guidelines points that the boards should have significant role in ensuring accountability. As results the board of directors should have independence, mandate and autonomy to oversight management. Further, the guidelines indicated that for the boards to be effective they should be free from political interference.

In emerging economies SOEs have become significant players in the economy of these countries. In Africa SOEs account for 15 percent of GDP and 50 percent for middle east countries (world bank ,2018). Other large economies whereby SOEs are dominant players in the economy include; China, Brazil, Indonesia among others. According to the world bank report on SOEs, indicated they were relevant as they engaged in provision of critical services and products in major sectors like water, energy, health and education whereby massive resources could be required to set up which maybe beyond the capability of private investors. GOK (2013) report indicated that failure to effectively implement adequate oversight arrangement, governance, transparency and disclosures had encouraged underperformance, misstatements and corruption in various SOEs in Kenya. This has led to frequent modifications of audit reports of SOEs by the auditor general. Modification of audit opinion in SOEs is a clear signal of lack of accountability. In Kenya, the board structures of various state-owned enterprises are designed in line with guidelines contained in Mwongozo (2015) code of regulation of governance for state corporations. A report by presidential taskforce on Parastatal reforms (GOK, 2013) concluded that SOEs in Kenya, boards were facing numerous challenges, including poor performance and governance (GOK, 2013). Mwongozo code was developed following efforts to reform corporate governance. Board structure has been used to promote accountability and transparency in SOEs in Kenya.

State owned enterprises in Kenya could easily be grouped based on characteristics including; industry, capital structure, size, age since incorporation, and the level of liquidity. Based on these characteristics it was important to evaluate the level of development in corporate governance and their effect on other research variables including audit opinion and earnings management. Managers of state-owned enterprises in Kenya equally faced pressure to improve earnings and protect their positions and contracts, which may have acted as encouraging factor for the managers to participate in earning management practices. If detected by independent auditors this could lead to modified audit opinions.

The constitution of Kenya 2010 section 229(6) clearly stipulates that the auditor general should independently issue the audit opinion of all SOEs after auditing their financial statements. In the recent past, the auditor general of Kenya has issued modified audit opinions to a significant number of SOEs leading to question on quality of their financial reporting by management (OAG Kenya, 2020). Failure among these entities was likely have negative consequences on the economy; loss of investments, funding, employment and lack key of services and products (World Bank, 2014).

1.2 Research Problem

Board of directors are mainly entrusted with two key roles of monitoring and direction of entities. Effective monitoring of information presented by management will safeguard the quality of the information presented by management. Based on the agency theory, through effective monitoring the agency problem due to information asymmetry can be resolved. Consequently, independent auditors will find the financial information presented by management to be truthful and issue clean reports. Therefore, the argument that well governed entities are not likely to receive modified audit opinion is based on theoretical assumption that boards provide monitoring roles to management and if done correctly can ensure quality financial information. Firms that receive unmodified reports are will build confidence among investors and are likely to attract funding and investments.

The auditor general of Kenya as the independent auditor has adversely cited several state-owned enterprises in audit reports (OagKenya, 2020). This has put to question the effectiveness of the boards in their monitoring roles, to ensure quality of information presented by management in these state-owned enterprises. Mwongozo code of corporate governance outlines that through effective monitoring boards must ensure accountability and transparency in state owned enterprises. At the center of this issue is the association between the board structure and audit opinion. Are some SOEs boards more prone to adverse audit opinion than others?

A number of studies reviewed the relationship among variables of interest in this study with mixed results. Some studies agreeing on the effectiveness of boards in constraining earnings management practices thus ensuring reporting quality as reflected in the audit opinion, while others were of a divergence opinion. Tsipouridou and Spathis (2014), Yasser and Mamun (2016), Khalil and Ozkan (2016) disagreed on effectiveness of corporate governance practices to constrain earnings manipulations, while Abolverdi and Kheradmand (2017), Moazedi et al. (2016) and Latif and Abdullah (2015) agreed that corporate governance practices to influenced level earnings manipulation. Contrasting findings on the relationship among study variables creates a conceptual gap. In addition, these studies failed to examine moderating and intervening factors resulting to a conceptual gap. It was important, to further test these relationships taking consideration moderating and intervening effects, as possibly there was indirect effects on relationship between board structure and audit opinion that had not been tested.

To test the relationships between the variables, various studies adopted diverse statistical techniques with diverse limitations resulting to methodological gaps. Meta-analysis technique used by Habib (2013) was prone to bias in selection of studies that could had a direct effect of the findings. Logistic regression was another technique widely used to accommodate categorical data, but aggregation of the outcome variable to binary may have led to lose of information (Ishak & Yusof, 2015; Kangarlouei, Jam & Motavassel, 2013; Farinha & Viana, 2009). This study made use of multinomial logistic regression; the technique was flexible to accommodate dependent categorical variable data and several outcomes on the dependent variable (El-habil, 2012).

Review of empirical evidence revealed a trend whereby the data and operationalization of variables was based on private sector context; mostly companies listed at the securities markets with stringent corporate governance mechanisms (Iqbal et al., 2015, Moazedi & Khansalar, 2016; Iraya, Mwangi & Muchoki,2015; Okiro,2014). Minimal literature was available on operationalization of variables using data from the public sector leading to a contextual gap. The conclusions drawn from this studies based in security's market context could not be generalized in the public sector context.

This study tested board structure, earnings management, firm characteristics and audit opinion in commercial state owned enterprises. An adverse audit opinion could attract a reaction from the stakeholders to replace the board and or top management or even stop funding. The research aimed to address the following question: did board structure, earnings management, firm characteristics affect audit opinion in state owned enterprises in Kenya?

1.3 Research Objectives

The primary objective of this study was to establish the relationship among board structure, earnings management, firm characteristics and audit opinion in commercial state owned enterprises in Kenya. The specific objectives were:

I. To examine the relationship between board structure and audit opinion in commercial state owned enterprises in Kenya.

II. To test the effect of earnings management on the relationship between board structure and audit opinion in commercial state owned enterprises in Kenya.

III. To determine the effect of firm characteristics on the relationship between board structure and audit opinion in commercial state owned enterprises in Kenya.

IV. To determine the Joint effect of board structure, earnings management, firm characteristics on audit opinion in commercial state owned enterprises in Kenya.

1.4 Value of the Study

The study aimed to advance on the available literature especially in area of corporate governance mechanisms in the public sector where limited literature was available. In addition, this study demonstrated how to use theory to answer research questions and make predictions on relationships among variables. The study using various theories including; Hegemony, agency theory, stakeholder and theory stewardship theory explained and made predictions on the relationship among the research variables. The study further, using research methodology demonstrated how to operationalize and test research variables in the public sector context. All the research variables including the audit opinion, board structure, earnings management and firm characteristics were operationalized based on theoretical frameworks and empirical evidence from prior studies.

Findings from this study will add value to practitioners of corporate governance in the public sector. Conclusions from this study will to be useful to boards of various SOEs and those charged with governance including the government for policy making. Other key stakeholders will also benefit from recommendations on the best corporate governance practices leading to improved performance. Several agencies including line ministries for the state corporation, state corporation advisory board responsible for implementing Mwongozo (2015) code of governance for state corporations, parliamentary committees responsible for oversight of various state investments and formulation of laws among others will benefit from findings on this study and the effectiveness of the various policies already implemented. The findings and conclusions from this study will help to draw attention to areas of concern and attention on corporate governance in public sector specifically on commercial SOEs.

Findings and conclusions from this study has provided additional literature and empirical evidence that maybe useful to academicians and researchers especially with interest and research questions particularly in the public sector context. Importantly, the study has further provided insights on the moderating and intervening effects on board structure and audit opinion that may help solve the existing disagreements among existing empirical evidence. Furthermore, this study has provided critical challenges of conducting research on SOEs in Kenya. In addition, the study has highlighted limitations recommendations areas for future research. This study therefore made contribution by addressing and answering key questions for researchers and scholars with interest in the public sector and given direction for possible areas of future research regarding the subject.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter covers the theoretical foundation and empirical review on the subject of board Structure, earnings management, firm characteristics, and audit opinion. This chapter also covers summary of past studies, Knowledge gaps and the conceptual framework. The chapter is organized as follows: section 2.2 is the theoretical foundation; section 2.3 is the empirical literature review 2.4 Knowledge gaps 2.5 the conceptual framework and 2.6 research hypothesis.

2.2Theoretical Foundation

This study has relied on several theories to provide theoretical framework, provide explanation and predictions among the research variables. Agency theory as argued by Jensen and Meckling (1976) proved the most dominant thus providing main anchorage to this study. Agency theory framework predicted a link among the study variables; earnings management, audit opinion board structure. Furthermore, the agency theory, other theoretical frameworks including stakeholder theory and stewardship theory explained the relationship among the study variables from diverse perspectives. However, managerial hegemony offered a contrasting perspective on how the study variables related to each other. These theories are discussed below giving their theoretical positions on the relationship between the variables, prepositions by the theories, critiques of the theories and finally the relevance of the theories to this study.

2.2.1 Agency Theory

Agency theory offers the most significant perspective and thus providing the theoretical foundation of this study. Berle and Means (1932) observed that as consequence of separation of control from ownership, there was likely to be a problem where the interest of managers and owners could not agree. This view was advanced by Jensen and Meckling (1976) who argued that agency problems resulted to conflicts between agent and the principal as consequence of information asymmetry. Proponents of agency theory argue that managers were self-seeking and aimed to capitalize on their interests at the cost of the principal, including through earnings management practices (Man & Wong, 2013). Due to these conflicts with agents, the principals have to put mechanisms to ensure trust. This could be achieved through governance mechanisms, including the board structure and independent auditor. Kahle, Wang and Wu (2014) argued that agency theory advocated for board structures that controlled the agent. Hence, boards with a reasonable representation of independent directors in contrast to executive and CEO duality were recommended. In addition, another mechanism of monitoring the untrustworthy agent was through the external audit whereby an independent expert auditor verified financial information prepared by the agent to ensure truthfulness of the information through audit opinion. Shleifer and Vishny (1997) clarified that effective corporate governance must guarantee a return of investment to shareholders. In the public sector contributors of finance through taxation faces similar challenges as a principal in the private sector with management as agents of state-owned enterprises. Even Mwongozo code of governance for state corporation supports board structure that has independence board members, separation of board chairmanship position and chief executive position, principles supported by the agency theorists.

Empirical evidence on how boards should be structured based on agency theoretical framework offer contrasting results. Salleh and Haat (2014); Nelwan and Tansuria (2019) supported the argument that diligent audit committees constrained earnings manipulations. However, other studies have contrasted these view. Yasser and Mamun (2015) established that board characteristics including CEO duality did not significant influence reporting quality in firms listed at Pakistan, Malasyian and Australian securities market.

However, critiques of agency theory argue that agency theory does not hold in all contexts. Yusof (2016) observed that the dominant theoretical framework supporting corporate governance was the agency in developing economies. He further noted that the theory was not sufficient in addressing all corporate governance issues as it ignored social and institutional factors that were relevant in corporate governance. In addition, Petrovic (2008) stated that agency theory did not provide sufficient information about board functionality and behaviors. Brudney (1985) argued that in reality independent boards may not be independent of management as proposed by agency theory. The critiques of the agency theory offer a room for alternative theories on corporate governance especially the stewardship theory that offers contrasting view. Therefore, it is evident that while agency theory is the dominant theory and offers a clear explanation on the relationship among the research variable, it might not always hold in all situations.

The importance of this theory to this study was; it predicted a negative relationship between strong boards and audit opinion thus proving useful in formulating the conceptual framework. Through board structure, it was predicted that the self-seeking agent could be controlled resulting to improved reporting quality and thus preventing earnings manipulations, and this was to be reflected in the audit opinion given by an independent auditor. The theory favored board structures dominated by independent boards, large boards and diligent audit committee’s variables that were key to this study.

2.2.2 Stewardship Theory

As theorized by Donaldson and Davis (1991) Stewardship theory offers an alternative explanation to agency theory on the relationship among research variables. Donaldson (1990) questioned the agency theory argument that majorly relied on organizational economics but ignored the human behavior aspect that was critical in governance. He further, faulted the agency theory argument that by the shareholders investing their capital faced greater risk hence the need to protect their interests. He observed that even the agent that was entrusted with investing the capital similarly faced even greater employment risk. Stewards contrary to agency theory believed that they will get their fair share of the firm gains and therefore aimed to maximize its value (Donaldson, 1990).

Those in support of the stewardship theory hold that it is possible to align interests of agents and owners. This alignment arises from psychological contract that results to trustworthy between the principal and management as well as towards all other stakeholders (Davis, Frankforter, Vollrath & Hill, 2007). Further, the theory posts that stewards were motivated to maximize the interests of shareholders by extend maximizing their own utility (Smallman, 2004). The steward put value on cooperation rather than personal interests as argued in agency theory. Even in conditions whereby the interests of the principal may not agree with the agent the steward behavior will likely to be collective as opposed to personal, hence the steward will aim to meet the organizational objective (Donaldson & Davis, 1991). Interestingly, managers that align with organizational goals are most likely to be highly committed and find value and satisfaction in achieving organizational goals.

Stewardship theory favors CEO duality as opposed to board independence. Stewardship theory will consequently support smaller boards for effective governance as opposed to large boards supported by the agency theory (Kalsie & Shrivastav,2016). In addition, Stewardship theory favored CEO duality, and boards dominated by executive directors as they empowered the steward (Donaldson & Davis,1991). Even if such a firm was audited, due to honesty of the steward the information contained in the financial statements was expected to be true and fair and the probability that independent auditors will issue unmodified opinion was on the higher side. Muth and Donaldson (1998) argued that since the steward was motivated and aligned to organizational goals there was no need for governance mechanisms that aimed to control the steward. Instead the steward should be empowered hence governance mechanisms that empowered the steward will be preferred. The theory supported the assertion that there was no need to audit such steward, therefore concluding that auditing was unnecessary in circumstances whereby management practiced stewardship values (Subramanian, 2018).

Empirical evidence on effectiveness of empowered steward was inconclusive. Tagiuri and Davis (1996) argued that in family controlled ownership the management and ownership were not significantly separated hence agency theory perspective could not hold. Wesley (2010) established no direct relationships between CEO attributes relating to stewardship theory including board structure and firm performance. However, the study established that family ownership structure moderated on the connections between firm performance and CEO stewardship attributers.

Critiques of stewardship theory argue that lack of independent challenge to the CEO by the independent board may lead to the powerful steward to maximize their benefits at the cost of owners (Finkelstein & Boyd, 1998). Further, Albanese, Dacin and Harris (1997) concluded that stewardship theory had failed to address the agency problem by focusing on the behavioral aspect that promotes motivation. This means that the stewardship theory had not completely addressed all governance problems.

The implication of these theory is that it offers an alternative perspective on how boards should be structured to ensure effective governance. This theory also offers an another perspective to explain corporate governance dilemmas on how to ensure accountability and trustworthy thus avoiding problems like earnings management practices. This theory further can be used to explain the role of auditing process and significance of audit opinion. This information was useful in formulating the conceptual framework.

2.2.3 Stakeholder Theory

As argued by (Freeman, 1984) stakeholder theory has proved to be a relevant theory as it proposes practical, ethical and effective way of managing organizations in complex business environment. At minimum institutions should be able to guarantee protection of interests of various stakeholders. The theory does not recommend satisfying the interests of stakeholders at the expense of shareholders but in a complimentary way. Hill and Jones (1992) further asserts that the shareholders were not the only stakeholders whose interests must be protected or affected by the entity. Instead, interests of all other stakeholders, that include customers, employees, suppliers and the broader community must be protected. According to Letza, Sun and Kirkbride (2004) corporate governance was best addressed from both shareholders and stakeholder's perspective. Through corporate governance mechanisms the both interest shareholders and firm's stakeholders will be protected. O'Sullivern (2000) added that by the shareholder putting assets and investments to an entity, it was not the only way that an entity increased its value. Value could be created by several groups within the society, including governments, customers and even society that could suffer the consequences of depletion of resources.

Proponents of stakeholder theory holds the view that, boards of directors, through decisions could protect interests of various stakeholders. Audit opinion was therefore useful to all parties external to the entity. A number of empirical studies have examined the link between corporate social responsibility practices and the board. Finegold, Benson and Hecht (2007) established that boards main objective was to maximize shareholders value. Similarly, Kiel and Nicholson (2003) established a significant positive influence of board size on the value of a firm in Australian public listed companies. In addition, there existed significant positive relationship between non-independent directors and firm performance. Garcia-Torea, Fernandez-Feijoo and Cuesta (2016) examined the effectiveness of boards protecting both stakeholders and shareholders. Using sustainability reports and transparency as proxies to measure other stakeholders' interests in corporate governance. The study established that board effectiveness had significant influence on other stakeholder's perspective on a company corporate governance. The study further stablished that in countries with stakeholders oriented perspective large firms were sensitive and responsible in addressing the interests of various stakeholders and even provided sustainability and transparency reports. In the recent past the requirement of activities of the entity to meet both economic, environmental and social impact have become significantly important (Abeysekera, 2013). Entities must act in a way that does not harm the environment to ensure their survival (Deegan,2002).

Critiques of stakeholders' theory point out that the theory had failed to address and solve the conflicting interests of various stakeholders. In addition, lack of clear ways of measuring the goals of each stakeholder left an opportunity for management to determine their own performance measures leading to accountability problems (Mallin, 2004). In addition, Jensen (2001) supported the argument that advocates of stakeholder theory had failed to solve conflicting interests of various stakeholders that needed to be protected by management. He proposed that by maximizing the interests of shareholders, will by extent maximize the interests of all stakeholders. They noted it was impossible to maximize shareholders returns without satisfying the goals of all stakeholders.

Boards selection based on this theory therefore should reflect representation of diverse stakeholders. The boards should be entrusted with the key objective of determining the various objective of various stakeholders and the potential conflicts and defuse them. This theory was useful to this study, as it also predicted a connection between board structure and audit opinion. Moreover, the argument that through the board structure the interests of various stakeholders will be protected was useful when formulating the conceptual framework.

2.2.4 Managerial Hegemony Theory

Managerial hegemony theory as advanced by Mace (1971) offers a diverse perspective from other corporate governance theories reviewed in this study. The theory holds that board of directors are irrelevant in governance mechanism. Boards of directors were not involved in strategic decisions, because these decisions are mainly, left to professional managers, unless there was a crisis. Consequently, boards of directors played insignificant role in direction and control of entities. Further, boards were dominated by professional management and were only left to provide supportive role mainly to certify management decisions (Jonsson, 2005). In another study, Schulze, Lubatkin and Dino (2003) using 883 firms in the US concluded that boards of directors did not always perform their responsibilities of supervising management as they were passive and tended to follow management decisions. Hung (1998) observed that managers made strategic decisions, and boards were appointed by the owners to act as those in control, but in reality, it was the managers that were in control. The CEO and managers could play a role in selecting external directors and were likely to choose directors with proven record of not interfering with management decisions (Hung, 1998). Therefore, directors who were reappointed mostly were those that tended to agree with management. Board of directors also, received numerous incentives from management and could not want to differ with the management. In return the directors were most likely to sympathize with management.

However, critiques of hegemony theory of argue that there is insufficient evidence backing this argument. In comparison there was sufficient evidence to support other corporate governance theories including agency theory and stewardship theory (Stiles &Taylor, 2001). This theory was useful to this study as it offered a different perspective from other corporate governance theories. It took a contrasting position that boards of directors played minimal roles in governance consequently, predicting no relationship among the study variables. To test and prove the existing relationships among research variables both direct and indirect empirical evidence was collected.

2.3 Empirical Literature Review

The literature review, specifically examined the relationship among the research variables with the objective of identifying the research gaps that were addressed by this study. The studies reviewed were specifically selected to determine evidence of relationship among the study variables. First the relationship between board structure and audit opinion. Secondly, the relationship among board structure, earnings management and audit opinion. Thirdly, the relationship among board structure, earnings management, audit opinion and firm characteristics. Lastly, the empirical evidence on the combined relationship among all the research variables including; board structure, earnings management, firm characteristics and audit opinion.

2.3.1Board Structure and Audit Opinion

To start, Jouri (2016) tested corporate governance, audit opinion and reporting quality in Tehran stock markets. Data was collected for the period 2001 to 2008 on 90 listed companies. The study established that weak corporate governance determined audit opinion in Tehran Market. However, strong corporate governance did influence unmodified opinion. The contrasting results established a conceptual gap that needed to be examined further in this study.

Mzenzi and Gaspar (2015) examined external audit reports and accountability in Tanzanian local governments. The study used auditor office general reports covering a period of 10 years. Additional primary evidence was obtained through conducting interviews with members of local parliament and parliamentary committees. Using content analysis, the relationships were tested. From the study the contribution of audit opinion in accountability of local authorities in Tanzania was marginal. This may have occurred due to limitation of scope as external auditors only evaluated financial information. The study also established that audit opinion had not been used effectively to hold to account those charged with responsibility as envisioned in agency theory. Failure to effectively hold managers into account using modified audit opinion created a conceptual gap that needed to be evaluated. The use of content analysis as research technique also created a methodological gap.

Habib (2013) examined the determinants of audit opinion. The study adopted meta-analysis techniques to draw conclusion based on findings from different studies. The study revealed that firm-specific characteristics influenced the odds modifications of audit opinion. But, auditor-related characteristics did not influence the odds of a firm receiving a modified opinion. The study established that firms that received MAO shared same characteristics, including size, capital structure, profitability and firm-related characteristics. Meta-analysis technique that was used in this study, statistically aggregated results from various studies, which may have resulted to misleading information, if there was biasness in selection of studies, or due lack of methodological quality of included studies.

Sherliza and Sitinorwahida (2011) examined corporate governance and audit report timelines using evidence from Malaysia. The study established audit committee size, profitability and audit opinion influenced the audit report timeliness. However, between board independence, audit committee members' qualification did not influence audit report timeliness. Cross-sectional study methodology was used covering the year 2009. From this study a methodological gap was established as this study undertook longitudinal study in contrast to cross-sectional study used in study under review.

Ballesta and Garcia-Meca (2007) using evidence from Spanish listed examined corporate governance and audit qualifications. Board structure and ownership structure was used to represent corporate governance. The context of the study was in Spain listed firms covering the periods from 1999 to 2002. Logistic regression methodology was employed to analyze determine the nature of the relationship. The study concluded that insider ownership contributed to lower chance of receiving audit qualifications while family members increased the chance of firm receiving audit qualification. The study supported the theoretical argument that insider ownership translated to improved governance structure leading to quality of financial information that was reflected in audit opinion. However, the study raises both methodological and contextual gaps. By, employing logistic regression technique only binary outcomes could be analyzed, while the data used was only based in private sector context thus leaving contextual gap in public sector.

Firth (1978) using evidence from UK examined the impact of modified audit reports on investment decisions. The study specifically examined data from 1500 listed firms in the United Kingdom that had received modified audit opinion from the period covering 1974 to 1975. The study established that some forms of audit qualifications significantly impacted on investments. This means that some forms of audit modifications contained information that influenced investment decisions. This indicating that various investors reacted differently to various types of qualifications. Lenders were not willing to lend to companies that had received certain types of audit qualifications in the United Kingdom. It will be important to consider if the facts hold in Kenya a developing economy and specifically in the public sector context.

2.3.2 Board Structure, Earnings Management and Audit Opinion

A review of literature on the relationship among board structure, earnings management with mixed was inconclusive. Sutrisno (2019) examined CEO aggressiveness, earnings manipulations and audit opinion in Indonesian listed firms. The study collected data covering the period 2014 to 2016. Using both multivariate and logistic regression to analyze the relationships. CEO overconfidence was measured using debt, dividend yield and over investment. Real earnings management was measured using overproduction, sales manipulation and production manipulation. The study established that CEO bullishness and earnings management positively related. However, there no significant relationship between audit opinion and earnings management. In addition, CEO overconfidence had a negative relationship with audit opinion. The study established that earnings manipulation did not mediate on CEO aggressiveness and audit opinion resulting to a conceptual gap.

Mohammed, Che-Ahmad and Malek (2019) evaluated board and earnings manipulation after review governance code in Nigeria. Using data was from companies listed at Nigeria securities exchange. The study used return of assets, firm size and firm profitability as control variables. The study employed generalized method of moment to examine the relationships. The study established that shareholders as chair of audit committee together with board independence significantly influenced earnings management in Nigeria. The conclusions are consistent with theory. However, the use of GMM in analyzing the data, creates a methodological gap as this technique cannot manage categorical dependent variable in the current study.

Nelwan and Tansuria (2019) examined effectiveness of auditee committee characteristics in constraining earnings management in Indonesia Listed firms. The study made use adjusted Jones model measurement for earnings management. Data was collected from listed companies in Indonesia covering the period 2009- 2011. The study established that audit committee independence constrained earnings manipulation. In contrast, the audit committee factors did not influence earnings management in Indonesian listed companies. The study creates contextual gap as the study was only based in Indonesia and private sector context. It was important to examine the relationship among the variables in different context specifically in public sector context.

Yasser and Mamun (2016) in Asia pacific tested earnings management and board leadership. The study adopted panel data using 330 firms covering the period from 2011 to 2013. Board structure was measured using CEO duality while financial reporting quality was measured using discretionary accruals, and firm characteristics adopted firm age and size measures. The study concluded that board structure had not significantly influenced the financial reporting quality and performance. However, female CEO negatively influenced performance. The study also established that larger boards tended to perform better regarding reporting quality. From this study, a conceptual gap was established as the study concluded that corporate governance mechanisms did not improve reporting quality. In addition, the study assumed a direct relationship but failed to test moderating and intervening effects including the audit opinion.

Abolverdi and Kheradmand (2017) examined the relationships between earnings management and modified audit opinion at Tehran securities Market. The study covered the period 2009 to 2013. Qualified opinion was the dependent variable while financial distress was used as a control variable. The study established positive relationship between earnings manipulation and modified opinion in Tehran listed companies, however, financial distress did not significantly influence the relationship. To analyze the data audit opinion was aggregated into two to binary logistic regression leading to a methodological gap. Further, the study used data only from private sector context, leaving a gap in public sector context.

Chelogoi (2017) using data from Nairobi Securities exchange tested corporate governance and earnings manipulation. The study employed census technique and collected data from 60 firms for the period 2005 to 2012. The employed multiple regression model to draw conclusions. The study established no significant connection between board independence and earnings management. Thus suggesting that independent boards did constrain earnings management. However, CEO duality and audit committee were established to constrain earnings manipulation. The mixed findings on board structure and earnings manipulation creates a conceptual gap as the findings on board independence were consistent with theory.

Moazedi and Khansalar (2016) in another study in Tehran securities market tested earnings management and audit opinion in Tehran listed firms. The study covered the period 2008 to 2013 using data from 117 firms. To test the relationships logistic regression model was employed. Firm size, firm performance and the nature of audit firm were taken as control variables. The study established a significant association between audit opinion and earnings manipulation in Tehran listed firms. A methodological gap arose as a result of using logistic regression, in that the audit opinion was only limited to binary outcome. The study only used data from private sector context leaving a gap in public sector context.

Daghsni, Zouhayer and Mbarek (2016) tested earnings manipulations and board factors in French listed firms. The study covered the period 2008 to 2012 and employed and regression model. The study established that board size and earnings manipulation were negatively, while CEO duality and earnings manipulation and board meetings positively related in French Listed Firms. This means that larger boards constrained earnings management in French firms. The study further suggesting that CEO duality increased the problem of earnings management due conflict of interest and domineering CEO. Increased board activity was also established to be a cause of increased earnings management practices. The study used firm performance and firm size as moderating variables. The study leaves contextual gap as data used in the study was collected from private sector leaving a contextual gap in public sector context.

Iraya, Mwangi and Muchoki (2015) using data from NSE tested corporate governance practices and earnings manipulation. Board independence, ownership concentration, boards size, and CEO duality as corporate governance practices. The study used 49 listed companies covering the period 2010 to 2012. Employing descriptive research design, the study established that in earnings manipulation positively related to CEO duality but negatively related to board size. The study did not connect the aspect of audit opinion leading to conceptual gap, in addition the study only used data from Nairobi securities exchange thus leaving a contextual gap in public sector.

Iqbal, Zhang and Jebran (2015) examined the link between governance and earnings manipulation in Listed firms in Karachi. The study examined 89 companies for the period 2003 to 2012. Board characteristics variables were measured using; CEO duality, managerial ownership, and independence of the audit committee, while discretionary accruals as proxy for earnings management. Using multivariate regression analysis, the study established that audit committee earnings management were negatively related but positively related to CEO duality. Managerial ownership and board size not determine earnings management. In the study firm size, growth, leverage and performance were taken as control variables. This study assumed a direct relationships and therefore did not factor the intervening and moderating effects leading to a conceptual gap.

Latif and Abdullah (2015) examined corporate governance mechanisms and earnings management in Karachi securities market. The study examined data for the period 2003 to 2012. The study established that audit committee independence and earnings manipulations were negatively related, while CEO duality was positively related to earnings management. Further the study concluded that effectiveness of corporate governance mechanisms constraining earnings management differed depending on size of the firm. The study led to a conceptual gap by failing to examine intervening and moderating variables. Study also, was based in the private sector leaving a gap in public sector context.

Tsipouridou and Spathis (2014) examined earnings management and audit opinion in Greece listed firms. Covered the period 2005 to 2011 and data was analyzed using logistic regression analysis.

The study did not establish a connection between audit opinion and earnings management in Greece. However firm characteristics variables including size and profitability influenced audit opinion. The study led to a conceptual gap by concluding that earnings management practices did not influence the nature of audit opinion.

Fodio, Ibikunle and Oba (2013) tested corporate governance mechanisms and earnings management quality at Nigerian securities market. Data was collected from 27 insurance companies covering the year 2007 to 2010. Regression method was used to test the relationships. The study established that governance mechanisms variables including; board independence, board size negatively related with earnings management. This suggest that these corporate governance mechanisms did not constrain earnings manipulation in insurance firms in Nigeria. However, other governance mechanisms variables including independent auditors and independent directors in audit committee were positively related. In this study independent audit was used as control variable leading to a conceptual gap. In addition, the study used least square regression method a technique that is not flexible to accommodate categorical variables resulting to a methodological gap

2.3.3 Board Structure, Firm Characteristics and Audit Opinion

Adiloglu and Vuran (2017) examined the key indicators of audit report using data from firms listed at the Istanbul securities market. The study collected data from 240 firms for a single period using cross-sectional study. To draw conclusions, the data was tested using logistic model. The study established that firm performance variables including return on equity ratio and assets returns were key determinants of audit opinion. The results revealed very high ratio of unqualified opinion, which may have been an indicator of bias as result of using data from a single period, this resulted to a methodological gap. This study used longitudinal data to address this problem.

Budisantoso, Rahmawati, Bandi & Probohudono (2017) tested auditor switch, audit opinion, and corporate governance. The study obtained data from financial statements covering the period 2012 to 2014 from Philippians, Thailand, Singapore, Indonesia and Malaysia. Data was analyzed using logistic regression. The study established audit opinion accuracy moderated on auditor switch and corporate governance. Financial deepening and audit committee were established to have significantly related to downward auditor switching. This means that independent directors improved the quality of audit. However, ownership structure did not significantly influence downward auditor switching. The study using audit opinion as moderating variable and not dependent variables creates conceptual gap.

Ishak and Yusof (2015) tested the effect of board independence on modified audit opinion in Malaysian environment using data from non-banking companies, from 2004 to 2009. The data was analyzed using descriptive and multivariate analysis to draw conclusions. The study concluded that board independence significantly influenced the probability entity reports being modified and therefore negatively related to modified audit opinion. In addition, highly leveraged, segmented companies also had a higher chance of the accounts being modified. The study assumed direct relationship between the variables ignoring intervening and moderating effect including earnings management.

Ali, Noor, and Khurshid (2015) tested the connection between earnings manipulation and firm size and in textile firms in Pakistan. Data was collected from 50 listed companies for the period covering 2004-2013. Firm size and discretionary accruals earnings management used as control variables. The study established positive and significant connection between earnings manipulations and firm size. The study concluded that firms with large assets were more likely to receive pressure from investors thus resorting to earnings management practices. This study assumed a direct link between firm size and earnings manipulation. Other studies considered firm size as control variable thus creating a conceptual gap.

Ianniello and Galloppo (2015) examined the reaction of stock market on the auditor opinion in Italian context. The study sampled firms using data obtained from annual reports covering the period 2007 to 2010. Firm characteristics variables including financial leverage, firm size and performance, were tested as control variables. It was established that overall audit opinion had significant impact on stock returns in the Italian context. Particularly the study established that adverse and disclaimer audit opinion negatively affected the stock prices. This means that modified audit opinions had a negative signaling effect to investors. However, modifications with except for audit opinion had minimal negative reaction effect on stock returns. The study further, established that unmodified opinion with emphasis paragraph positively related to stocks returns. This means that audit opinion contained information that was useful to investors to make investment decision in the Italian context. The use of event study methodology creates a methodological gap that needs to be evaluated. The study did not also evaluate the effect of governance mechanisms resulting to a conceptual gap.

Ahmadi, Sedghiani and Jamali (2014) examined the economic consequences of modified audit opinion in firms listed at Tehran securities market. Data was collected from 120 companies listed companies covering the period 2004 – to 2011. Firm characteristics variables including growth, leverage and size were tested. Regression model was employed to test the connections. No significant relationship between modified opinion and expected shareholders' returns was established. This means that modified opinion had a signaling effect on investors portraying information risk that influenced investment decisions. However, no significant relationship was established between modified audit opinion and credit credibility. This means that lenders relied on other credit scoring rules and legislations to award credit, consequently they did not consider modified audit opinion in award of credit. Failure by the modified audit opinion to influence credit rating creates a conceptual gap.

Kangarlouei, Jam and Motavassel (2013) evaluated corporate governance and audit opinion in Tehran stock exchange. Using descriptive correlational methodology, the study established that the ratio of qualified opinion and unqualified opinion was not significantly different with strong governance mechanisms. However, the ratio of qualified opinions significantly increased with weak governance mechanisms. The study created a conceptual gap by observing that that ratio of qualified and unqualified opinion was not significant with strong governance mechanisms.

Swastika (2013) examined audit quality, firm size, board independence and their impacts on earnings manipulations. The tested data from annual reports relating to 51 companies in Indonesia covering 2005 to 2007. To approximate earnings management, the Jones modified model was employed. Regression model was used to test the data. The study established that firm size, board independence and audit quality predicted earnings manipulations. The conclusions are in agreement with the hypothesis that large firms were more likely to establish stronger governance mechanisms and attract competent and qualified independent auditors thus constraining earnings management.

Habbash (2012) examined the link between audit committee effectiveness and earnings manipulations in United Kingdom. Further, the study block holder shareholding and earnings management. The study sampled 350 UK firms covering the period 2005 to 2007. The study controlled for firm performance, leverage, firm growth and board size. The study established that firms that had effective audit committee constrained earnings management. The study further established that audit committee did not prevent earnings manipulations in firms with higher block holder shareholding resulting conceptual gap. This may have meant that block holder shareholding may have affected the independence of audit committee thus making them less effective.

Dechow Sloan and Sweeney (1996) tested the consequences and causes of earnings manipulation. The study sampled 92 firms in United State of America covering the period 1982 to 1992. After controlling for bonuses and contracts, the study established that firms dominated by insider directors and CEO duality engaged in earnings manipulation. In addition, these firms; lacked audit committee and block stockholders. The study assumed a direct connection between earnings manipulations and weak boards. This study introduced both moderating and intervening variables to the relationship.

Carcello and Neal (2000) evaluate the audit committee composition and audit opinion. Using data from listed firms at New York securities market, and focused on financial distressed firms for the year 1994. Data was tested using a regression model. The control variables included financial distress measured by, liquidity, financial leverage and assets returns. The study established that increasing independent directors in the audit committee lowered the probability of an entity receiving modified opinion. In addition, the study established that firm characteristics variables including financial distress in companies significantly moderated on composition of directors in audit committee and the type audit reports issued by the independent auditors. This study used cross sectional study only using data for period 1994 leading to methodological gap.

Mutchler et al. (1997) using data from bankrupt companies in New York Securities tested the link, between mitigating factors and audit opinion. The study examined data from financially depressed companies in the manufacturing sector using data from wall street journal index covering the period 1974 to 1985. The study established that firms that were financially depressed measured by negative working capital, default on debt repayment and operational financial losses were mostly to have their reports modified. Further, the results revealed that subsequent events including significant contrary reporting information before the independent auditors issued their audit reports significantly influenced the type of opinion. However, mitigating steps taken by the entity to correct the contrary information were not significant in correcting the audit opinion decision by the independent auditor. Size of the company was established to have a significant influence the type of audit opinion. Independent auditors were unlikely to issue modified reports to large companies possibly because of the confidence that large companies could resolve bankruptcy issues. This study created a conceptual gap by only focusing financial information and audit opinion failed to factor the corporate governance aspect including on board structure.

Elliott (1982) examined audit opinion and abnormal return outcomes and ambiguities in United States of America. The study examined 328 randomly sampled firms using data obtained from accounting research systems covering the year 1973-1978. The study established that subject to audit reports had insignificant impact on share returns. The study further established that subject to audit reports did not receive significant media attention hence their effect was minimal particularly in the short term. The study controlled for firm and industry characteristics. It was established that firm and industry characteristics influenced the type of audit opinion. It means firms that received modified opinion were mainly from the same industry and faced similar challenges like decline in earnings. This study failed to examine the corporate governance aspects that might have influenced the firm characteristics leading to modifications leading to a conceptual gap.

2.3.4 Board Structure, Earnings Management, Firm Characteristics and Audit Opinion.

Khalil and Ozkan (2016) evaluated board independence, earnings management audit quality in Egypt. Data was collected for the period 2005 to 2012 non-financial firms. Board size, insider ownership, audit committee composition and CEO duality were indicators of corporate governance. Firm size and leverage were taken as control variables. The study concluded that independent directors did not constrain earnings management. The study further indicating that the effect of independent board on earnings manipulations was contingent on ownership levels. The conclusion that independent directors could not constrain earnings management led to conceptual gap that needed to be investigated and tested in other studies.

Hadrache (2015) examined qualified audit opinion and earnings management in France banking sector. The study sampled 162 banks covering the period 2005- 2012. Three control variables were introduced in the study including; leverage, bank size and growth. The study established that both audit quality and qualified opinion constrained earnings management in French banks. The findings established that if managers knew that the quality or audit was high they avoided engaging in earnings practices for fear of detection. Moreover, firm's that received qualified opinion avoided earnings management practices for fear of consequences. Bank size as was found to be positively related to earnings manipulations suggesting that larger banks engaged in earnings management. Other control variables including leverage and growth were found to be insignificant.

Moss (2016) examined corporate governance, earnings management and cost of capital in Thailand. Corporate governance variables included audit opinion, board independence, managerial ownership and audit committee. Cost of capital acted as the response variable. Data was collected from annual reports from Thailand listed firms covering the period 2003 to 2010. To draw conclusions, the data was tested using a regression model. The study established significant link between earnings manipulations and cost of capital. This means that earnings management increased information risk resulting to lenders and investors demanding more returns for the increased cost. Secondly, the study established significant association between corporate governance variables and cost of capital. The nature of relationships was both positive and negative but consistent with agency theory. The hypothesis to use cost of capital as the response variable created a conceptual gap on the relationship between the variables.

Salleh and Haat (2014) examined audit committee and earnings management in the Malaysian Bursa market in 2007. Specifically, the study examined audit committee expertise, frequency of meetings and committee independence with association with discretionary accruals. The study was based on 280 listed companies covering the period between 2005 – 2008. The study established that after revision of Malaysian code of corporate governance. Audit committee characteristics significant influenced earnings management. The firm size, leverage acted as control variables in this study. A contextual gap was established as it only used data from private securities market and not public sector.

Hsiao, Lin and Hsu (2010) examined the relationship among earnings management, corporate governance and audit opinion. The study examined delisted firms covering the period 1997 to 2007. A logit statistical model was used to examine if financially distressed firms were more likely to engage in earnings management manipulation. Further, the study aimed to establish if financially distressed firms lacked board independence. The study established financially distressed companies were likely to engage earnings management. In addition, it was established that CEO duality led to unfavorable audit opinion.

Fodio, Ibikunle and Oba (2013) examined data from insurance companies covering the period 2007 to 2010. The study established earnings management was positively related board independence, board size and audit committee size. This implies that governance mechanisms could reduce earnings manipulations. In addition, the study established that independent external audit and audit committee were positively influenced earnings manipulations. This implied that the independent auditors and audit committee could not reduce earnings manipulations. The study adopted regression analysis. The study adopted agency theory to develop theoretical framework for both earnings management and corporate governance variables. In the study firm size was used as the control variable. It was negatively related to earnings management. This implying that smaller firms were likely to engage in earnings manipulations.

Caramanis and Spathis (2006) investigated the determinants of audit qualification on firms listed at Athens securities market. The study used cross-sectional study using a sampled data collected from listed companies for the year 2001. Data was analyzed using logistic model establish the connection between the variables. The study established that firms' characteristics variables including; firm profit margins, total assets and firm liquidity measured using current ratio were significant determinants of audit qualifications. This meant that firms that were experiencing financial problems reflected by poor liquidity ratios were likely to receive modified audit opinion. This means that management of poor performing companies were likely to engage in manipulation of accounting figures using earnings manipulation to impress the stock market resulting qualifications of their statements by the independent auditors. This study creates a methodological gap as the study used cross-sectional data for the period 2001 a technique that was prone to bias. This study will adopt a longitudinal study technique to address this methodological gap.

Farinha and Viana (2009) examined board structure and modified audit opinion in Portuguese stock exchange. The study adopted a logistic regression to test the relationships. Modified audit opinion acted as the outcome variable, board structure as the explanatory variable, while firm characteristic including firm size being used as control variables. The study established that board diligence and board independence negatively contributed to the odds of a firm receiving the modified opinion. The board size results were not statistically significant; further the study established that other variables that determined probability of firm receiving modified opinions were, earnings, growth and even dividend payout. The board size and diligence through a number of meetings and the mix in number of professionals helped in ensuring quality of financial information resulting to unqualified audit opinion. The study was only undertaken in private sector context leaving a gap in public sector context.

2.4 Summary and Research Gaps

In summary, a review of literature reveals a number of knowledge gaps. A significant number studies assumed a direct relationship between variables of interest in this study, ignoring the indirect effect of intervening and moderating effects leading to conceptual gaps. Furthermore, results from the empirical evidence reviewed are mixed and inconclusive. A number of studies concluding that through board structure, earnings management could be constrained (Abolverdi & Kheradmand,2017; Moazedi et al.,2016). In contrast other studies disagreeing on the effectiveness of boards (Yasser & Mamun,2016, Tsipouridou & Spathis, 2014). It was important that further studies be done in the public sector context with the aim of confirming or disapproving the findings.

Different studies adopted diverse statistical methods to analyze and operationalize study variables resulting to methodological gaps. Meta-analysis technique employed Habib by (2013) was prone to risk of bias on selected studies. Additionally, some studies adopted binary logistic regression as result forced to aggregate the dependent outcome to binary thus losing vital information in the process (Ishak &Yusof, 2015, Kangarlouei et al., 2013, Farinha & Viana, 2009).

Empirical evidence review further proved contextual gaps, as most studies examined the relationship between variables mostly using data from companies listed at securities markets. There were limited studies using information or data from public sector companies including SOEs leading to contextual gap. See table 2.1 on summary of knowledge gaps based on prior studies.

Table 2.1Summary of Previous Studies and Research Gaps

RESEARCHER(S)	FOCUS	FINDINGS	KNOWLEDGE GAPS	FOCUS OF CURRENT STUDY
Sutrisno (2019)	Earnings management CEO aggressiveness and audit opinion in Indonesian.	Earnings manipulation did not mediate on audit opinion and CEO aggressiveness.	The findings of the relationship between audit opinion and CEO overconfidence creates a conceptual gap.	Both moderation and mediation are introduced.
Nelwan and Tansuria (2019)	Earnings management and Audit committee in Indonesian Listed companies covering the period 2009 to 2015.	Earnings manipulation and audit committee independence had negative relationship. However, the audit committee expertise had no effect in earnings management in Indonesian listed companies.	Failure of audit committee expertise to constrain earnings management creates a conceptual gap	The study introduced both moderating and intervening effects.
Mohammed, Che-Ahmad and Malek (2019)	Audit committee and earnings management in Nigeria.	Shareholder as board as chair and board constrained earnings management.	The study analyzed the panel data using generalized method of moment that not be effective in dealing with categorical dependent variable.	This study introduced a multinomial logistic regression to deal with categorical dependent variables.
Kheradmand and Abolverdi (2017)	Earnings management and modified audit opinion in Tehran.	The study concluded that significant positive link existed between modified opinion and earnings manipulations in Tehran Securities.	The study used binary logistic regression leading to methodological gap as audit opinion could only two categories.	Multinomial logistic technique that allows more outcomes of dependent variable was used.

Budisantoso et al. (2017)	Corporate governance Audit opinion, downward and auditor switch.	The study established financial deepening and audit committee had negative connections with downward auditor switching.	The study using audit opinion as moderating variable and not dependent variables creates conceptual gap.	Audit opinion factored as the outcome variable.
Chelogoi (2017)	CG and earnings manipulation in Kenyan context.	The study established that board independence did not constrain management. However CEO duality and audit committee constrained earnings management.	The findings that board independence did not constrain earnings management creates a conceptual gap.	This study examined effectiveness of board independence in public sector context.
Moazedi et al. (2016)	The Auditors Opinion and earnings management in Tehran.	The study examined the relationship between earnings manipulations and audit opinion in Tehran listed firms and a significant positive association was established.	contextual gap as the study was only based in the private.	This study addressed this gaps by focusing on the public sector context in addition used a
Daghsni et al. (2016)	Board characteristics and earnings manipulation in French Firms.	Significant positive relationship board activity, CEO duality but negative relationship board size and earnings management while CEO duality and in French Listed Firms.	private sector context leaves a gap in public sector.	The context of the study is in the public sector.
Khalil & Ozkan, (2016)	Audit quality, board independence, audit quality and earnings manipulation in Egypt.	Increasing the ratio of independent directors did not constrain earnings management.	The findings that independent directors did not constrain earnings management created conceptual gap.	The study introduced intervening and moderating variables.

Jouri (2016)	Auditor opinions, corporate governance and reporting quality.	Significant association between weak corporate governance and unmodified opinion but no correlation between strong corporate unmodified opinion.	The findings on weak and strong corporate governance creates a conceptual gap.	This study examined the relationship further by introducing intervening and moderating variables.
Yasser and Mamun (2015)	Board structure and earnings management in Asia Pacific.	No significant relationship between board leadership and reporting quality. However, female CEO negatively impacted performance.	The findings that corporate governance mechanisms did not improve quality of financial reporting creates conceptual gap.	The study introduced a moderating and intervening variables to address the conceptual gap.
Moss (2016)	The cost of capital, governance and earnings management in Thailand.	Insignificant link between cost of capital and earnings manipulation but strong link between cost of capital and governance.	The study hypothesis that creates association between the cost of capital and corporate governance creates conceptual gap.	Both moderation and mediation are introduced.
Iqbal et al. (2015)	Earnings management and board structure in Karachi Listed firms.	Negative but significant association between earnings management and audit committee positive relationship with CEO duality.	The study did not factor moderating and intervening variables and study only used data from private sector context	The study introduced moderating and intervening variables in addition use data from Public sector context.
Iraya et al. (2015)	Earnings management practices, corporate governance on companies listed at Nairobi stock market.	Significant and negative association among board structure variables and earnings manipulations.	The study did not factor in moderating and intervening variables. The study was based in the private sector leaving a gap in public sector context.	The study introduced audit opinion as a dependent variable, and focusing on the public sector context.

Ishak and Yusof (2015)	Board independence on modified audit opinion in Malaysian environment.	Board independence significantly influenced the odds modification of audit opinion.	Use of binary logistic regression created a methodological gap.	The study introduced multinomial logistics regression to address multiple outcomes.
Latif and Abdullah (2015)	Corporate governance mechanisms and earnings management in Pakistan.	Negative and significant association between audit committee independence and earnings management but positive association with CEO.	The study assumed direct relationship and not did factor moderating and intervening variables.	This study introduced a moderating and intervening variables.
Almasarwah (2015)	Earnings management and corporate governance in Jordanian industrial firms.	Ownership structure significantly constrained earnings management compared to board structure variables.	The study did not factor intervening and moderating variables.	The study introduced earnings management as intervening variable.
Hadriche (2015)	Modified audit opinion, and earnings management in France banking sector.	Modified audit opinion constrained earnings management in French banks.	The study used qualified opinion as explanatory variable creating a conceptual gap.	Both moderation and mediation are introduced .
Mzenzi and Gaspar (2015)	Examined effect of external audit on accountability in Tanzanian local governments	The study established that audit opinion contribution in accountability in local authorities in Tanzania was marginal	The use of content analysis as research technique creates a methodological gap.	A multinomial logistic model is used.
Ianniello and Galloppo (2015)	Examined the reaction of stock market on the auditor opinion in Italian context.	The study established that overall audit opinion had significant impact on stock returns in the Italian context.	Event study methodology creates a methodological gap that needs to be evaluated.	A multinomial logistic model is used .

Tsipouridou and Spathis (2014)	Earnings management and audit opinion in Greece listed firms.	Audit opinion did not influence earnings manipulation in Greece Listed firms.	A conceptual gap by concluding that earnings management practices did not influence the nature of audit opinion.	The study introduces moderating and intervening variable to address the conceptual gap.
Ahmadi et al.(2014)	The study examined the economic consequences of qualified audit opinion	The study established that audit opinion significantly affected the expected returns. The study also no concluded audit opinion had no significant effect on creditors.	The study did not focus on what causes the audit opinion.	audit opinion is factored as an outcome variable.
Simpson (2014)	Board and governance in state owned entities in Ghana.	SOEs only complied with minimal issues from legal frameworks , weaknesses in board performance ,criteria of appointment, balance of executives and other board characteristics	The study only focused on the board characteristics leaving a gap in its effect on other variables including audit opinion.	The study emphasizes the effect of the board on audit opinion.
Omoro (2014)	Top management team, voluntary disclosure, reporting quality in commercial SOEs in Kenya	The demographic diversity of top management influenced level of financial reporting quality.	The study did not cover the aspect of audit opinion.	audit opinion is factored as an outcome variable
Habib (2013)	Determinants of audit opinion.	The study revealed that firm-specific characteristics influenced the propensity of a firm receiving modified audit opinion.	Meta -analysis technique used in the study creates a methodological gap.	The study made use of multinomial logistic regression.
Swastika (2013)	Firm size, board independence and audit quality on earnings	Firm size, board independence and audit quality predicted earnings management.	Use of multiple regression model creates a methodological gap.	The study made use of multinomial

	management Indonesia stock exchange.			logistic regression.
Kangarlouei et al. (2013)	Corporate governance and audit opinion in Tehran stock exchange.	The study established that the ratio of qualified opinion and unqualified opinion was not significantly different with strong governance mechanisms.	The observation that no significant relationship between unqualified opinion and strong governance mechanism creates a conceptual gap.	The study introduced intervening and moderating variables to solve the conflicts.
Fodio et al. (2013)	CG and earnings manipulation in insurance firms at Nigerian securities market.	Governance mechanisms variables including; board independence, size and size of audit committee constrained earnings management.	In this study independent audit was used as control variable leading conceptual gap.	This study examined audit opinion as response variable.
Kahle et al. (2014)	Anglo- American governance environments.	Differences existed on the effects of the board size, independence and outside directors between UK and US Firms.	Contextual gap as study done in developed markets leaving gap in emerging markets.	The study focused on the public sector in developing country.
Locke and Duppati (2014)	The study examined financial performance in SOEs after reforms in corporate governance reform in India	Financial performance had improved following governance reforms.	The study did not check if CG reforms also affected quality of information audit opinion.	The study examined effect CG reforms on quality of financial information as reflected in the Audit opinion
Moradi et al. (2011)	Modified audit reports and share returns in Iran	Modified audit reports did not significantly affect share prices. These conclusions reflecting that users of audit reports did not value information were not aware of it.	The study conclusion on lack of effect on share prices creates a conceptual gap	Board structure on audit opinion are factored.
Lin et al.(2011)	Economic consequences of qualified opinions in China.	The study established MAO did not have significant economic and borrowing consequences especially in state controlled entities in China.	The study did not cover aspect of board structure.	The study covered aspects of board structure.

Habbash (2012)	Audit committee earnings management and block holder shareholding in UK.	Audit committee constrained earnings management.	The UK context resulting to contextual gap.	This study was be undertaken in public sector context.
Sherliza et al. (2011)	Corporate governance and audit report timelines in Malaysia	Audit committee size profitability and audit opinion influenced the audit report timeliness but board independence, did not.	The study made cross-sectional study and only covered year 2009.	The study made longitudinal study.
Hsiao et al. (2010)	Earnings management, corporate governance and audit opinion.	Earnings management was linked to financially distressed companies. CEO duality led to unfavorable audit opinion.	A logit statistical model was used to examine the relationship thus creating a methodological gap.	Multinomial logistic technique that allows more outcomes of dependent variable was used.
Farinha and Viana (2009)	Board structure, modified audit opinion in Portuguese stock exchange.	Board activity and board independence negatively related to the odds of firm receiving the modified opinion.	Contextual gap as the study was based in the private sector context leaving a gap in the public sector context	Public sector context.
Caramanis and Spathis (2006)	Examined the determinants of audit qualification on firms enlisted Athens securities Market.	The study established firm characteristics including firm profit margin and firm liquidity were determinants of audit qualification.	The data creates a methodological gap by use of cross sectional data prone to bias	This study used longitudinal data to address this methodological gap
Carcello and Neal (2000)	Audit committee composition and audit reporting.	independent directors in the audit committee lowered the odds of an entity receiving modified opinion.	The data creates a methodological gap by use of cross sectional data prone to bias	This study used longitudinal data to address this methodological gap
Mutchler et al.(1997)	Contrary information, moderating factors on audit opinion decisions companies in New York stock market.	The study established that firms that were financially depressed companies were more probable to receive modified opinion. Large firms were unlikely to receive modified audit opinion.	Study only used financial data and audit opinion leading to conceptual gap by failing to consider corporate governance aspects	This study introduced board structure as the explanatory variable.

			including board structure.	
Dechow et al.(1995)	Examined causes and consequence of earnings manipulation	Boards dominated by insiders' and CEO duality were likely to manipulate earnings.	Prediction of direct relationship between earnings management and weak boards creates a conceptual.	Both moderation and mediation are introduced .
Elliott (1982)	Examined audit pinion and abnormal return outcomes and ambiguities in united states of America.	The study established that subject to audit opinion had no significant impact on share prices.	The study failed to examine the corporate governance aspects that might have influenced the firm characteristics leading to modifications leading to a conceptual gap.	This study introduced board structure as explanatory variable.
Firth (1978)	Qualified audit reports and investment decisions.	audit qualifications had negatively impacted on investment decisions.	The historical period covered in the study creates contextual gap	This study made use of more recent data covering the period .

2.5 Conceptual Framework

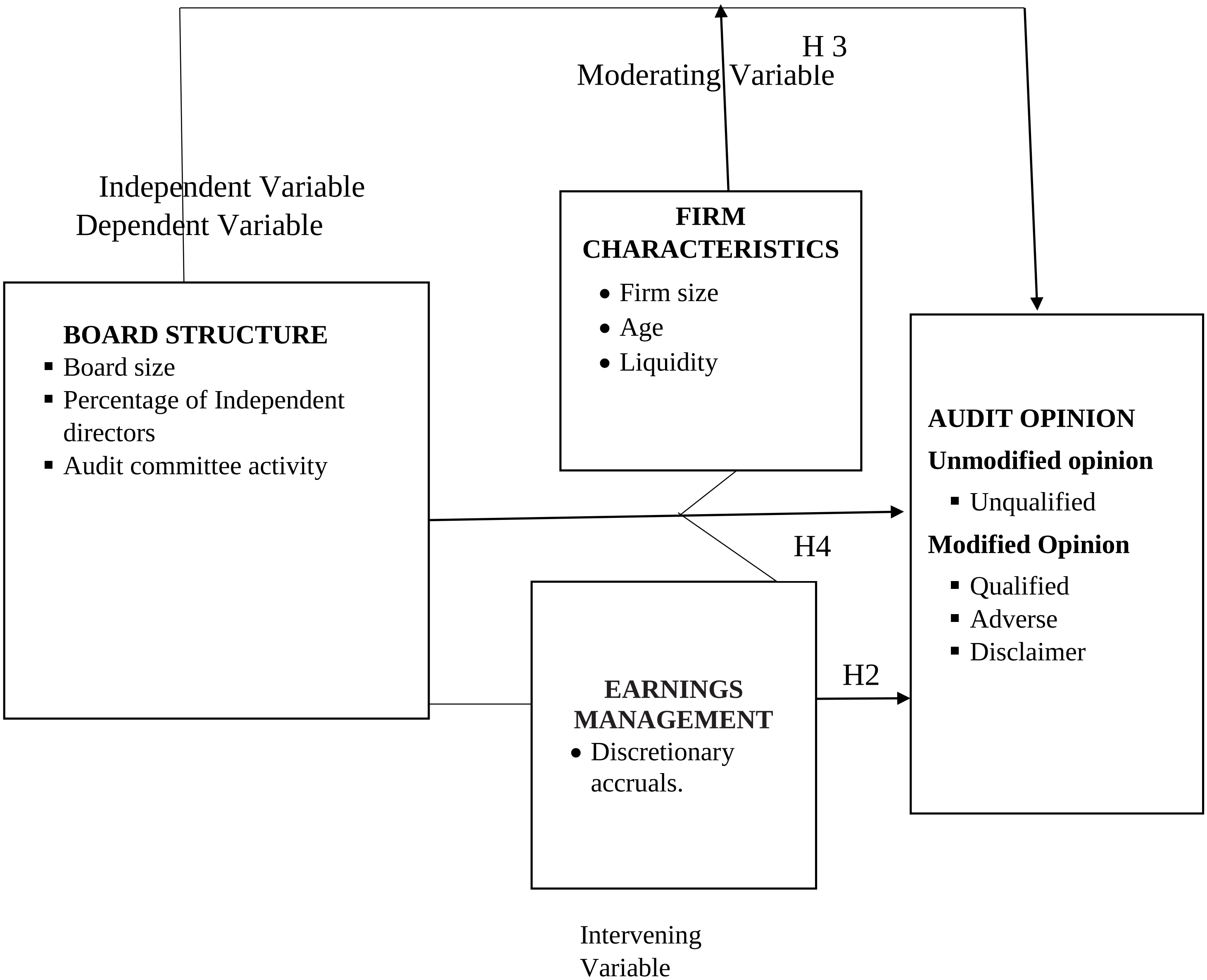
Based on theoretical framework and empirical evidence, it was conceptualized that boards as structured in commercial state owned enterprises could directly influence the nature audit opinion issued by the independent auditor. Good governance in SOEs was believed to result in reporting from management consequently resulting to clean audit opinion by independent auditors. In contrast, poor governance could fail to constrain earnings management practices resulting to poor quality in financial information leading to qualified opinion by independent auditors. This study therefore conceptualized that earnings management mediated on board structure and audit opinion. Firm characteristics variables including firm size, age and liquidity were conceptualized moderate on board structure and audit opinion.

Agency theory posts that through board structure the agent could be controlled. Hence, the board through supervision and advisory could influence quality of reporting by management. If monitoring was done correctly, it could have resulted to quality information in financial statements leading to clean reports by independent auditor. The independent variable was therefore, the board structure operationalized; board independence, board size, and audit committee activity. Operationalization and measurement of board structure variables was supported by prior studies; Ishak and Yusof (2015) established significant connection between board independence modified audit opinion. Latif and Abdullah (2015) concluded that audit committee diligence constrained earnings management hence was negatively related to modified audit opinion. Yasser and Mamun (2016) established that larger boards tended to perform better regarding reporting quality. The dependent variable, the audit opinion was conceptualized to depend on board structure. The audit opinion was based on evidence obtained after independent auditor reviewed information presented by management. The audit opinion was grouped into two namely; unmodified opinion and modified audit opinion (Hsiao et al., 2010). This classification including; disclaimer opinion, adverse opinion or qualified audit opinion was also based on guidelines by Intosai (2010) on deriving the audit opinion. Audit opinion was categorized into four (4) unordered categories including; zero (0) for unqualified opinion, one (1) qualified opinion, two (2) adverse opinion and three (3) disclaimer opinion based on empirical evidence from previous studies.

Firm characteristics variables measured by the firm size, age and liquidity were conceptualized to moderate on board structure and audit opinion. It was believed that firm characteristics variables including size, age and liquidity influenced the level of governance as large firms were likely to have stronger governance mechanism (Habib, 2013). Firms with large assets were more likely to receive pressure from investors thus resorting to earnings manipulation (Ali et al., 2015).

Earnings management was believed to mediate on the correlation between board structure and audit opinion. It was predicted that due to self-seeking tendencies of the agent, most likely, the agent could interfere with earnings as a measure of performance to mislead the principal. Consequently, this could have led to compromise in the reporting quality resulting to modification of audit opinion. Dechow et al. (1995) stated that earnings manipulation was likely to be achieved through accruals. This was so as, through accruals management could take advantage of accounting choices and estimation. See figure 2.1 the conceptual framework.

Figure 2.1 the Conceptual Model



Source: Author, 2021

2.6 Research Hypotheses

The research hypotheses tested in this study mirror the research objectives; in addition, the hypotheses were based on theoretical review and conceptual framework in figure 2.1.

H_1: The relationship between board structure and audit opinion in commercial state owned enterprises in Kenya is not significant.

H_2: The intervening effect of earnings management on the relationship between board structure and audit opinion in commercial state owned enterprises in Kenya is not significant.

H_3: The moderating effect of firm characteristics on the relationship between board structure and audit opinion in commercial state owned enterprises in Kenya is not significant.

H_4: The joint effect of board structure, earnings management and firm characteristics on audit opinion in commercial state owned enterprises in Kenya is not significant.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the various research strategies guiding this study. It examines the terms of collecting data and analyzing the data with the aim of drawing conclusions. Specifically, the chapter covers; research philosophy, research design, study population, data collection methods, research variables, diagnostic tests and data analysis.

3.2 Research Philosophy

Ontology and epistemology are the key aspects of research philosophy. Ontology aims to determine reality and forms of reality, it explains what constitute reality (Crotty, 1989). Epistemology purposes to determine how to create, acquire and communicate knowledge. Further, epistemology examines the relationship between knower and what is to be known (Guba & Lincoln, 1994). According to Easterby-Smith, Thorpe and Lowe (2002) through research philosophy, a researcher can avoid research mistakes by identifying appropriate methodology from early stages in research. Research philosophy can help a researcher to identify right research methodologies thus avoid using unsuitable ones. According to Kuhn (1962) various paradigms represents different worldviews of thinking shared by a group of scientists on how to solve a particular problem using research.

To determine a particular philosophical approach, various assumptions are considered. From an epistemological word view. Positivist approach entails focusing on discovering observables and measurable facts to ensure that only credible and reliable data could be used in discovery (Crotty, 1998). In addition, one will focus on the causal relationship among the research variables. Further, one will use existing laws to predict or explain relationship among research variables. The Positivists believe in objectivism, as the observer is believed to be different from what is observed.

In addition, the positivism holds that the researcher should conduct research in impartial way and be free from influence (Creswell, 2014). In contrast, Interpretevism paradigm holds that an individual want to develop a subjective meaning world they live and experiences of it. These experiences and meanings are varied and the inquirer would try to look for complexity in them (Scotland, 2012).

This study therefore adopted a positivism research philosophy. The study was guided by positivism research approach. This means that the study was guided by positivist beliefs, prepositions and methodologies. The justification being that this study relied on existing theories to explain the relationship among the variables of the study. Additionally, this information was used to formulate hypothesis.

The primarily examined the board structure and audit opinion after moderation for earnings manipulation and firm characteristics in commercial state owned entities. The study conceptualized the relationship among the variables using existing theories as a result developed the hypothesis. The study operationalized the study variables collecting data and analyzing it to draw conclusions about relationships among the variables. This study therefore qualifies to be a positivist study paradigm.

Table 3.1 Research Paradigms

	Positivism	Interpretevism
Beliefs	Real	Nominal
	The world is external to the researcher.	The world is socially constructed.
	Only on true reality exits.	There are multiple realities.
	Science is free of value.	human interest drives science.
Researcher should focus on	Only on variable facts	Focus on meaning
	Look for fundamental laws and causality.	Understand what happens.
	Simplest elements.	Evaluate totality of each situation.
	Hypothesis formulated and tested them.	Induction from data.
Preferred method	concepts Operationalized to be measured.	Diverse methods to establish different aspects of phenomenon.
	large sample so as to generalize.	Small sample investigated in depth.

Source: Adopted from Zukauskas, Vveinhardt and Andriukaitienė, 2018

3.3 Research Design

The study examined the relationship among four variables including: the board structure, firm characteristics, earnings manipulation and audit opinion. This qualified the study to be both correlational and longitudinal research designs. According to Field (2009) correlational research designs involves measuring many variables at the same period of time without manipulating the data. Unlike experimental research where data variables are manipulated to establish cause and effect in correlational research causality cannot be determined. Correlational design describes and measures degree of association between variables (Creswell, 2014).

The justification of using correlational research design was, to adequately test the hypothesis by measuring the relationship among the variables. In addition, longitudinal research design, measured the changes of same variables at different points of time. This was to enable the researcher to explore reasons for progressive shifts that occurred due to corporate governance developments over time in Kenya. Therefore, it was important to understand the effects of various developments in board structure. Over time there may have been developments on corporate governance on these state owned enterprises in Kenya.

3.4 Population of Study

The population constituted all the thirty-three (33) commercial and manufacturing state owned enterprises in Kenya based on classification by state corporations' advisory committee (SCAC) see appendix II. The study used census, whereby all the variables of interest were collected from all the 33 commercial state owned entities. Census was preferred because of reliability and accuracy, as the variables of interest in this study including; specific firm characteristics, board structure and audit opinion.

3.5 Data Collection

The secondary data used that was obtained from audited reports presented by management. Financial data obtained from audited reports was used to compute earnings manipulation based accruals using the Modified Jones model. Discretionary accruals as proxy of earnings manipulation was justifiable because management were likely to use accruals. This because, as they are flexible and are based on management judgement, therefore can easily be used to manipulate the accounting data. Further various studies on effectiveness of earnings management detection models reveal, Jones modified model still remains the most effective detection model for earnings management (Miko & Kamardin, 2014; Dechow et al.,2012). Further, the financial data obtained from audited annual reports was used to measure firm characteristics variables including; age of the firm, size, leverage and liquidity. These variables were believed to moderate on board structure and audit opinion.

In addition, data on board structure including; board independence, boards size directors, and audit committee activity was collected from corporate governance statements also published in audited financial statements. The data collection process involved examining the governance statements in the annual reports. The number of audit committee meetings held in a particular period represented the audit committee activity. The board size involved measuring the number of board members. Whereas, non-executive directors represented the board independence.

Data on audit opinion was collected from audit reports presented to parliament by the office of the auditor general of Kenya. This is the independent office mandated to audit and report on all public sector entities in Kenya. The audit opinion was categorized and coded into four unordered categories based on the possible types of audit opinion including; unqualified opinion zero (0) to represent unqualified opinion, one (1) qualified opinion, two (2) adverse opinion and three (3) disclaimer opinion.

The data was obtained for the periods 2007 to 2016. This period covered was justifiable as it provided useful information on the influence of progressive developments in boards structure over the periods and their influence on audit opinion in the commercial state owned enterprises in Kenya. During these period major developments including; new constitution 2010, development of performance contracting; development of Mwongozo code of corporate governance. These developments may have influenced corporate governance in commercial SOEs thus affecting other variables in this study.

The use of secondary data was justifiable, specifically the use of financial data obtained from annual reports, used to estimate discretionary accruals. The data from audited financial statements was reliable as it had been audited by independent auditor making the estimates reliable. Similarly, the secondary data used to estimate board structure variables from corporate governance statements thus providing reliable information as the information in governance statements that has also been verified by independent auditors.

3.6 Operationalization of Research Variables

Operationalization of variables is the process of defining the research Variable with the objective of measurement as hypothesized. The section explains how the variables in this study are measured and operationalized including; board structure, earnings management, firm characteristics and audit opinion.

3.6.1 Operationalization of Board Structure

The board structure was operationalized by; non-executive directors as proxy for board independence, number of audit committee meetings, and the size of in particular year. Board size was measured as the total number of board members in particular period. The audit committee diligence was estimated by the number of audit committee meetings conducted in a particular period. This was based on literature from empirical evidence from prior studies (Daghsni et al., 2016; Khalil & Ozkan ,2016; Ali et al., 2015).

Table 3.2 Operationalization of Board Structure

Variable	Indicator	Measurement	Scale	Source
Board Size	Board Size	Number of board members	Ratio scale	Corporate governance statements
audit committee meetings	Audit committee diligence	audit committee meetings	Ratio scale	Corporate governance statements in annual reports
Non-executive directors	Board independence	Number of non-executive directors	Ratio scale	Corporate governance statements in annual reports

3.6.2 Operationalization of Audit Opinion

Based on audit standards and empirical evidence from prior studies an audit reports can be categorized two; modified opinion and unmodified opinion. The modified opinion can be further categorized into: qualified opinion, adverse opinion and disclaimer opinion. A number of studies grouped the audit opinion into only two categories; modified opinion and unmodified opinion through aggregation of all the modified opinions into one, as this allowed use of binary and logistic regression when for analysis of the audit opinion (Sutrisno, 2019; Ianniello & Galloppo, 2015; Adiloglu & Vuran, 2017; Sherliza & Sitinorwahida, 2011). However, this study examined all the three forms of modified audit opinion independently to gain additional insights. This means in total there were classified into four classes whereby unmodified opinion (=0) qualified opinion (=1) adverse opinion (=2) disclaimer opinion (=3). Operationalization of audit opinion was supported by literature from prior studies (Ianniello & Galloppo, 2015; Hsiao et al., 2010; Farinha & Viana 2009). In addition, the use of four categories as opposed to two provided additional information on the contribution of each form of modified opinion that would have been lost by aggregation the three forms into one category.

Table 3.3 Operationalization of Audit Opinion

Audit Opinion	Indicator	Measurement Categorical	Scale	Source
Unmodified opinion	Quality of financial information	Unmodified =(0)	Nominal	Audit Reports
Qualified	Quality of financial information	Qualified (1)	Nominal	Audit Reports
Adverse	Quality of financial information	Adverse(2)	Nominal	Audit Reports
Disclaimer	Quality of financial information	Disclaimer (3)	Nominal	Audit Reports

Source: Author, 2021

3.6.1 Operationalization of Firm characteristics

Firm characteristics variables were operationalized by measuring, liquidity. firm age and size. Firm size as an indicator of firm performance was operationalized through logarithm of total assets. Hypothesizing that large firms faced more challenges with the likelihood of encouraging earnings management (Sutrisno ,2019; Habib, 2013 & Farinha & Fiana, 2009). Firm age was operationalized using the age since incorporation. Age was considered an important firm characteristic as an indicator of development of corporate governance structures (Ali et al., 2015). The ratio of current assets and current liabilities represented the firm liquidity. It acted as an indicator of financial problems and was hypothesized to encourage earnings management practices (Caramanis &Spathis, 2006).

Table 3.4 Operationalization of Firm Characteristics

Firm Characteristics	Indicator	Measurement Categorical	Scale	Source
Firm Size	Moderation effect	logarithm of total assets.	Ratio Scale	Financial statements
Liquidity	Moderation effect	Current assets/Current Liabilities.	Ratio Scale	Financial statements
Firm Age	Moderation effect	Age since incorporation.	Ratio Scale	Financial statements

3.6.2 Operationalization of Earnings Management

Computation of discretionary accruals acted as proxy for earnings manipulation was based on Modified Jones model (Dechow et al., 1995). Discretionary accruals determined as the dereference between total accruals and non-discretionary accruals as shown below.

Step 1: Calculate Total Accruals

TACC=$\Delta CA_t - \Delta CASH_t - \Delta CL_t + \Delta DCL_t - DEP_t$

Where

TACC - the total accruals

CA - changes current assets in time t

CL -changes in current liabilities in time t

CASH-Changes in cash in time t

DCL - Changes in debt in current liabilities in time t

DEP - Amortization and Depreciation in time t

Step 2: Estimate the Jones Model

$$\frac{TACC_t}{TA_{t-1}} = \alpha_1 \frac{1}{TA_{t-1}} + \alpha_2 \frac{(\Delta REV_t - \Delta REC_t)}{TA_{t-1}} + \alpha_3 \frac{PPE_t}{TA_{t-1}} + \varepsilon_t$$

TACC: Total accruals

TA t-1: Total Assets at the period t-1

Δ REV: changes in net revenue time t less revenue in time t-1

Δ REC: Changes in accounts receivables time t less time t-1

PPE: property plant and equipment

α1α2α3 parameters estimated using regression

ε_t The residual or the discretionary accruals

Step 3 Discretionary accruals

In step 3: The discretionary accruals were computed by subtracting non-discretionary accruals (NDACC) from the total accruals (TACC).

Discretionary accrual (DACC) = Total Accruals (TACC) – Non discretionary accruals (NDCA)

3.7 Diagnostic Tests

Multinomial logistic regression model was to test and predict the connections between the study variables. This technique was preferred because it was flexible and able to accommodate categorical variable that has more than two response variables. According to (El-Habil, 2012) multinomial logistic regression model was a less restrictive model when compared with other multivariate models. Multinomial logistic regression model techniques did not require fulfilment of demanding assumptions including normality, homoscedasticity and continuous data. Tabachnick, Fidell and Osterlind (2001) argued that MLR was robust to violations of normality assumptions required by other multivariate regression models. In addition, the technique did not assume a linearity between response and explanatory variables. Diagnostics statistics were also simple to interpret (Bayaga, 2010).

Various diagnostic tests were undertaken to tests the aptness of the multinomial regression model. Multicollinearity tests were performed to check for high correlation assumption between the independent variables. It was important to test for absence of multicollinearity as presence affected the consistency of the results (Garsun, 2009). The value inflation factor was the collinearity statistics that was used to test for multicollinearity whereby as a rule of thumb, a tolerance of 0.1 or less is a cause of concern, this is equivalent to VIF of 10 or more.

The Hausman (1978) specification test determined the independence irrelevant alternative postulation. The assumption puts a condition that addition or deletion of response categories does not affect the chance of the remaining outcomes. Excluding one outcome from the model was not expected to influence the relative risk of the remaining outcomes. This meant that multinomial regression performed better when the outcomes were not substitutes or were unrelated.

The likelihood test ratio test was performed to evaluate the assumption of independent variable significance. Likelihood test ratio specification tests was used test the condition that coefficients associated with explanatory variables were simultaneously equal to zero. Goodness of fit test evaluated the fit of the model with various outcomes categories. Null hypothesis stating that model fit was good against the alternative (Goeman & Cessie, 2006). Further, to test for the predictive accuracy of the model, classification table matrices were used. Fagerland, Hosmer, Bofin (2008) argued that classification tables were useful matrices to test the predictive success of the multinomial regression model.

3.8 Data Analysis

The study analyzed the relationship between the variables using both correlational and longitudinal approach covering ten years' period. Quantitative techniques including, correlation analysis and multinomial logistic regression statistical techniques used to evaluate the relationships. The study tested board structure and audit opinion. Additionally, the study tested both mediating and moderating effects of earnings manipulation and firm characteristics.

3.8.1 Multinomial Logistic Regression Model

This is a form of generalized regression model, which is flexible to accommodate categorical data as a depended variable of different categories and accept multiple explanatory variables (El-habil, 2012). Multinomial logistic regression is a multivariate statistical tool with dichotomous dependent variable with many predictor variables (Pohar, Blas & Turk, 2004). Multinomial logistic regression as a statistical tool has become preferred tool used by researchers because of its flexibility as the technique is less restrictive compared to other regression techniques. Multinomial logistic regression has to meet normality assumption. In addition, MLR fits well in diverse forms of distribution (Tabachnick & Fidell, 2007)

3.8.2 Hypothesis to Test Relationship between Board Structure on Audit Opinion

$$AO = \alpha + \beta 1\ BDsize + \beta 2ACmeeting + \beta 2perIND + \varepsilon \quad \text{……………………………Equation 2}$$

Regress on board Structure variables on audit to test βn is significant

Where: α is regression constant βn is regression; Audit opinion is the dependent variables Board structure variables the independent variables included board size (BDsize), Percentage of independent directors (perIND) and audit committee activity (ACmeeting); ε is the error term.

3.8.3 Hypothesis to Test the Mediating Effect of Earnings Management on the Relationship between Board Structure and Audit Opinion.

Mediating effect of earnings management on board structure and audit opinion is based on Baron and Kenny (1986) four steps mediating effect.

Step 1: Regress AO on BS to test $\beta 1$ is significant.

$AO = \alpha + = \alpha + \beta 1\ BDsize + \beta 2ACmeeting + \beta 3perIND + \varepsilon$……………………Equation 3

Step 2: Regress EM on BS to prove $\beta 1$ is significant

$EM = \alpha + = \alpha + \beta 1\ BDsize + \beta 2ACmeeting + \beta 3perIND + \varepsilon$……………. ……...Equation 4

Step 3: Regress to test $\beta 2$ is significant

$(AO) = \alpha + \beta 2\ (EM) + \varepsilon$…………………… ……………………………………Equation 5

Step 4: Regress to test $\beta 2$ is significant and $\beta 1$ is smaller

$AO = \alpha + \beta 1\ BDsize + \beta 2ACmeeting + \beta 3perIND + \beta 4\ (EM) + \varepsilon$…………... Equation 6

Where: α is regression constant, $\beta 1$…. Bn are regression coefficients, BS the independent variables, EM is the intervening variable ε is the error term

3.8.4 Hypothesis to Test the Moderating Effect of Firm Characteristics on the Relationship between Board Structure and Audit Opinion.

Moderating effect of firm characteristics on board structure and audit opinion is based on Baron and Kenny (1986) moderator effect.

$AO = \alpha + \beta 1\ BS + \beta 2\ FC + \beta 3\ (BS * FC) + \varepsilon$…………………………………. Equation 7

Regress to prove β3 is significant as proof of moderating effect

Where α β1…β3 are regression Coefficients Audit opinion (AO) the dependent variables; Board structure (BS) the independent variable Firm characteristics (FC) the moderating variable ε is the error term

3.8.5 Hypothesis to test the Joint Effect of Board Structure, Earnings Management and Firm Characteristics on Audit Opinion.

$AO = \alpha + \beta 1\ BS + \beta 2\ FC + \beta 3\ EM + \varepsilon$……………………………. Equation 8

Where: α is regression constant, β1...β3 are regression coefficients , board structure the independent variable, Earnings Management the intervening variable , Firm characteristics the moderating variable ε is the error term

CHAPTER FOUR: PRESENTATION OF RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the results of descriptive statistics of the variables of the study. These statistics includes; means, standard deviation, skewness and kurtosis coefficients. The chapter also presents results on Pearson's correlation analysis. The chapter further gives a summary of the findings, and how these findings contribute to knowledge and theory. The results are based on raw data found in appendix III.

4.2 Data Points

This study undertook a census study of all the thirty-three (33) commercial state owned enterprises in Kenya as categorized by the state corporation advisory committee (SCAC, 2020). Data from audit reports was obtained from 28 SOEs from a target of 33 companies, this translating to 278 data points.

4.3 Descriptive Statistics: Audit Opinion

Table 4.1 Audit Opinion Frequency Distribution

Audit Opinion	Frequency	Percent
Unqualified	89	32.01
Qualified	180	64.75
Adverse	2	0.72
Disclaimer	7	2.51
	278	100.0

Source: Author, 2021

Table 4.1 presents the results of frequency distribution of the audit opinion. The results indicate that majority of commercial state owned enterprises in Kenya received modified opinion. Qualified audit opinion accounting for 64.7% of opinions issued by the auditor general of Kenya. Disclaimer opinion accounted for 2.5% while adverse opinion accounting 0.7% of reported opinions by the auditor general of Kenya. The results suggest that only 32 % of commercial SOEs received unqualified opinions. The low percentage of firms with clean reports points to a challenge in boards in SOEs ensuring that only quality information was presented by management to the independent auditor. The large percentage of firms receiving qualified opinion also signals lack of accountability in SOEs which is an indicator of weak governance mechanisms.

4.4 Descriptive Statistics: Board Structure

The board structure the explanatory variable in this study, was operationalized by measuring the size of the board, board independence, and the audit committee diligence estimated by number of meetings for audit committee of the board as proxy for board diligence.

Table 4.2 Descriptive Statistics Board Structure

Variable	N	Min	Max	Mean	SD	SK	KU
Board Size	278	4	16	10.20	2.124	-.366	1.271
Number of AC Meetings	278	0	11	3.79	1.884	0.815	1.529
% of non-executive directors	278	0.00	1.00	.4246	.1976	.135	1.258

Source: Author, 2021

Table 4.2 presents board structure descriptive statistics. The results for board size show a mean of (10.2) members with a minimum of (4) members, a maximum of (16) members and standard deviation of 2.1. Based on the criteria set out in Mwongozo guidelines on the board size it shows that majority of SOEs in Kenya had not complied with Mwongozo guidelines on board size. That recommends optimal board size (7 -9) members.

The results on the number of auditee committee meetings show a mean of (3.79) meetings per year, with a maximum of (11) meetings per year and standard deviation of (1.884). The average number of audit committee meetings is below a minimum of four (4) meetings per year recommended by Mwongozo guidelines. This means that SOEs in Kenya had not complied with reforms in corporate governance recommended by Mwongozo code.

The results on board independence indicate a mean of 42.2% of board members being non-executive directors with a standard deviation of 19.7%. This suggest that majority of SOEs had complied with Mwongozo code that required at least thirty percent (30%) of board members to be independent directors. The results on Kurtosis coefficients shows values of less than two, meaning board structure variables were evenly distributed, with all coefficients on the skewness for the three variables being close to zero.

4.5 Descriptive Statistics: Firm Characteristics and Earnings Management.

Table 4.3 Descriptive Statistics Firm Characteristics and Earnings Management

	Mean	SD	Min	Max	SK
Firm Age	35.04	19.964	35.04	94	.845
Firm Size	8.4467	1.408	8.4467	11.49	-.276
Liquidity	7.2823	68.996	7.2823	1150.75	16.552
Discretionary Accruals	-.0086	.1712	-.0086	.825	-.806

Source: Author, 2021

Table 4.3 presents the results for firm characteristics the moderating variables and discretionary accruals the intervening variable. The descriptive statistics on firm characteristics show that most commercial SOEs in Kenya have been in existence for longer period, with a mean of age 35 years since incorporation with a standard deviation of 19.9 years. The logarithm of total assets reveal mean of (8.4) with standard deviation of (1.4) with a skewness of (-0.276). The results on liquidity shows variation across the firms as distribution with a mean of (7.02). Liquidity results shows high skewedness with coefficient of (16). The results on earnings manipulation based Jones modified model 1995 show a mean of (-0.008) with standard deviation of (0.171) and skewness of (-0.80).

4.6 Correlation Analysis.

The Pearson product correlation measures the degree of association between variables including; the strength and direction. The correlation coefficients range +1 to -1. Stronger correlation between independent variables may lead to multi-collinearity problems, which may interfere with regression model ability to predict the dependent variables from independent variables. Correlation coefficient score r ±0.8 indicates multi-collinearity.

4.6.1 Pearson product-moment correlation Board Structure

Table 4.4 Pearson Product-Moment Correlation Board Structure

Scale	1	2	3
Board size	1		
Number of Meetings	-.007	1	
Independent Directors	-.342	.176	1

Source: Author 2021

Table 4.4 presents the board structure correlation coefficients. The results show (r =-0.07) negative correlation between audit committee meetings and board size. The results further indicate (r =-0.34) negative correlation between board size and board independence. Finally, the results show (r= 0.17) positive correlation between audit committee meetings and the board independence. The par –wise correlations results among the independent variables suggests the independent variables were not highly correlated hence multi-collinearity was not challenge in the study.

4.6.2 Pearson Product-Moment Correlation Firm Characteristics.

Table 4.5 Pearson Product-Moment Correlation Firm Characteristics

Scale	1	2	3
Firm Age	1		
Firm Size	-.324	1	
Liquidity	-.060	.032	1

Source: Author, 2021

Table 4.5 presents the firm characteristics Pearson Correlation Coefficients. The results indicate (r =- 0.32) negative correlation between age since incorporation and the firm size. In addition, the results indicate (r= -.06) negative correlations between age since incorporation and liquidity. Further the results show low but positive correlation (r = 0.032) between firm size and liquidity. The result suggests no evidence of strong correlation among the moderating variables hence the problem of multi collinearity did not exist.

4.6.3 Pearson Product-Moment Correlation Board Structure and Earnings Management.

Table 4.6 Pearson Product-Moment Correlation Between Board Structure and Earnings Management

Scale	1	2	3	4
Board Size	1			
Number of AC meetings	-.007	1		
Board Independence	-.342	.176	1	
Earnings Management	-.018	-.172	-.120	1

Source: Author, 2021

Table 4.6 presents Pearson correlation results between board structure variables and discretionary accruals. The results reveal negative correlation between discretionary accruals and all board structure variables. Discretionary accruals and board size shows negative correlation (r=-0.018). The number of audit committee meetings as proxy for audit committee diligence shows negative correlation (r=-0172). The correlation with percentage of independent directors was low and negative (r=-0.12). There was no evidence of strong correlation among the variables.

4.6.4 Pearson Product-Moment Correlation Board Structure and Firm Characteristics.

Table 4.7 Pearson Product-Moment Correlations Board Structure and Firm Characteristics

Scale	1	2	3	4	5	6
Board Size	1					
AC meetings	-.007	1				
Independence	-342	.176	1			
Firm Age	-265	.360	.249	1		
Firm Size	.284	-.226	-.159	-.324	1	
Liquidity	.157	.000	-.107	-.060	.032	1

Source: Author, 2021

Table 4.7 presents results Pearson correlations on firm characteristics and the board structure. Board size had a negative correlation with age of a firm (r=-0.265). Board size had a negative correlation with size of the firm (r=-0.284) and a positive correlation with liquidity(r=0.157). Audit committee meetings indicate a positive correlation with age of the firm (r= 0.36) and negative correlation with size of the firm(r=-0.226). Positive correlation between firm age (r=0.249) and board independence and negative correlation with size of the firm (r=-0. 159). The par wise correlations among the firm characteristics and board structure variables was not strong to causes multi collinearity problems.

4.6.5 Pearson Product-Moment Correlation Audit Opinion and Firm Characteristics

Table 4.8 Pearson Product-Moment Correlation between Firm Characteristics and Audit Opinion

Scale	1	2	3	4
Firm Age	1			
Firm Size	-.324	1		
Liquidity	-.060	.032	1	
Audit Opinion	-.365	.434	-.062	1

Source : Author, 2021

Table 4.8 presents correlation results between the audit opinion and firm characteristics variables. The result reveal negative correlation between audit opinion and age of the firm (r=-0365). In addition, audit opinion had a positive correlation with size of the firm (r=0.434). Further, the results show negative correlation between audit opinion and firm liquidity (r= -0.062). The pair –wise correlations among the explanatory variables were relatively low suggesting the multi-collinearity problem did not exist.

4.7 Diagnostics Test Results

Diagnostic tests were performed to test the aptness of the model and compliance to specific assumptions of multinomial logistic regression model. To ensure explanatory variables were not highly correlated Multi-collinearity test was used. To check the fit of the model, goodness test model was used. Other tests included the model accuracy prediction tests using the classification matrices. Post estimation Hausman (1978) test was used to test for independent irrelevant alternative condition. These diagnostic statistical tests were conducted to check whether the model was suitable for the data. In addition, the diagnostic tests were used to check that the results obtained from multinomial regression model was valid.

4.7.1 Collinearity Statistics

Multi-collinearity is a statistical problem that occurs when explanatory variables are sign if correlated. This complicate the measurement of individual contribution the explanatory variables.

Table 4.9 Collinearity Statistics

Model	VIF
Board size	1.280
Audit Committee meetings	1.207
Independent directors	1.192
Firm Age	1.318
Firm size Log-TA	1.200
Liquidity	1.029

a. Dependent Variable: Audit Opinion Source: Author ,2021

Table 4.9 presents the collinearity statistics, whereby as a rule of thumb, a tolerance of 0.1 or less is a cause of concern, this is equivalent to VIF of 10 or more. The results show that for all the explanatory variables had very low VIF of below 2. This means that multi-collinearity was not a concern based on the results. The justification of using this test was to ensure that the results obtained from this model were consisted. This aided in determining the contribution made by each explanatory variable.

4.7.2 Overall Test of the Relationship

Table 4.10 Model Fitting Information

	Chi-Square	Df	Sig
	61.434 9	9	.000

Source: Author, 2021

Table 4.10 presents the statistic results of model fitting information. The chi –square statistic assessed the overall effectiveness of the multinomial regression model. A likelihood ratio test chi square compares full model with null model. The results reveal Chi- square value (61.434) significant based on values $p<0.05$). The null hypothesis was thus rejected. This suggest that changes in the response variable could be explained the changes in board structure. The justification of using this test proves overall fit of the full model when compared with null model.

4.7.3 Strength of Multinomial Regression Relationship

To check the fit of the model, the goodness was employed with various categories of outcomes. The null hypothesis stated that model fit was good against the alternative model. The diagnostic test using two metrics including; the Pearson and deviance chi- square tests.

Table 4.11 Goodness of Fit

	Chi-Square	Df	Sig.
Pearson	383.479	351	.112
Deviance	273.559	351	.999

Source: Author, 2021

Table 4.11 presents Pearsons and deviance chi- square tests results. The results reveal Pearson chi-square value of (383.479) with P -values of (0.112) not significant (p value > 0.05). This means that fit of the model was good. Further the deviance chi-square results show a value of (273.55) similarly not significant (p value > 0.05). This further proves that the model fit was good. This test was justified as it aided to prove that the model was reliable in testing the data in order to draw conclusions and make predictions.

4.7.4 Predictive Accuracy Test

Table 4.12 Predictive Accuracy Classification Statistics

					Predicted
Observed	0	1	2	3	Percent Correct
Unqualified	32	57	0	0	36.0%
Qualified	15	163	0	2	90.6%
Adverse	0	2	0	0	0.0%
Disclaimer	0	7	0	0	0.0%
Overall Percentage	16.9%	82.4%	0.0%	0.7%	70.1%

Source: Author, 2021

Table 4.12 presents the results of predictive accuracy using classification statistics. The classification statistics are used to state which observed group was best predicted by the model used. From the results the overall predication for the model was 70.1% which is significant. The results further reveal that qualified opinion was the group that was best predicted by the model with prediction accuracy of 90% while followed by unqualified audit opinion with prediction accuracy of 36.0 %. The results reveal that the model could not accurately predict adverse and disclaimer audit opinion. The overall prediction accuracy rate of 70.1% proves that the model was useful, this justifies the use of the model.

4.7.5 Hausman Specification Test

The Hausman specification test was used to check independent irrelevant alternatives condition.

Table 4.13 Hausman Specification Test Results

Coefficients	(b)	(B)	(b-B)	
	Full model	Model2	Difference	S.E.
Board size	-.6829234	-.2932135	-.3897099	.
Committee meetings	.7756879	1.283841	-.5081527	.
Board independence	-9.532037	-26.05403	16.522	.

Test: Ho: difference in coefficients not systematic Prob>chi2 = 0.1677

The Hausman specification test results in table (4.13) shows probability chi-square value = (0.16) significant as the (p > 0.05). Hence, null hypothesis is not rejected. This means that the multinomial logit model did not violate the independent irrelevant alternatives condition. This mean the assumption that deletion of a response category in this case deletion of qualified opinion (2) from the full model did not influence the chance of the remaining outcomes. Excluding one outcome from the model was not expected to affect the relative risk of the remaining outcomes. The choice of Hausman specification test was justified as it proved multinomial regression model outcomes were unrelated and not substitutes to a condition necessary for the choice of this model.

4.8 Chapter Summary

The chapter presented descriptive statistics and Pearson correlation among the research variables. The descriptive statistics on the audit opinion reveal that majority of commercial state owned enterprises received modified opinion accounting for 64.7% of all the opinions issued by the auditor general of Kenya. Only 32% of firms received unmodified opinions. 2.5% of commercial SOEs got adverse opinions while 0.7 % of the firms receiving a disclaimer opinion. With majority of the commercial state owned enterprises receiving modifications, brings to doubt the effectiveness of SOEs boards to ensure reporting quality presented by management. The results also indicate that the SOEs boards have failed in governance roles of supervising management to ensure only quality of financial information presented by management.

Descriptive statistics on board structure the independent variable in this study reveal that the average size of the boards in state owned enterprises in Kenya had mean of (10.2) members with standard deviation (2.124). The board sizes result in SOEs in Kenya are larger in size than set out in guidelines by Mwongozo code governance for state corporations. This means that commercial state owned enterprises in Kenya have not complied guidelines set by the Mwongozo code sets an optimal board size of 7-9 members. The number of audit committee meetings reveal mean of (3.39) meetings with standard deviation of (1.8). This also is below the minimum standard set by Mwongozo code of at least four (4) meetings per year. Low number of committee meetings indicates lack of diligence in the committee in their oversight roles which raises concern on the effectiveness of this critical subcommittee.

The results on board independence indicate a mean of (42.46%) with standard deviation of standard deviation of (19%) showing disparity among the firms. The Mwongozo guide provides for the boards to be effective at least (30%) of the boards should be independent. The results show that most state owned enterprises had met the minimum requirement of board independence.

Based on the results, clearly most state owned enterprises had not adhered to the requirements in Mwongozo code for state corporations on matters relating to board structure. The clear violation of the basic requirements of the code of governance set by the state to ensure good governance points out the lack of consequences for those that violated the code of governance. This study was in agreement with study by Matsiliza (2017) that established a significant improvement in corporate governance in south Africa SOEs as a number of entities had implemented recommendations in governance codes of corporate governance in both Muswati II and III codes including practicing sustainable business practices. However, notable challenges were noted in the board performance. Simpson (2014) examined boards and governance in State owned enterprises in Ghana concluded that the SOEs had made significant improvement in corporate governance in Ghana. However, dismal performance was noted in the area of board performance evaluation, lack of balance in the board independence and political independence.

The results on correlational analysis between audit opinion and board structure reveal negative correlation between board size and audit opinion that was statistically significant. Audit committee activity results show significant positive correlation between board structure and audit opinion. This relationship is in agreement with agency theoretical framework that predicted that through board structure audit opinion could be influenced. In addition, lack of strong correlation among the board structure variables rules out that multicollinearity problems in this study.

The results also reveal negative correlation between earnings manipulation and board structure variables. The results show significant negative correlation between audit committee activity and earnings manipulations. This relationship was also in agreement with theoretical framework based on the agency theory that predicted that through board structure, earnings management problems could be constrained. The relationship in this case was not strong with all the coefficients being below 40% hence not significant thus ruling out multi collinearity problem. The relationship with `audit committee activity where (r=0.172) was significant. The results show correlation between earnings management and firm characteristics variables. The relationship with liquidity statistically being statistically significant (r=0.242). Based on collinearity statistics the VIF values reveal that the independent variables were not highly correlated thus ruling out multicollinearity problem. This ensured that regression results were valid.

To test the accuracy of the model in predicting the outcomes diagnostic tests were conducted. Based on the goodness of test results both the Pearson and chi-square results reveal the model had good fit meaning the model was good for the data. In addition, the classification statistics results reveal that model had overall (70.1%) accuracy rate to predict the response outcomes. This means the model could be relied upon to make predictions about the response outcome when using the data. Collinearity results ruled out multicollinearity problems, thus indicating that the explanatory variables could correctly be used to explain the response outcomes.

CHAPTER FIVE: HYPOTHESIS TESTING AND DISCUSSION OF THE FINDINGS.

5.1 Introduction

This chapter presents the results for the four null hypothesis examined and their interpretations. The first hypothesis on board structure, and the audit opinion was not significant in commercial SOEs in Kenya. The second hypothesis demonstrates that the mediating effect of earning's management on board structure and audit opinion was not significant. The third hypothesis indicating the moderating effect of firm characteristics on board structures and audit opinion was not significant. The fourth hypothesis indicated the joint effect of board structure, earning's management and firm characteristic on the audit opinion was not significant.

5.2 Relationship between Board Structure and Audit opinion

The objective of this study was to examine the relationship between the board structure and audit opinion in the state-owned commercial enterprises in Kenya. The audit opinion was categorized into four categories; unqualified opinion with a score of zero (0), qualified opinion with a score of one (1), adverse opinion with a score of two (2) and disclaimer opinions with a score of three (3). The board's structure indicators were the size of the board, percentage of independent directors in the board and the number of audit committee meeting to capture audit committee activity. The hypothesis was:

H_{01}: Board structure has no significant relationship with the audit opinion in commercial SOEs Kenya. This resulting equation is:

$(AO) = \alpha + \beta1\ (BDSize)\ \beta2\ (ACmeetings + \beta3\ (PerIND\ ) + \varepsilon$ ………..Equation 2

Table 5.1 Table Model Fitting Information on Board Structure and Audit Opinion

	Chi-Square	Df	Sig.
Intercept Only			
Final	55.500	9	.000

Table 5.1 presents the model fitting information on the regression of board structure on audit opinion. The data shows the final model had chi- square value of (55.5) that was significant based on (p values < 0.005). This means that the final model with predictor variables was better in predicting the outcome variable when compared with intercept only model. This means that the model with board structure variables in overall was better in predicting the audit opinion as an outcome variable.

Table 5.2 Likelihood Ratios Board Structure and Audit Opinion.

	Chi-Square	Sig.
Intercept	27.272	.000
Board Size	7.185	.066
AC meetings	41.460	.000
Board Independence	13.352	.004

Source: Author, 2021

Table 5.2 presents multinomial logistic regression results of board structure on audit opinion. The likelihood ratio tests result show that board structure variables including; number of audit committee meetings and board independence separately significantly contributed to overall effect on audit opinion. The number of audit committee meetings, percentage of independent directors' results shows p -values of ($p=0.000$, $p= 0.004$) hence significant ($p< 0.05$), suggesting that individually board structure variables significantly contributed to the prediction of the audit opinion. However, the board size results based on p –values ($p > 0.05$) was not significant, hence did contribute significantly to the overall model.

Table 5.3 Regression Results, Board Structure and Audit Opinion

Audit Opinion	Variable	B	Sig.	Exp (B)
Unqualified	Intercept	11.622	.012	
	Board size	-.671	.027	.511
	Number of AC meetings	.770	0.007	2.159
	Board Independence	-9.360	0.002	8.613
Qualified	Intercept	11.622	.001	
	Board size	-.671	.015	.482
	Number of AC meetings	.770	.292	1.339
	Board Independence	-9.360	.002	9.99
Adverse	Intercept	8.741	.224	
	Board Size	-.648	.206	.523
	Number of AC meetings	.133	.801	1.142
	Board Independence	-6.527	.182	.001

a. The reference category 3 is disclaimer opinion. Source: Author, 2021

Table 5.3 presents parameter estimates of multinomial logistic regression results of board structure on audit opinion. The coefficients predict the odds of receiving the unqualified opinion (0), qualified opinion (1) and adverse opinion (2) when compared disclaimer opinion (3) as the reference category. To predict the odds of receiving unqualified opinion (0) when the disclaimer opinion as the reference category. The results show board size had a negative coefficient beta (β -0.671) significant based on p- values (p< 0.05) and positive exponentiated beta less than one Exp (β) 0.511). The results mean that with unit increase in board size decreased the odds of receiving unqualified opinion decrease by a ratio of (0.511) when compared with the disclaimer opinion as the reference category.

The result on the effect committee meetings indicating a positive coefficient beta (β 0.770) statistically significant p-value < 0.05 and exponentiated beta greater than one (1) Exp (β 2.159). The results mean that with unit increase in the number of committee meetings increased the odds of receiving unqualified opinion by a factor of (2.159) when compared to disclaimer opinion as the reference category.

The results on effect of independent directors show a negative coefficient beta (β-9.360) significant based on p values (p< 0.05) and positive exponentiated coefficient greater than one (Expβ of 8.613). This result meaning with unit increase in percentage of independent directors, the odds of receiving unqualified opinion increased by a factor of (8.613) when compared with disclaimer opinion as reference category.

The results on the odds of receiving a qualified opinion when compared with disclaimer opinion as reference category are also presented in (see table 5.3). The results on effect of board size show negative coefficient beta (β-0.671) significant based on p -values ($p < 0.05$) with negative exponentiated coefficient less than one (1) Exp (β) (1.339). This means unit increase in board size increased the odds of receiving a qualified opinion by a factor of (1.339) when compared with the disclaimer opinion as the reference category.

The results on the effect number of audit committee meetings as proxy for board diligence reveal a positive beta coefficient (β 0.770) not statistically significant p -values ($p > 0.05$) and a positive exponentiated Expo (β) 9.99). Therefore, with unit increase in the number of audit committee meetings the odds of receiving a qualified opinion increased by factor of (9.99) when compared with disclaimer opinions as the reference category.

The results on the effect of percentage of the independent show a negative coefficient (β-9.211) statistically significant p- values < 0.05 with a positive exponentiated coefficients less one Exp(β) (0.482). This means with a unit increase in percentage of independent directors the likelihood of receiving qualified decreases by factor (0.482) when compared with the disclaimer opinion as the reference category.

The results on the odds of receiving adverse opinion when compared with disclaimer opinion as reference category are also presented in table 5.3. The results on effect of board size show a negative coefficient beta (β-0.648) not statically significant with p-values ($p > 0.05$) and exponentiated beta factor of less than Exp (β 0.523). This means that with unit increase in board size the odds of receiving adverse opinion reduced by a factor of (0.523) also not statistically significant.

The results on effect of number of audit committee meetings as proxy for board diligence had a negative coefficient (β 0.133) also not statistically significant with p- values ($p>0.05$) and exponentiated beta factor less than one (Exp β 0.001). This means that unit increase in the number of audit committee meetings did not significantly affect the odds of receiving adverse opinion when compared with disclaimer opinion as reference category.

The results on the effect of percentage of independent directors indicate a negative coefficient (β -6.527) also not statistically significant with (p values > 0.05) and exponentiated coefficients less than one Expo (β .001). The results reveal unit increase in independent directors did not significantly have an effect on the odds of receiving adverse opinion when compared with disclaimer opinion as reference category.

In conclusion the results model summary in table (5.1) show that board structure variables including; number of audit committee meetings and percentage of independent directors' individually had a significant overall effect predicting the audit opinion. In addition, the results on table 5.2 the likelihood ratio tests result shows that board structure variables individually had a significant effect on the explanatory variable. Hence, board structure variables predicted both unqualified audit opinion and qualified audit opinion when compared with the disclaimer opinion as reference category. Further, the parameter estimates in table 5.2 indicate that various factors of boards structure had statistically significant effect of predicting the odds of receiving unqualified opinion, qualified opinion and adverse opinion when compared with disclaimers opinion as reference category. The hypothesis that the relationship between board structure, and the audit opinion was not significant in commercial SOEs in Kenya was therefore rejected.

5.3 The Intervening Effect of Earnings Management on the Relationship between Board Structure and Audit Opinion.

The second objective was to examine the intervening effect of earnings management on the relationship between board structure and audit opinion. The proxy for earnings management was discretionary accruals. The study hypothesizing no significant mediating effect of earnings management.

H_{02}: Earnings management has no significant intervening effect on the relationship between board structure and audit opinion in commercial state owned enterprises in Kenya.

To test for the mediating effect of earnings management the following four equations were developed based on Baron and Kenny (1986) four steps mediating effect.

Step 1: Regress Board Structure on Audit Opinion

$AO = \alpha + \beta 1\ BDsize + \beta 2 ACmeetings + \beta 3\ PerIND + \varepsilon$……………………Equation 3

Regress AO on BS variables to test βn is significant.

Based on the results in table 5.1 board structure variables were statistically significant to predict the audit opinion.

Step 2: Regress Earnings Management on Board Structure

$EM = \alpha + \beta 1\ BS + \varepsilon$……………. Equation 4

Regress EM on BS to prove β1 is significant.

Table 5.4 Regression Results of Earnings Management on Board Structure

Variable	Unstandardized	Standardized	Sig.
(Constant)	-.058	.183	.294
Board Size	.012	.082	.007
Number of meetings	.006	.073	.202
Board Independence	.050	.183	.285

a. Dependent Variable: Discretionary Accruals Source: Author, 2021

Table 5.4 show regression results of earning's management on board structure variables. The results show that board size had a positive beta coefficient (β 0.012) statistically significant as, (p-value 007, is < 0.05). The results for the number of audit committee meetings show positive coefficient (β 0.006) not statistically significant with (p-values 0.202 >0.05). The percentage of independent directors show a positive beta coefficient (β 0.285) for percentage of independent directors but not statistically significant as (p- values 0.285, is >0.05).

Step 3: Regress Audit Opinion on Earnings management

Opinion (AO) = $\alpha + \beta 2$ Earnings Management (EM) $+\varepsilon$……………………Equation 5

Regress to test β2 is significant.

Table 5.5 Likelihood Ratios, Earnings management and Audit Opinion.

Audit Opinion	B	Sig	Exp(B
Unqualified	1.607	.391	4.986
Qualified	2.984	.112	19.771
Adverse	1.588	.663	.204

a. The reference category is: 3. Disclaimer Opinion Source : Author, 2021

Table 5.5 show multinomial logistic regression outputs of earning's management on audit opinion. The results reveal that earning's management had a positive effect on the likelihood of a receiving unqualified opinion when compared with the disclaimer opinion as the reference category. With β 1.607, Exp β 4.986 the results were not statistically significant with (p values of 0.392>0.05). Similarly, earning's management had a positive effect on the likelihood of receiving the qualified opinion when compared with the disclaimer opinion as the reference category. The results show (β 2.984, Exp β 19.771) not statistically significant with (p values of 0.112>0.05). The p values were not statistically significant; unqualified opinion (p=0.391) qualified opinion (p=0.112) and (p= 0.663) for an adverse opinion, all the p- values (p>0.05). This means that discretionary accruals did not predict changes in the audit opinion of commercial SOEs in Kenya.

Step 4: Regress Board Structure on Audit opinion and Earnings Management

AO = α + β1BDsize + β2ACmeetings+ β3 PerIND β4 EM + ε. ……. Equation 6

Regress to test β2 is significant and β1 is smaller.

Table 5.6 Parameter Estimates, Board Structure, Audit Opinion and Earnings Management

Audit Opinion	Variable	Beta	Sig	Exp(B)
Unqualified	Intercept	10.417	.030	.000
	Board Independence	-8.725	.006	.578
	Board Size	-.548	.088	2.309
	Number AC Meetings	.837	.012	.022
	Discretionary Accruals	-3.834	.092	.000
	Board Independence	-8.645	.005	.539
	Board Size	-.618	.051	1.489
	Number of AC Meetings	.398	.225	.026
	Discretionary Accruals	-3.639	.094	.000
Adverse	Intercept	7.682	.454	
	Board Independence	-5.229	.471	.005
	Board Size	-.567	.453	.567
	Number of AC Meetings	-.360	.673	.697
	Discretionary Accruals	.808	.861	

The reference category is: 3 Disclaimer Opinion Source: Author, 2021

Table 5.6 presents multinomial logistic regression results on the intervening effect of earnings management on the relationship between board structure and audit opinion. The results show negative effect of discretionary accruals on the likelihood of receiving unqualified opinion when compared disclaimer as the reference category as (β-0.834, Exp β) but not statistically significant as (p value of 0.092>0.05). The results reveal negative effect of discretionary effect on the odds of receiving qualified opinion as (β -3.639, Exp β0.026) but also not statistically significant (p value of 0.094>0.05). The results further show negative effect of discretionary accruals on the odds to receive adverse opinion when compared with disclaimer opinion as reference category as (β -0.808, Exp β0.000) although results were not statistically significant (p value of 0.861>0.05).

Based on these results the null hypothesis is accepted; that Earnings management had no significant intervening effect on the relationship between board structure and audit opinion in commercial state owned enterprises in Kenya failed to be rejected.

5.4 The Moderating Effect of Firm Characteristics on the Relationship between Board Structure and Audit Opinion

Moderating effect of firm characteristics on the relationship between board structure and audit opinion is based on Baron and Kenny (1986) moderator effect.

$AO = \alpha + \beta 1\ BS + \beta 2\ FC + \beta 3\ (BS * FC) + \varepsilon$…………………………………. Equation 7

Regress to prove $\beta 3$ is significant as proof of moderating.

5.4.1 Moderating Effect of Firm Characteristics on the Relationship between Number of Audit Committee Meetings and Audit Opinion.

Table 5.7 Model Fitting Information, Firm Characteristics, AC meetings and Opinion

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	407.633			
Final	372.350	58.151	9	0.000

Source: Author, 2021

Table 5.7 presents the model fitting information after testing the moderating effect of firm characteristics on the relationship between firm number of audit committee meetings and audit opinion. The results for the final model indicate chi -square value of (58.151) statistically significant with (p value < 0.05). This means that the final model with explanatory variables was better in predicting the outcome variable better than intercept only model. This suggesting that the firm characteristics variables moderated on the relationship between audit committee meetings and audit opinion.

Table 5.8 Likelihood Ratio Results, Firm Characteristics, AC meetings and Audit Opinion

Model	-2 Log Likelihood of Reduced Model	Chi-Square	Df	Sig.
Intercept	382.977	42.118	3	.000
AC Meetings _Firm Size	350.047	9.188	3	.027
AC Meetings_ Firm Age	410.290	69.431	3	.000
AC Meetings_ Liquidity	344.995	4.136	3	.247

Source: Author, 2021

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

Table 5.8 presents the likelihood ratio tests on the effect of number of audit committee meetings on audit opinion after moderation for firm characteristics variable firm size, firm age and liquidity. The results indicate that the interaction variable of number of audit committee meetings and firm age had chi –square value of (9.188) with p -value of ($p<0.05$) indicating that the results were significant. The results mean that the individual contribution of the interaction variable was significant meaning that firm age moderated on the relationship between number of audit committee meetings and audit opinion.

The results for the interaction variable of number of audit committee meetings and firm size show chi- square value of (69.431) and (p -value < 0.05) statistically significant. This mean that the contribution of the interaction variable after introducing firm size as an interaction variable was significant. This further, suggesting that firm size significantly moderated on relationship between number of audit committee meetings and audit opinion.

5.4.2 Moderating Effect of Firm Characteristics on the Relationship Between Board Size and Audit Opinion.

Table 5.9 Model Fitting Information, Firm Characteristics, Board Size and Audit Opinion

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	430.500			
Final	372.350	58.151	9	.000

Table 5.9 presents the results of model fitting information after testing the moderating effect of firm characteristics on relationship between board size and audit Opinion. The results show that the final model had chi- square value of (58.151) with p –value ($p < 0.05$) statistically significant. This suggest that the final model was better in predicting the outcome variable when compared with intercept only variable. The results indicate that firm characteristics had significant moderating effect on the relationship between board size and audit opinion.

Table 5.10 Likelihood Ratio Results, Firm Characteristics, Board Size and Audit Opinion

Model	-2 Log Likelihood of Reduced Model	Chi-Square	Df	Sig.
Intercept	383.774	11.424	3	.010
Board Size _Liquidity	377.899	5.549	3	.136
Board Size _Firm Age	411.157	38.808	3	.000
Board Size _Firm Size	389.020	16.670	3	.001

Source: Author, 2021

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

Table 5.10 presents the likelihood ratio test results on the moderating effect of firm characteristics on the relationship between board size and audit opinion. The results indicate the contribution of each interaction variable to the model. The results on the effect of the interaction variable board size and liquidity indicate chi –square value of (11.424) but not statistically significant p value

> 0.05). This means that the interaction variable did not have significant contribution to the model.

This suggesting that liquidity did not significantly moderate on the relationship between board size and audit opinion.

The results on the interaction variable board size and firm age indicate chi -square value of (38.808) statistically significant (p -value < 0.05). This mean that the contribution of the interaction variable was significant. The results therefore suggest the firm age as firm characteristic variable as moderating was significant.

The results for the board size and firm size as interaction variable show a chi- square value of (16.67) p- value of (p< 0.05) hence significant. The result mean that the individual contribution of the interaction variable to the model was significant. This mean that the moderation effect of firm size as a firm characteristic on the relationship between board size and audit opinion was significant in state owned enterprises in Kenya.

5.4.2 Moderating Effect of Firm Characteristics on the Relationship Between Board Independence and Audit Opinion.

Table 5.11 Model fitting Information, Firm Characteristics, Board Independence and Audit Opinion

	-2 Log Likelihood	Chi-Square	Df	Sig.
Intercept Only	407.633			
Final	248.497	159.136	9	.000

Source: Author, 2021

Table 5.11 presents the model fitting information on the moderating effect of firm characteristics on the relationship between board independence and audit opinion. The results indicate final model had chi -squire value of (159.136) and p- value (p< 0.05) that was statistically significant. This means in overall the final model with explanatory variables was more effective in predicting the audit opinion. This mean that firm characteristics had moderating effect on the relationship between board independence and audit opinion.

Table 5.12 Likelihood Ratio Results, Firm Characteristics, Board Independence and Audit Opinion.

Effect	-2 Log Likelihood of Reduced Model	Chi-Square	Df	Sig.
Intercept	332.791	84.294	3	.000
Board Independence_ Firm Age	357.587	109.090	3	.000
Board Independence _liquidity	271.044	22.547	3	.000
Board Independence _Firm Size	333.231	84.734	3	.000

Source author, 2021

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0

Table 5.12 presents the likelihood ratio tests results on the contribution of each interaction variable after moderation of the firm characteristics on the relationship between board independence and audit opinion. The results for the interaction variable board independence and firm age indicate chi- square (109.090) value that is statistically significant with p -value ($p< 0.05$). This means the moderating effect firm age as firm characteristics on the relationship between board independence and audit opinion was significant.

The interaction variable board independence– liquidity show chi –squire value (22.547) with (p value > 0.05) that significant. This means the moderating effect liquidity on the relationship between board independence and audit opinion was significant. The results on the interaction variable board independence and firm size indicate chi -square value (84.734) with p- value (p<

0.05) statistically significant. This result suggests the moderating effect of firm size on the relationship between board independence and audit opinion.

5.5 The Joint Effect of Board Structure, Earnings Management and Firm Characteristics on Audit Opinion.

AO=α+β1 BS+β2 FC +β3 EM+ ε…………………………………………… Equation 8

Table 5.13 Model Fitting Information, Board Structure, Earnings Management and Firm Characteristics on Audit Opinion

Model	Chi-Square	Sig.
Final	150.470	.000

Source: Author, 2021

Table 5.13 presents multinomial logistic regression results on joint effect of Board structure, earnings management and firm characteristics on audit opinion. The results show, jointly the full model was statistically significant ($p < 0.05$) to predict the dependent variable. Based on the significant results. The null hypothesis that the joint effect of board structure, earnings management and firm characteristics on audit opinion in commercial state owned enterprises in Kenya was not significant was therefore rejected.

Table 5.14 Likelihood Ratio Test Results, Board Structure, Earnings Management and Firm Characteristics on Audit Opinion.

Effect	Chi-Square	Sig
Intercept	16.333	.001
Board Size	20.657	.000
AC Meetings	17.609	.001
Board Independence	25.900	.000
Firm Age	30.739	.000
Firm Size	59.726	.000
Liquidity	2.415	.491
Discretionary Accruals	0.729	.866

Table 5.14 presents the likelihood test ratio tests result that reveal, the individual contribution of each variable to the model. The firm characteristics variables of age and size were statistically significant significantly contributing to the overall outcome. However, Liquidity and discretionary accruals were not statically significant. This means that the contribution of liquidity and discretionary accrual to the overall model was not significant.

Table 5.15 Summary of Study Objectives, Hypothesis, Results and Interpretation

Objectives	Hypothesis	Results	Interpretation
Board structure and audit opinion in commercial state owned enterprises in Kenya	Board structure has no significant relationship with audit opinion in commercial state owned enterprises in Kenya.	Board structure variables significantly predicted odds of both unqualified opinion, and qualified opinion when compared with disclaimer opinion as the reference category.	Null hypothesis rejected
Mediation earnings management on board structure and audit.	Earnings management on mediation board structure and audit in SOEs in Kenya is not significant	Earnings management did not mediate on board structure and audit opinion in commercial SOEs in Kenya. The results not significant.	Failed to reject the null hypothesis.
Moderation effect of firm board structure and audit opinion.	The moderating effect of firm characteristics on board structure and audit opinion SOEs in Kenya is not significant.	Based on the results the overall effect of firm characteristics variables were statistically significant on the outcome variable.	The null hypothesis is therefore rejected.
the Joint effect of board structure, earnings management, firm characteristics on audit opinion in commercial SOEs in Kenya.	The joint effect of board structure, earnings management and firm characteristics on audit opinion in commercial SOEs is not significant.	Jointly the were significant.	The null hypothesis rejected

Source: Author, 2021

5.6 Discussion of the Findings

The study was to examine the board structure and audit opinion after moderating for firm characteristics and earnings manipulation. The findings are discussed as follows.

5.6.1 Relationship between Board Structure and Audit Opinion

The first objective was to examine the relationship between board structure and audit opinion. The study hypothesized that board structure had no significant relationship with the audit opinion in commercial SOEs n Kenya. A multinomial logistics regression was used to analyze the results.

Based on results in table 5.1 board structure variables had significant overall effect on the audit opinion. The null hypothesis was therefore rejected. In table 5.2 the board structure variables individually had significant effect on the explanatory variable hence able to predict the odds of receiving unqualified opinion and qualified opinion when compared with the disclaimer opinion as the reference category. Regression results on table 5.3 show board size had the negative significant effect on the odds of receiving unqualified opinion when compared with the disclaimer opinion as the reference category. Further, board size had a negative significant effect on the odds of receiving a qualified opinion when compared with the disclaimer opinion as the reference category. The finding that board size significantly affects the reporting quality, is in agreement with other studies, including; Yasser and Mamun (2016), Daghsni, Zouhayer and Mbarek (2016) who concluded that larger boards tended to perform better regarding the reporting quality.

Regression results on table 5.3 on effect of audit committee activity on audit opinion reveal, the number of audit committee meetings had the significant positive effect on the odds of a firm receiving the unqualified opinion when compared to disclaimer opinion as a reference category. Number of audit committee meetings had the significant positive effect on the odds of a firm receiving a qualified audit opinion when compared with the disclaimer opinion as the reference category. This means increased audit committee activity improved the diligence of the committee thus making it more effective as reflected in the audit opinion. The findings are concurring with other studies that concluded that audit committee activity improved quality of financial reporting (Iqbal, Zhang & Jebran, 2015; Latif & Abdullah, 2015)

The regression results on table 5.3 indicate board independence had significant negative effect on the odds of a firm receiving a qualified opinion when compared with the disclaimer opinion as the reference category. The results on board independences are consistent with other studies, including; Ishak and Yusof (2015) tested the effect of board independence on modified audit opinion and concluded that board independence influenced the odds of receiving a modified audit opinion. However, in contrast Khalil and Ozkan (2016) concluded that independent directors did not constrain earning's management in Egypt non-listed companies.

5.6.2 The Effect of Earnings Management on the Relationship between Board Structure and Audit Opinion

The second objective was to test the intervening effect of earning's management on the relationship between board structure and audit opinion. The study hypothesized that earnings management had no significant intervening effect on board structure and audit opinion in commercial state-owned enterprises in Kenya. Earning's management was operationalized using discretionary accruals. To test for the intervening effect Baron and Kenny (1986) four steps model were used. The regression results revealed that discretionary results had no significant intervening effect on the relationship between board structure and audit opinion. The hypothesis that the mediating effect of earning's management on the relationship between board structure and audit opinion was not significant was therefore failed to be rejected.

The findings are in agreement with Sutrisno (2019) that earning's management had no intervening effect CEO overconfidence and audit opinion in Indonesia. Tsipouridou and Spathis (2014) failed to link earning's management to audit opinion in Greece. However, Abolverdi et al. (2017) established a significant link between earnings manipulation and audit opinion. Moazedi et al. (2016) also reported association between earnings manipulations and audit opinion Tehran listed firms.

5.6.3 Effect of Firm Characteristics on the Relationship between Board Structure and Audit Opinion.

The objective was to determine the moderating effect of firm characteristics on the relationship between board structure and audit opinion. The study hypothesized that; firm characteristics had no significant moderating effect on board structure and audit opinion in commercial SOEs in Kenya.

Based on the model fitting information the firm characteristic's variables, including; age of a firm, liquidity and size showed significant moderating effect on the relationship between board structure and audit opinion. The moderating effect was significant to predict the odds of an entity receiving unqualified opinion, and qualified opinion when compared with the disclaimer opinion as the reference category. The study findings are in agreement with Habib (2013) who established that firm-specific characteristics influenced the propensity of a firm receiving modified audit opinion. Ali, Noor, and Khurshid (2015) concluded that firms with large assets were more likely to receive pressure from investors thus resorting to earning's management practices.

5.6.4 Joint Effect of Board Structure, Earnings Management and Audit Opinion in State Owned Entities

The fourth objective was to examine the joint effect of board structure, earning's management and firm characteristics on the audit opinion. The study hypothesized that the joint effect of board structure, earning's management and firm characteristic on audit opinion was not significant in commercial SOEs in Kenya. The results from the study reveal that, jointly, the board structure, firm characteristics and earning's managements were statistically significant with (p value < 0.05).

The results from table 5.13 show overall the final model with the joint variables. The results were significant in predicting outcome compared to intercept only model. These means that jointly board structure, earnings management and firm characteristics had significant overall effect on audit opinion. Consequently, the hypothesis that the joint effect of board structure, earnings management and firm characteristics on audit opinion was not significant in commercial state owned enterprises in Kenya was rejected.

These findings are in agreement with a number of studies that established a link between board structure, earnings management, firm characteristics variables, and audit opinion. Hsiao, Lin and Hsu (2010) established that earnings management significant financially distressed companies. The study further established that CEO duality led to unfavorable audit opinion. Hadrache (2015) established that both audit quality and qualified opinion constrained earnings management in French banks. In addition, results for bank size were significant indicating that larger banks resorted to earnings management. Salleh and Haat (2014) established that audit committee characteristics was significantly related to earnings management after revision of Malaysian code of corporate governance. Caramanis and Spathis (2006) established that firms' characteristics variables including; firm profit margins, total assets and firm liquidity measured using current ratio were significant determinants of audit qualifications in Athens.

CHAPTER SIX: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This study set out to examine the relationship between board structure and audit opinion after moderating for firm characteristics and intervening for earnings management in commercial state-owned enterprises in Kenya. These objectives were achieved by testing four hypotheses explored in this study. This chapter presents a summary of the findings after testing the hypothesis. The chapter further gives conclusions, recommendations and contribution of this study. The chapter concludes by identifying limitations for the study and areas for further research.

6.2 Summary of Findings

The first objective was to examine the relationship between board structure and audit opinion in commercial SOEs in Kenya. Regression results reveal that board structure variables, board independence, board size, and audit committee meetings had a significant effect in predicting the odds of a firm receiving unqualified and qualified opinion when compared with the disclaimer opinion as the reference category. The first hypothesis that the relationship between board structure, and the audit opinion was insignificant in commercial SOEs in Kenya was therefore rejected.

The second objective was to examine intervening effect of earning's management board structure and audit opinion in commercial state-owned enterprises in Kenya. The regression results reveal that discretionary accruals as proxy to earning's management had no significant effect on the relationship between board and audit opinion. The second hypothesis that the mediating effect of earnings management on board structure and audit opinion was not significant it was therefore failed to be rejected.

The third objective was to examine the moderating effect of firm characteristics on board structure and audit opinion in commercial SOEs in Kenya. The results reveal firm characteristic's variables; age since incorporation, liquidity and firm size had a significant moderating effect on board structure and audit opinion and could be useful in predicting the audit opinion. The third hypothesis indicating the moderating effect of firm characteristics on board structures was not significant was therefore rejected.

The fourth objective was to examine the jointly board structure, earnings management and firm characteristics on the audit opinion. The regression results from the study reveal that the overall joint effect was statistically significant ($p < 0.05$) to predict on audit opinion outcome. The fourth hypothesis that the joint effect of board structure, earning's management and firm characteristic on the audit opinion was not significant was therefore rejected.

6.3 Conclusion of the Study

The primary objective of this study was to examine board structure, earnings management, firm characteristics and audit opinion in commercial SOEs in Kenya. Results reveal worrying trend as majority of commercial state owned entities in Kenya received modified opinions; qualified opinion accounting for 64.7 % of the audit opinions, 0.7% of Commercial SOEs received adverse opinions and 2.5% disclaimer audit opinion. Only 32 % of commercial state owned enterprises in Kenya firms received unqualified opinion or clean reports. The high number of SOEs receiving modified opinions brings to doubt the effectiveness of governance mechanism in place for these entities. Higher number of modified audit opinions is an indicator of lack of accountability in these SOEs.

The results reveal that board size had a mean of (10.2) members with standard deviation of (2.124) based on descriptive statistics. This is higher than Mwongozo guidelines that provides for an optimal board size of 7-9 board members. This finding point out that SOEs boards in Kenya were bloated, and most SOEs had not complied with the requirements of Mwongozo code. Board independence indicated a mean of (42.6%) with standard deviation of (19%). These results mean that majority of SOEs boards had adhered to Mwongozo code requirement that at least thirty percent (30%) of directors should be independent. The number committee meetings reveal a mean of (3.39) with standard deviation of (1.884). This is lower than the minimum standard set by Mwongozo (2015) code of at least four meetings per annum implying that SOEs had not complied with Mwongozo code. The low level of committee meetings as reveal lack of thoroughness among the committee members. This means that audit committee did not diligently undertake their roles of oversight.

The first objective was to determine the relationship between board structure and audit opinion in commercial state owned enterprises in Kenya. Board structure variables including; board size, audit committee activity and board independence had significant ($p< 0.05$) overall effect in the model to predict the odds of receiving unqualified opinion and qualified opinion with disclaimer opinion as reference category. The first hypothesis that the relationship between board structure and audit opinion in commercial state owned enterprises in Kenya was not significant was therefore rejected.

Further, the results reveal individually boards size lowered the likelihood of an auditor issuing both unqualified and qualified opinion relative to disclaimer opinion increases. This suggest that unit increase in board size reduces the odds of receiving unqualified opinion by a factor of (0.511) when compared to disclaimer opinion as the reference category. But, increase in board size by a unit lowered the odds of receiving qualified opinion by a factor of (1.339). These findings agree Yasser and Mamun (2016) who established that larger boards tended to perform better regarding quality of financial reporting in Asia pacific countries. Ebaid (2011) established that large boards were more effective as responsibility of oversight was spread to many observers who may have had diverse skills and expertise thus ensuring better performance from the board of directors. However, the results contrast Khalil and Ozkan (2016) who concluded that increasing independent directors did not constrain earning's management in Egypt non-listed companies.

The results on audit committee meetings had indicate was positive and significant ($p < 0.05$). Suggesting unit increase in audit committee increased the odds of receiving unqualified opinion by a factor of (2.59) which was statistically significant when compared by disclaimer opinion as the reference factor. This means increased audit committee activity translated into a diligent committee that performed oversight duties effectively. This resulted to reporting quality hence the odds of independent auditor issuing a clean opinion. The results predicted that unit increase audit committee activity increased the odds of receiving qualified opinion by a factor of (9.99) although the results were not statistically significant. These findings agree with other studies that concluded audit committee diligence was effective in constraining earnings management and led to better audit opinion (Iqbal, Zhang & Jebran, 2015; Latif & Abdullah, 2015). However, the findings contradict, Habbash, Sindezingue and Salama (2013) that established no significant link between audit committee and earnings manipulation.

The results on independent directors were negative but significant ($p< 0.05$) predicting both unqualified and qualified opinion when compared to receive a disclaimer opinion. The unit increase in independent directors reduced the odds of receiving unqualified opinion by a factor of (8.613) and (0.482) for qualified opinion see table 5.3. This means unit increase in percentage of independent directors significantly lowered the odds of receiving both unqualified and qualified opinion based on p -values ($p< 0.05$) when compared with disclaimer opinion as reference category. These findings agreeing with Ishak and Yusof (2015) that board independence significantly influenced the probability of an entity receiving modified audit opinion. This finding contrasts other studies Khalil and Ozkan (2016) who determined that increasing independent directors did not constrain earnings management in Egypt.

The second objective was to test the intervening effect of earning's management on board structure and audit opinion. The study hypothesized that earnings management did not have significant intervening effect on board structure and audit opinion in commercial SOEs in Kenya. Earnings management was operationalized using discretionary accruals. To test for the intervening effect Baron and Kenny (1986) four steps were used when testing intervening effect of earnings management on board structure and audit opinion. The regression results were not statistically significant based the p- values ($p>0.05$). This means that discretionary accruals did not mediate on board structure and audit opinion in SOEs in Kenya. The second hypothesis that the mediating effect of earning's management board structure and audit opinion was not significant was therefore failed to be rejected. The findings concur with a number of studies (Sutrisno, 2019; Tsipouridou & Spathis,2014; Daghsni, Zouhayer & Mbarek, 2016).

The third objective examined the moderating effect of firm characteristics on board structure and audit opinion. The regression results show statistically significant overall effect on the model after moderating for age on board structure size and audit opinion based on p- values ($p < 0.05$). The regression results reveal that firm characteristic's variables; firm age, liquidity and size showed significant moderating effect on board structure and audit opinion. The moderating effect of firm characteristic's variable was significant to predict the likelihood to receive both unqualified opinion and qualified opinion when compared with the disclaimer opinion as the reference category. The overall study findings established that firm-specific characteristics influenced the propensity of receiving modified audit opinion. The third hypothesis on the moderating effect of firm characteristics on the relationship between board structures was not significant was therefore rejected. The study findings are in agreement with Habib (2013) and Ali, Noor, and Khurshid (2015) on influence of firm characteristic's variables on audit opinion.

The fourth objective jointly examined board structure, earning's management and firm characteristics on the audit opinion. The study hypothesized that the joint effect of board structure, earnings management and firm characteristics on audit opinion was not significant in commercial SOEs in Kenya. The results reveal that jointly the effect of board structure, firm characteristics and earnings managements on audit opinion results were significant ($p< 0.05$). The fourth hypothesis that the joint effect of board structure, earnings management and firm characteristic on the audit opinion was not significant was therefore rejected. These study findings are in agreement with other studies that established significant relationship between the variables (Hsiao, Lin & Hsu, 2010; Salleh & Haat, 2014; Caramanis & Spathis ,2006).

6.4 Contribution of this Study

This study has significantly contributed in development of literature on theory in corporate governance. The study used existing theories to formulate hypothesis and predict the relationship between the research variables. This study has made a contribution on how to operationalize and tests variables in public sector context hence a positive contribution towards methodology. The findings from this study will greatly benefit practitioners of corporate governance in public sector.

6.4.1 Contribution Towards Theory

This study reviewed contrasting theories, including the agency theory, stewardship theory, stakeholder theory. The diverse theoretical frameworks helped to understand the different relationships among the research variables. In addition, the diverse theoretical frameworks were used to formulate hypothesis and research questions in the public sector context thus advancing existing testing and advancement of these theories.

Secondly, the various theories advanced various positions on how boards should be structured to ensure effective governance and accountability. Agency theory the dominant theory providing guidance on how boards should be structured to solve the agency problems and information asymmetry. Stakeholder theories arguing for board structure that could guarantee interests of various stakeholders were protected. In addition, legal requirement for entities to protect the environment and ensure sustainable usage of resources was another reason stakeholder theory was thought to be relevant. Stewardship theory supporting the argument that boards that protected the steward in contrast to boards that aimed to control the steward. Review of all these theories revealed both have areas of strengths and criticisms thus proving that in practice, no particular theory was applicable in all circumstances. It means that the structure of boards in terms of size, board independence and board activity was based on the situational factors and legal requirement of each state-owned enterprise. The findings that the existing theories on corporate governance may be complimentary in contrast to be competing is an advancement on the developments on these theories.

The findings from this study provide additional empirical evidence to further test existing theories on corporate governance. Unlike other prior studies that only focused on companied listed at securities market this study specifically focused on data form the public sector context. The study findings provide unique information on both the state of quality of financial information and corporate governance in Kenya state owned entities. The information obtained will advance knowledge on the effectiveness of governance mechanisms in SOEs thus advancing the existing literature on the theories.

Different theories offered diverse predictions on possible relationships among the research variables. Based on the findings the relationship between the board structure and other research variables may have not been direct but indirect through mediating and moderating variables. The findings of both direct and moderating effect on the relationships will be useful in development existing theoretical literature. These will particularly be useful to scholars and academicians interested in the developments in relationships among the research variables.

6.4.2 Contribution Towards Research Methodology

This study contributed greatly towards the measurement and operationalization of research variables particularly in the public sector context. Board structure variables were operationalized using size of the board, number of audit committee meetings and board independence. Discretionary accruals were used as a proxy for earnings management. Firm characteristics variables were operationalized using liquidity, firm age and size of the firm. Audit opinion was operationalized using four ordered categories. The measurement and testing of these variables in public sector contributed toward research and methodology.

A number of techniques were employed in the attest the relationship between the research variables with inconclusive results. In order to draw conclusions a number of previous studies used logistic regression limiting to the binary categorical outcome. This study made use of multinomial logistic regression bringing out several outcomes instead of just two outcomes based on binary logistic regression commonly used in prior studies. In addition, this technique was flexible allowing the analysis of multiple outcomes.

This study specifically used secondary data that was obtained from annual reports of commercial state-owned enterprises. Secondary data that was used in this study had been verified by independent auditors hence more reliable. The use of secondary data brings out the subject of objectivity and helped to avoid bias associated with primary data. This study, therefore, advanced the positivism research philosophy beliefs on how to conduct research and the preferred research methodology.

6.4.3 Contribution Towards Corporate Governance SOEs

Findings from this study will add value to practitioners in the area of transparency and accountability in the public sector. SOEs in Kenya are mainly guided by Mwongozo (2015) code for state corporations and various legislations that gives direction on how these corporations should be controlled and directed. Conclusions from this study will prove useful to boards of various state-owned enterprises and those charged with directing and control in SOEs. The findings will be useful to the government for policy making. Other stakeholders including parliamentary committees; public account's committee and public investments committees that oversight these SOEs. Other interested groups include state advisory committee, line ministries and investors. Other key stakeholders will benefit from recommendations on the best practices on board performance leading to increased transparency and accountability.

The findings of this study could be useful to auditors in predicting the audit opinion. The findings that firm characteristics significantly moderated on board structure and audit opinion could help auditors to critically examine the firm characteristics, including liquidity with the aim of predicting financial troubles. These could help auditors to be more vigilant thus promote audit quality resulting to appropriate audit opinion. The conclusions from this study could be useful for those with interests in how SOEs are directed and controlled including; scholars and academicians. This study adds to the available literature, especially in public sector context where the empirical evidence was scanty. Specifically, the conclusion that board structure and audit opinion relationship may not be direct due to indirect effects firm specific characteristics will help scholars and academician for further research.

Conclusion from these studies could prove to be useful to international partners and entities interested in development of corporate governance in SOEs. OECD is one entity that has attempted to offer guidance in development corporate governance principles among the members' countries. The world bank group has also invested significantly on development and improvement of corporate governance through SOEs toolkit for corporate governance. It has also continuously collected data and findings on SOEs. These findings could provide knowledge about the performance of boards in SOEs in Kenya. This information could help guide their future direction and control structures in SOEs in Kenya.

6.5 Limitations of this Study

This study was limited in terms of context as the study used data only from commercial and manufacturing sector of state owned entities in Kenya an emerging economy. Consequently, this study did not address the comparative aspects of governance issues from other emerging and developed economies. Lack of data from other countries limited this study to establish if the results were consistent across the countries.

Secondly, there was limited literature, specifically in the public sector context. Lack of studies, specifically on the audit opinion and relationship between research variables in the public sector in Kenya's context made it difficult to do comparative analysis. Most of the available literature was based on studies using data, mainly from firm's listed security's market whose findings could not be generalized to public sector context. Moreover, due to strict guidelines from securities market corporate governance was more developed in private companies making it difficult to do a comparison with public sector.

Thirdly, this study faced limitation in measurement of some board structure variables, specifically on board's independence. Based on empirical literature board independent was estimated using the percentage of non-executive directors. Based only on information obtained from corporate governance reports it was challenging to determine if the directors classified as non-executive were truly independent of management in board decision making. The data from corporate governance reports did no provide sufficient information about the voting patterns in board meetings and activity to ascertain if members classified as non-executive were truly independent of management.

This study also faced limitation as the study did not provide information on the signaling effect of audit opinion. The study provided the results of audit opinion but did not provide additional information on the consequences of audit reports and reactions, especially from government, lenders and donors. Furthermore, the study did not provide sufficient information on the audit process, including audit methodology that will give reasonable assurance on quality.

6.6 Recommendations for Further Studies

This study specifically focused on the commercially state-owned enterprises. The choice of commercial SOEs was based on the assumption these entities met the criteria for motivation to engage in earning's management and agency problems. It will be important for future studies also cover other state-owned enterprises that are not categorized as commercial to establish if the findings hold. In addition, it will be important in future to undertake comparative studies with the private sector entities to establish the differences that manifest between private owned companies and state-owned enterprises.

Secondly, this study only used data from state owned entities in Kenya as an emerging economy. Future studies should consider undertaking comparative studies by using data from other emerging economies and developed economies. Different countries have adopted different codes of governance, legislations to ensure good governance, accountability and transparency. Comparative studies will determine how each country has fared, and this may help countries that have underperformed to take corrective measures.

Thirdly, the study used of secondary obtained from annual reports and governance reports. The benefit of using the secondary data was that the data had been audited and verified by the independent auditors. Future studies should consider using primary data to get insights from the personal and subjective positions on the reasoning by individual. This will also help obtain data from subjective position as advocated in qualitative research.

Regarding operationalization of variables, this study examined specific variables that were deemed of great interest and concern to the researcher. The choice of variables was therefore, not exhaustive. Future studies should consider examining other wide-range variables that were not factored in this study. There still exist various aspects of corporate governance not addressed in this study, including behavioral and gender aspects.

This study adopted a positivism research philosophy principle to undertake this study. Positivism beliefs guided in the formulation of hypothesis, methodology and analysis with the aim of establishing relationship between variables. It will be interesting to adopt a diverse research philosophy in future studies especially a qualitative research approach. This will help bring the salient strengths of the diverse research philosophies. This study specifically adopted longitudinal research approach covering the period 2007 to 2016. The process of collecting and analyzing longitudinal data was time-consuming and expensive. Future studies should consider doing a cross-sectional study to compare the results to save on cost and time.

This study specifically examined the audit opinion as an end product from the independent auditor. Future studies should consider evaluating the qualitative aspects of the audit process that guarantees quality reports. More emphasis should be given to the areas of; audit methodology, audit planning, audit evidence and reporting. Furthermore, future research should focus on other important aspects of audit opinion. The aspect of the consequences of audit opinion to ascertain the signaling effect of audit opinion to; investors, lenders, donors, government funding and even management retention should be considered in future studies.

REFERENCES

Abbott, L. J., Park, Y., & Parker, S. (2000). The effects of audit committee activity and independence on corporate fraud. *Managerial Finance, 26*(11), 55-68. Retrieved from https://doi.org/10.1108/03074350010766990

Abeysekera, I. (2013). A template for integrated reporting. *Journal of Intellectual Capital, 14*(2), 227-245.

Abolverdi, Z., & Kheradmand, A. (2017). A Survey of the Relationship between Earnings Management and Qualified Auditor Opinion in Tehran Stock Exchange. *International Journal of Economics and Financial Issues, 7*(2), 723-729.

Adiloglu, B., & Vuran, B. (2017). Identification of key performance indicators of auditor's reports: evidence from Borsa Istanbul. *Journal of Economics, Finance and Accounting, 3*, 256-261.

Ahmadi, M. R., Sedghiani, B. A., & Jamali, K. (2014). Economic consequences qualified audit opinions: Evidence from listed Companies in Tehran stock exchange. *Research Journal of Recent Sciences, 3*(10), 89-95.

Albanese, R., Dacin, M. T., & Harris, I. C. (1997). Agents as stewards. *Academy of Management Journal, 22*(3), 609-611.

Albright, S. C., Zappe, C. J., & Winston, W. L. (2011). *Data Analysis,Optimisation and Simulation Modelling.* Canada: South-Western, Cengage Learning.

Ali, U., Noor, M., Khurshid, M. K., & Mahmood, A. (2015). Impact of Firm Size on Earnings Management: A Study of Textile Sector of Pakistan. *European Journal of Business and Management*.

Almasarwah, A. (2015). *Earnings management and its relationship with internal control and corporate governance mechanisms in Jordanian industrial firms.* Loughborough University, Accounting Department. Leicestershire, UK: Unpublished PhD Thesis Loughborough University.

Baber, W. R., Gore, A. K., Rich, K. T., & Zhang, J. X. (2013). Accounting restatements governance and municipal debt financing. *ournal of Accounting & Economics, 56*(2), 212-227.

Ballesta, J. P., & Garcia-Meca, E. (2007). Audit qualifications and corporate governance in Spanish listed firms. *Managerial Auditing Journal, 20*, 725 - 738.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 1173-1182.

Bayaga, A. (2010). Multinomial logistic regression: usage and application in risk analysis. *Journal of applied quantitative methods, 5*(2), 288-297.

Beasley, M. S. (1996). An Empirical Analysis of the Relation between the Board of Director Composition and Financial Statement Fraud. *The Accounting Review, 71*(4), 442-465.

Berle, A. A., & Means, G. C. (1932). *The Modern Corporation and Private Property.* New York: Macmillan.

Brudney, V. (1985). Corporate governance, agency costs, and the rhetoric of contract. *Columbia Law Review, 85*(7), 1403-1444.

Budisantoso, T., Rahmawati, R., Bandi, B., & Probohudono, A. N. (2017). Audit opinion accuracy, corporate governance and downward auditor switching: A study of association of southeast asian nations economics community. *International Journal of Economics and Financial Issues, 7*(5), 530-540.

Cadbury, A. (1992). *Committee on the financial aspects of corporate governance.* London: Financial reporting council, London stock exchange.

Capalbo, F., Frino, A., Mollica, V., & Palumbo, R. (2014). Accrual-based earnings management in state owned companies: Implications for transnational accounting regulation. *Accounting, Auditing & Accountability Journal, 27*(6), 1026-1040.

Caramanis, C., & Spathis, C. (2006). Auditee and audit firm characteristics as determinants of audit qualifications. *Managerial Auditing Journal, 21*(9), 905-920.

Carcello, J. V., & Neal, T. L. (2000). Audit committee composition and auditor reporting. *The Accounting Review*, *75*(4), 453-467.

Carmichael, D. R. (2004). The PCAOB and the social responsibility of the auditor. *Accounting horizons, 18*(2), 127-133.

Chambers, N., Harvey, G., Mannion, R., Bond, J., & Marshall, J. (2013). Towards a framework for enhancing the performance of NHS boards: a synthesis of the evidence about board governance, board effectiveness and board development. *Health services and delivery research, 1*(6), 2050-4349.

Chan, K. H., Lin, K. Z., & Wang, R. R. (2012). Government ownership, accounting-based regulations, and the pursuit of favorable audit opinions: Evidence from China. *Auditing: A Journal of Practice & Theory, 31*(4), 47-64.

Chelogoi, S. K. (2017). Effect of corporate governance on firms listed at Nairobi securities market. *International Journal of Economics, Commerce and Management*, *5*(8), 641-654.

Congress of the United States. (2002). *Sarbanes-Oxley Act.*

Creswell, J. W. (2014). *Research design: qualitative quantitative and mixed approaches.* London: SAGE Publications, Inc.

Crotty, M. (1989). *The foundations of social research.* London: Sage.

Daghsni, O., Zouhayer, M., & Mbarek, K. B. (2016). Earnings Management And Board Characteristics: Evidence From French Listed Firms. *Account and Financial Management Journal, 1*(2), 91-110.

Davis, J., Frankforter,, S., Vollrath, D., & Hill, V. (2007). An empirical test of stewardship theory. *Journal of Business & Leadership: Research, Practice, and Teaching, 3*(1), 4-50.

De Andres, P., Azofra, V., & Lopez, F. (2005). Corporate boards in OECD countries: size, composition, functioning and effectiveness. *Corporate Governance, 13*(2), 197-210.

Debnath, p., & Roy, C. (n.d.). Do firm specific characteristics influence earnings management? Contemporary evidence from Indian Economy. *Asian Journal of research in business economics and management, 7*(6), 318-336.

Dechow, P. M., Hutton, A. P., Kim, J. H., & Sloan, R. G. (2012). Detecting earnings management: A new approach. *Journal of Accounting Research, 50*(2), 275-334.

Dechow, P., Sloan, R., & Sweeney, A. (1995). Detecting earnings management. *The Accounting Review, 70*(2), 193-225.

Deegan, C. (2004). *Financial Accounting Theory.* McGraw-Hill Australia: Pty Ltd.

Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management, 16*(1), 49-64.

Donaldson., L., & Davis, J. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Academy Of Management Review*, 66.

Doty, J. R. (2014). *The Role of Audit in Economic Growth.* Washington, D.C: PCAOB.

Easterby-Smith, M., Lowe, A., & Thorpe, R. (2002). *Management Research: An Introduction.* London: Sage Publications.

Ebaid, I. (2011). Corporate governance practices and auditor's client acceptance decision: empirical evidence from Egypt. *Corporate Governance: The international journal of business in society, 11*(2), 171-183.

El-habil, A. (2012). An application on multinomial logistic regression model. *Pakistan journal of statistical operational research, 8*(2), 271-291.

Elliott, J. A. (1982). Subject to" Audit Opinions and Abnormal Security Returns — Outcomes and ambiguities. *Journal of Accounting Research, 20*(2), 617-638.

Fagerland, M. W., Hosmer, D. W., & Bofin, A. M. (2008). Multinomial goodness-of-fit tests for logistic regression models. *Statistics in Medicine, 27*(21), 4238–4253.

Fakhfakh, M. (2014). Linguistic performance and legibility of auditors'reports with modified opinions An advanced investigation based on the ISAs on audit reports. *Asian Review of Accounting, 24*(1), 1321-7348.

Fama, E. F., & Jensen, M. C. (1983). Separation of Ownership and Control. *The Journal of Law and Economics, 2*(26), 301-325.

Farinha, J., & Viana, L. F. (2009). Board Structure and modified audit opinions: Evidence from the Portuguese Stock Exchange. *International Journal of Auditing, 13*, 237–258. doi:10.1111/j.1099-1123.2009.00394.x

Fauzi, F., & Locke, S. (2012). Board structure, ownership structure and firm performance: A study of New Zealand listed-firms. *Asian Academy of Management Journal of Accounting and Finance, 8*(2), 43–67.

Feng, N. C. (2014). Economic consequences of going concern audit opinions in nonprofit charitable organizations. *Journal of Governmental & Nonprofit Accounting, 3*, 20-34.

Field, A. P. (2009). *Discovering statistics using SPSS: and sex and drugs and rock n roll roll.* London: Sage.

Finegold, D., Benson, G. S., & Hecht, D. (2007). Corporate boards and company performance: review of research in light of recent reforms. *Corp. Govern.: Int. Rev, 15*(5), 865-878.

Finkelstein, S., & Boyd, B. K. (1998). How much does the CEO matter? The role of managerial discretion in the setting of CEO compensation. *Academy of Management Journal, 41*(2), 179-199.

Firth, M. (1978). Qualified audit reports: Their impact on investment decisions. *The Accounting Review, 53*(3), 642-650.

Fodio, M. I., Ibikunle, J., & Oba, V. C. (2013). Corporate governance mechanisms and reported earnings quality in listed Nigerian insurance firms. *International Journal of Finance and Accounting, 2*, 279-286.

Freeman, R. (1984). *Strategic Management: A Stakeholder Approach.* London: Pitman.

Gallopo, G. (2015). Stock market reaction to auditor opinions – Italian evidence. *Managerial Auditing Journal, 30*(6/7), 610-632.

Garcia-Torea, N., Fernandez-Feijoo, B., & Cuesta, M. d. (2016). Board of director's effectiveness and the stakeholder perspective of corporate governance: Do effective boards promote the interests of shareholders and stakeholders. *BRQ Business Research quartely, 19*(4), 246-260.

Garson, D. (2009). *Logistic Regression with SPSS.* North Carolina: North Carolina State University.

Gkliatis,, I. (2014). *An examination of board director's roles and the impact of the external environment and board characteristics.* Brunel University, Brunel Business School. Unpublished PhD Thesis.

Goeman, J. J., & Cessie, S. L. (2006). A Goodness-of-fit test for multinomial logistic regression. *Jstor, 62*(4), 980-985.

Guba, E. G., & Lincoln, Y. S. (1994). *Competitive paradigms in qualitative research.* London: sage.

Habbash, M., Sindezingue, C., & Salama, A. (2013). The effect of audit committee characteristics on earnings management: Evidence from the United Kingdom. *International Journal of Disclosure and Governance, 10*(1), 13-38.

Habib, A. (2013). A meta-analysis of the determinants of modified audit opinion decisions. *Managerial Auditing Journal, 28*(3), 184 - 216.

Hackenbrack, K., & Nelson, M. W. (1996). Auditors' incentives and their application of financial accounting standards. *The Accounting Review, 70*(1), 43 -59.

Hadriche, M. (2015). Auditor reputation, audit opinion, and earnings management: Evidence from French banking industry. *Journal of Modern Accounting and Auditing, 2*(7), 341-352. doi:10.17265/1548-6583/2015.07.002

Hausman, J. (1978). Specification tests in econometrics. *Econometrica, 46*(6), 1251-1271.

Hayes, R., Dassen, R., Schilder, A., & Wallage, P. (2005). *Principles of Auditing: An Introduction to International Standards of Auditing.* Harlow: Pearson Prentice Hal.

Hearly, P., & Wahlen, J. (1999). A review of the earnings management literature and it's implications for standard setting. *American Accounting Association Accounting Horizon, 13*(4), 365-383.

Hill, C. W., & Jones, T. M. (1992). Stakeholder-agency theory. *Journal of Management Studies, 29*(2), 131-154.

Hsiao, H. F., Lin, S. H., & Hsu, A. C. (2010). Earnings management, corporate governance, and auditor's opinions: a financial distress prediction model. *Investment Management and Financial Innovations, 7*(3), 29-46.

Hung, H. (1998). A typology of the theories of the roles of governing boards. *Corporate governance, 6*(2), 101-111.

ICAEW . (2005). *Agency theory and the role of audit.* London: The Institute of Chartered Accountants in England & Wales.

ICAEW :The Institute of Chartered Accountants in England & Wales. (2005). *Agency theory and the role of audit.* London: Auditquality.

INTOSAI. (2009). *SAI Independence.* LIMA: (INTOSAI).

INTOSAI. (2009). *SAI Independence: A Founding Principle of INTOSAI.* LIMA: The International Organisation of Supreme Audit Institutions.

INTOSAI. (2009). *The International Standards of Supreme Audit Institution standard 1705 : Forming an Opinion and Reporting on Financial Statements.* Vienna Austria: (INTOSAI). Retrieved from http://www.intosai.org/

INTOSAI. (2010). *Forming an opinion and reporting on financial statements.* Johannesburg: International Organization of Supreme Audit Institutions.

INTOSAI. (2010). *Forming an Opinion and Reporting on Financial Statements.* Johannesburg: International Organization of Supreme Audit Institutions.

Iqbal, A., Zhang, X., & Jebran, K. (2015). Corporate governance and Earning Management: Acase of Karachi Listed firms. *Indian Journal of Corporate governance, 8*(2), 103- 118.

Iraya, C., Mwangi, M., & Muchoki, G. W. (2015). The effect of corporate governance practices on earnings management ofcompanies listed at the Nairobi securities exchange. *European Scientific Journal, 11*(1).

Ishak, S., & Yusof, M. A. (2015). Board of directors' independence and modified audit report: an analysis of the Malaysian environment. *Jurnal Pengurusan, 44*, 47-55.

Islam, R., Rashid, K., & Anderson, R. (2008). *A Comparison of corporate governance and firm performance in developing (Malaysia) and developed (Australia) Financial Markets.* Melbourne: Centre for Strategic Economic Studies.

Jensen, M. (2001). Value maximisation, stakeholder theory and the objective function. *Journal of Applied Corporate Finance, 14*(3).

Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial economics,* 305-360.

Jiraporn, P., Miller, G. A., Yoon, S. S., & Kim, Y. S. (2008). Is earnings management opportunistic or beneficial?An agency theory perspective. *International Review of Financial Analysis, 17*(3), 622-634.

Jonsson, E. I. (2005). The role model of the board: A preliminary study of the roles of Icelandic boards. *Corporate Governance, 13*(5), 710-717.

Jouri, A. (2016). The relationship between auditor's opinions, corporate governance and accounting information quality. *International Journal of Advanced Biotechnology and Research (IJBR), 7*(3), 404-408.

Kahle , M., Wang, L., & Wu, j. (2014). Board structure: an empirical study of firms in Anglo-American governance environments. *Managerial Finance, 40*(7), 681 - 699.

Kahle, M., Wang, L., & Wu, J. (2014). Board structure: an empirical study of firms in Anglo-American governance environments. *Managerial Finance, 40*(7), 681 - 699.

Kalsie, A., & Shrivastav, S. M. (2016). Analysis of Board Size and Firm Performance: Evidence from NSE Companies Using Panel Data Approach. *Companies Using Panel Data Approach, 9*(2), 148-172. Retrieved from https://doi.org/10.1177/0974686216666456

Kangarlouei, S. J., Jam, B., & Motavassel, M. (2013). Indepenent auditor opinion, corporate governance and financial reporting quality in firms listed in Tehran stock exchange. *The SIJ Transactions on Industrial, Financial & Business Management, 1*(2).

Khalil, M., & Ozkan, A. (2016). Board independence, audit quality and earnings management: Evidence from Egypt. *Journal of Emerging Market Finance*, *15*(1), 84-118. doi:10.1177/0972652715623701

Kheradmand, A., & Abolverdi, Z. (2017). A survey of the relationship between earnings management and qualified auditor opinion in Tehran Stock Exchange. *7*(2), pp. 723-729.

Kido, N., Petacchi, R., & Weber, J. (2012). The Influence of elections on the accounting choices of governmental entities. *Journal of Accounting Research*, *50*(2), 443-476.

Kiel, G., & Nicholson, G. (2003). Board Composition and Corporate Performance: How the Australian experience informs contrasting theories of corporate governance. *Corporate Governance: An International Review*, *11*(3), 189-205.

Kuhn, T. S. (1962). *The structure of scientific revolutions.* Chicago: University of Chicago Press.

Latif, A. S., & Abdullah, F. (2015). The Effectiveness of Corporate Governance in Constraining Earnings Management in Pakistan. *The Lahore Journal of Economics, 20*(1), 135-155.

Lee, T. (1993). *Corporate audit theory.* Chapman & Hall.

Leedy, P. D., & Ormrod, J. E. (2005). *Practical research: Planning and design.* Upper Saddle River, NJ: Prentice-Hall.

Letza, S., Sun, X., & Kirkbride, J. (2004). Shareholding versus stakeholding: a critical review of corporate governance. *Corp. Govern.: Int. Rev, 12*(3), 242-263.

Li, C., Zheng, W., Chang, P., & Li, S. (2015). The correlation between corporate governance and market value: regime or signal? *China Finance Review International*, 19-33.

Limperg, T. (1932). *Theory of inspired confidence.* Amsterdam: University of Amsterdam.

Lin, Z., Jiang, Y., & Xu, Y. (2011). Do modified audit opinions have economic consequence?Empirical evidence based on financial constraints. *China Journal of Accounting Research*, *4*, 135-154.

Locke, S. M., & Duppati, G. (2014). *Financial performance in indian state owned enterprises following corporate governance reforms.* Retrieved from SSRN: https://ssrn.com abstract=3286704

Luxi, C., lei, L. C., yu, D. X., Qi, W., & yu, W. W. (2013). Corporate governance and firm performance:Empirical evidence from China. *International Conference on Education Technology and Management Science*.

Mace, M. L. (1971). *Directors: myth and reality*. Boston: Harvard University Press.

Malik, S. U. (2012). Relationship between corporate governance score and stock prices: Evidence from KSE- 30 index companies. *International Journal of Business and Social Science*.

Mallin, C. A. (2004). *Corporate Governance*. Oxford: Oxford University Press.

Man, C.-k., & Wong, B. (2013). Corporate governance and earnings management: A survey of literature. *Journal of Applied Business Research, 29*(2), 391-418. Retrieved from https://doi.org/10.19030/jabr.v29i2.7646

Matsiliza, N. S. (2017). Corporate governance of the state-owned enterprises in an emerging country: Risk management and related issues. *Risk governance & control: financial markets & institutions, 7*(3), 35-43. doi:10.22495/rgcv7i3p4

Matsumoto, D. A. (2002). Management's Incentives to avoid negative earnings surprises. *Accounting Review, 77*(3), 483-514.

Menon, K., & Williams, J. D. (1994). The use of audit committees for monitoring. *Journal of Accounting and Public Policy, 13*(2), 121-139.

Mgeni, T., & Nayak, P. (2016). Impact of structural firm characteristics on business performance of SMEs: Evidence from agribusiness firms in Dar es salaam, Tanzania. *Arabian Journal of business and management review, 6*(5), 2223-5833.

Miko, N. U., & Kamardin, H. (2014). Detecting earnings management:Comparative analysis of models in Nigeria. *Journal of Accounting Frontier, 16*(2), 68-76.

Mishra, M., & Malhotra, A. K. (2016). Audit committee characteristics and earnings management: Evidence from India. *International Journal of Accounting and Financial Reporting, 6*(2), 247-273.

Moazedi, E., & khansalar, E. (2016). Earning management and audit opinion. *International Journal of Economics and Finance, 8*(4), 113-122.

Mohammed, I. A., Che-Ahmad, A., & Malek, M. (2019). Regulatory changes, board monitoring and earnings management in Nigerian financial institutions. *Business & Economics Review, 28*(2), 152-168.

Moradi, M., Salehi, M., Rigi, M., & Moeinizade, M. (2011). The effect of qualified audit report on share prices and returns: Evidence of Iran. *African Journal of Business Management, 5*(8), 3354-3360.

Moss, S. (2016). The impact of corpoarate governance practices and earnings management on cost of capital evidence from Thailland. *ACRN Oxford Journal of Finance and Risk Perspectives, 5*(1), 160-182.

Muller-, K., Wang, L., & Wu, J. (2014). Board structure: an empirical study of firms in Anglo-American governance environments. *Managerial Finance*, 681 - 699.

Mutchler, J. F., Hopwood, W., & McKeown, J. M. (1997). The influence of contrary information and mitigating factors on audit opinion decisions decisionson bankrupt companies. *Journal of Accounting Research, 35*(2), 295-310.

Muth, M., & Donaldson, L. (1998). Stewardship theory and board structure: a contingency approach. *Corporate governance and international review, 6*(1), 5-28.

Mwongozo. (2015). *Mwongozo the code of governance for state corporations.* Nairobi: Government of Kenya.

Mzenzi, S. I., & Gaspar, A. F. (2015). External auditing and accountability in the Tanzanian local government authorities. *Managerial Auditing Journal*, 681-702.

Nath, S. D., Islam, S., & Saha, A. K. (2015). Corporate board structure and firm performance: The context of pharmaceutical industry in Bangladesh. *International Journal of Economics and Finance, 7*(7), 1916-9728.

Nelwan, M. L., & Tansuria, B. I. (2019). Audit committee characteristics and earnings management practices. *Journal of Economics, Business, and Accountancy Ventura, 22*(1), 85-97.

O~ Sulivan, A. M. (2000). *Contest for corporate control: Corporate governance and economic performance in United States and Germany.* New york: Oxford University Press.

Oba, B., Tigrel , E., & Sener, P. (2014). Board structure in listed firms: evidence from an emerging economy. *Corporate Governance, 14,* 382 - 394.

OAG Kenya. (2020). *Office of the auditor general reports.* Nairobi: Office of the Auditor general of Kenya.

OECD. (2015). *The OECD Guidelines on Corporate Governance of State Enterprises.* OECD.

Okiro, K. (2014). *Corporate governance, capital structure, regulatory compliance and performance of firms listed at the east African community securities exchange.* Unplished PhD thesis University of Nairobi.

Omoro, N. O. (2014). *Demographic Diversity in Top Management Team Corporate Voluntary Disclosure, Discretionary Accounting Choices and Financial Reporting Quality in Commercial State Corporations in Kenya.* University of Nairobi. Nairobi: Unpublished PhD Thesis University of Nairobi.

O'Sullivan, M. (2000). *Contest for corporate control: Corporate governance and economic performance in United States and Germany.* New york: Oxford University Press.

Othman, H. B., & Zeghal, D. (2006). A study of earnings-management motives in the Anglo-American and Euro-Continental accounting models: The Canadian and French cases. *The International Journal of Accountin, 41*, 406-435.

Pallot, J. (2003). A wider accountability? The Audit Office and New Zealand’s bureaucratic revolution. *Critical Perspectives on Accounting, 14*(1-2), 133-155.

Pearce, J., & Zahra, S. (1992). Board composition from a strategic contingency perspective. *Journal of Management Studies, 29,* 411-438.

Petrovic, J. (2008). Unlocking the role of a board director: A review of the literature. *Management Decision, 46*(9), 1373-1392.

Pfeffer, J., & Salancik, G. R. (1978). *The External Control of Organizations: A Resource Dependence Perspective.* New York: Harper & Row.

Pohar, M., Blas, M., & Turk, S. (2004). Comparison of logistic regression and linear discriminant analysis: A simulation study. *Metodološki zvezki, 1*(1), 143-161.

Pourciau, S. (1993). Earnings management and non routine executive changes. *Journal of, 32,* 379-382.

Public Sector Reforms and Performance Contracting. (2009). *Kenyan Public Sector Reforms and Performance Contracting guidelines.* Nairobi: Government of Kenya.

Rashid, K. (2008). *A Comparison of corporate governance and firm Performance in developing (Malaysia) and developed(Australia) financial markets.* Melbourne: Unpublished Phd Victoria University .

Ronen, J., & Yaari, V. (2008). *Earnings management: Emerging insights in theory, practice, and research.* New York: Springer.

Said, U. H., & Madugu, U. (2015). The imperative of population sampling in social sciences. *Global journal of political and science and administration, 3*(3), 49-57.

Salleh, N. H., & Haat, M. H. (2014). Audit committee and earnings management :Pre and Post MCCG. *International Review of Management and BusinessResearch,* 307-318.

Sanchez, J. P., & Garcia-Meca, B. E. (2005). Audit qualifications and corporate governance in Spanish listed firms. *Managerial Auditing Journal, 20*(7), 725 - 738.

SCAC. (2019, January 2019 Friday). *State corporations*. Retrieved from State corporation advisory committee: http://www.scac.go.ke/2015-02-16-09-44-25/commercial-manufacturing

Schelker, M. (2013). Auditors and corporate Governance: Evidence from the public sector. *Kyklos, 66*(2), 275-300.

Schelker, M., & Eichenberger, R. (2010). Auditors and fiscal policy: Empirical evidence on a little big institution. *Journal of Comparative Economics, 38*(4), 357–380.

Schulze, W. S., Lubatkin, M. H., Dino, R. N., & Buchholtz, A. K. (2001). Agency Relationships in Family Firms:Theory and Evidence. *Organization Science, 12*(2), 99-116.

Scotland, J. (2012). Exploring the philosophical underpinings of research: Relating ontology and epistemology to the methodology of the scientific, interpretive and critical research paradigms. *English language teaching, 5*(9), 9-16.

Shaikh, R., Fei, G., Shaique, M., & Nazir, M. R. (2019). Control enhancing mechanisms and earnings management: Empirical Evidence from Pakistan. *Journal of Risk and Financial Management, 12*(130), 120-130.

Sherliza, P. N., & Sitinorwahida, S. (2011). Corporate governance and audit report timelines:Evidence from Malasysia. *Research in accounting in emerging aconomies*.

Shleifer, A., & Vishny, R. W. (1997). A Survey of corporate governance. *The Journal of Finance*, 737-783.

Simpson, S. N. (2014). Boards and governance of state-owned enterprises. *Corporate Governance, 14*(2), 238-251.

Smallman, C. (2004). Exploring theoretical paradigm in corporate governance. 78-94.

Solakoglu, M. N., & Demir, N. (2016). The role of firm characteristics on the relationship between gender diversity and firm performance. *Management Decision, 54*(6), 1407-1419.

Stiles , P., & Taylor, B. (2001). *Boards at Work: How directors view their roles and responsibilities.* Oxford: Oxford University Press.

Streim, H. (1994). Agency problems in the legal political system and supreme auditing institutions. *European Journal of Law and Economics, 1*(3), 177-192. Retrieved from http://link.springer.com/10.1007/BF01552469.

Subramanian, S. (2018). Stewardship theory of corporate governance and value system: The case of a family-owned business group in India. *Indian Journal of Corporate Governance, 11*(1), 88-102.

Sutrisno, P. (2019). CEO Overconfidence, Audit Firm Size, Real Earnings Management, Audit Opinion. *Academy of Accounting and Financial Studies Journal, 23*(1), 1-13.

Swastika, D. L. (2013). Corporate governance, firm size, and earning management: evidence in Indonesia stock exchange. *IOSR Journal of Business and Management, 10*(4), 77-82.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using Multivariate Statistics.* Person Education Inc.

Tabachnick, B. G., Fidell, L. S., & Osterlind, S. J. (2001). *Using multivariate statistics.* Boston, United State of America: Allyn and Bacon.

Tagiuri, R., & Davis, J. (1996). Bivalent attributes of the family firm. *Family Business Review, 9*(2), 199-208.

The International Organisation of Supreme Audit Institutions (INTOSAI). (2009). *SAI Independence: A Founding Principle of INTOSAI.* LIMA: INTOSAI.

Tricker, R. I. (1984). *Corporate governance: practices, procedures, and powers in British companies and their boards of directors.* Gower Pub. Co.

Tsipouridou, M., & Spathis, C. (2014). Audit opinion and earnings management:Evidence from Greece. *Accounting Forum, 38,* 38-54.

Uzun, H., Szewczyk, S., & Varma, R. (2004). Board Composition and Corporate Fraud. *Financial Analysts Journal*, 33-43.

Watts,, R., & Zimmerman, J. L. (1986). *Positive Accounting Theory.* New Jersey: Prentice-Hall, Inc.

Wesley, C. L. (2010). *The impact of stewardship on firm performance : A family ownership and internal governance perspective.* Taxas: Unpublished PhD Thesis A& M University.

World Bank. (2014). *Corporate goevernance of state owned enterprises: Tool Kit.* Washington: world bank.

Yasser, Q. R., & Mamun, A. A. (2016). The relationship between board leadership structure and earnings management in Asia-Pacific. *Accounting Research Journal*, *29*(4), 413-428.

Zukauskas, P., Vveinhardt, J., & Andriukaitienė, R. (2018). *Philosophy and paradigm of scientific research.* Web of science.

APPENDICES

Appendix 1: Secondary Data Capture Form

SECTION A: DATA ON BOARD STRUCTURE

Name of the company……………………………………

Name of corporation	Year	Board size	Number of board meetings	Number of audit committee meetings	ID	Opinion
Corporation	2016					
Corporation	2015					
Corporation	2014					
Corporation	2013					
Corporation	2012					
Corporation	2011					
Corporation	2010					
Corporation	2009					
Corporation	2008					
Corporation	2007					

SECTION B: DATA ON EARNINGS MANAGEMENT

Name of the company……………………………………….

Year of Incorporation

Corporation	Year	Current Assets	Current Liabilities	Cash	Debt CL	Dept & Amt	Total Assets	Revenue	Receivables	PPE
Corporation	2016									
Corporation	2015									
Corporation	2014									
Corporation	2013									
Corporation	2012									
Corporation	2011									
Corporation	2010									
Corporation	2009									
Corporation	2008									
Corporation	2007									

SECTION C: FIRM CHARACTERISTICS

Name of the company……………………………………….

Year of Incorporation……………………………….

CORPORATION	YEAR	AGE	LIQUIDITY	LOG TOTAL ASSETS
Corporation	2016			
Corporation	2015			
Corporation	2014			
Corporation	2013			
Corporation	2012			
Corporation	2011			
Corporation	2010			
Corporation	2009			
Corporation	2008			
Corporation	2007			

SECTION D: AUDIT OPINION

Name of the company……………………………………….

Name of corporation	Year	Opinion
Corporation	2016	
Corporation	2015	
Corporation	2014	
Corporation	2013	
Corporation	2012	
Corporation	2011	
Corporation	2010	
Corporation	2009	
Corporation	2008	
Corporation	2007	

Appendix II: List of Commercial State Owned Enterprises

1.	Agro-Chemicals and Food Company
2.	Chemelil Sugar Company
3.	East African Portland Cement Company
4.	Gilgil Telecommunications Industries
5.	Jomo Kenyatta Foundation
6.	Kenya Airports Authority
7.	Kenya Broadcasting Corporation
8.	Kenya Electricity Generating Company
9.	Kenya Literature Bureau
10.	Kenya Ordinance Factories Corporation
11.	Kenya Pipeline Company
12.	Kenya Ports Authority
13.	Kenya Power and Lighting Company
14.	Kenya Railways Corporation
15.	Kenya Civil Aviation Authority
16.	Kenya Safari Lodges and Hotels
17.	Kenya Seed Company Limited
18.	Kenya Wine Agencies
19.	Kenyatta International Convention Center
20.	National Cereals and Produce Board
21.	National Housing Corporation
22.	National Oil Corporation of Kenya

23.	National Water Conservation and Pipeline Corporation
24.	Numerical Machining Complex
25.	Nzoia Sugar Company
26.	Postal Corporation of Kenya
27.	Pyrethrum Board of Kenya
28.	School Equipment Production Unit
29.	South Nyanza Sugar Company
30.	Telkom Kenya Limited
31.	University of Nairobi Enterprises and Services Limited
32.	New Kenya Co-operative Creameries Ltd
33.	Kenya Electricity Transmission Company

Source: www.scac.go.ke, 2021

Appendix III: Raw Data on Research Variables

YEAR	NAME OF COMPANY	BOARD SIZE	NO OF AUDIT COMMITTEE MEETINGS	NO INDEPENDENT DIRECTORS	AUDIT OPINION	AGE OF INCORPORATION
2016	Ken Gen Ltd	11	7	7	0	62
2015	Ken Gen Ltd	11	9	7	0	61
2014	Ken Gen Ltd	11	10	7	0	60
2013	Ken Gen Ltd	11	4	7	0	59
2012	Ken Gen Ltd	11	11	7	0	58
2011	Ken Gen Ltd	11	6	7	0	57
2010	Ken Gen Ltd	11	8	7	0	56
2009	Ken Gen Ltd	11	8	7	0	55
2008	Ken Gen Ltd	11	6	7	0	54
2007	Ken Gen Ltd	11	8	7	0	53
2016	Kenya Power & Lighting	9	6	5	0	94
2015	Kenya Power & Lighting	9	6	5	0	93
2014	Kenya Power & Lighting	9	5	5	0	92
2013	Kenya Power & Lighting	10	5	5	0	91
2012	Kenya Power & Lighting	10	5	5	0	90
2011	Kenya Power & Lighting	10	7	5	0	89
2010	Kenya Power & Lighting	10	5	5	0	88
2009	Kenya Power & Lighting	10	7	5	0	87
2008	Kenya Power & Lighting	10	6	5	0	86
2007	Kenya Power & Lighting	10	10	5	0	85
2016	Agro Chemical Ltd	10	4	0	1	38
2015	Agro Chemical Ltd	10	4	0	1	37
2014	Agro Chemical Ltd	10	4	0	1	36
2013	Agro Chemical Ltd	9	4	0	1	35
2012	Agro Chemical Ltd	10	4	0	1	34
2011	Agro Chemical Ltd	8	4	0	1	33
2010	Agro Chemical Ltd	8	4	0	1	32
2009	Agro Chemical Ltd	8	4	0	1	31

2008	Agro Chemical Ltd	8	4	0	1	30
2007	Agro Chemical Ltd	8	4	0	1	29
2016	Chemelil Sugar Company	11	4	4	1	48
2015	Chemelil Sugar Company	11	4	4	1	47
2014	Chemelil Sugar Company	9	4	2	1	46
2013	Chemelil Sugar Company	11	3	4	1	45
2012	Chemelil Sugar Company	14	4	4	1	44
2011	Chemelil Sugar Company	14	4	4	1	43
2010	Chemelil Sugar Company	9	4	4	1	42
2009	Chemelil Sugar Company	9	4	4	1	41
2008	Chemelil Sugar Company	9	3	4	0	40
2007	Chemelil Sugar Company	10	6	4	1	39
2016	Jomo Kenyatta Foundation	10	4	4	0	50
2015	Jomo Kenyatta Foundation	10	2	4	0	49
2014	Jomo Kenyatta Foundation	10	3	4	0	48
2013	Jomo Kenyatta Foundation	10	3	4	0	47
2012	Jomo Kenyatta Foundation	10	2	4	1	46
2011	Jomo Kenyatta Foundation	10	4	4	1	45
2010	Jomo Kenyatta Foundation	10	4	4	0	44
2009	Jomo Kenyatta Foundation	11	3	4	0	43
2008	Jomo Kenyatta Foundation	11	5	4	0	42
2007	Jomo Kenyatta Foundation	11	5	4	0	41
2016	Kenya Airports Authority	14	4	5	1	25
2015	Kenya Airports Authority	11	6	5	1	24

2014	Kenya Airports Authority	8	7	3	1	23
2013	Kenya Airports Authority	11	4	5	1	22
2012	Kenya Airports Authority	10	4	5	1	21
2011	Kenya Airports Authority	10	3	5	1	20
2010	Kenya Airports Authority	14	4	5	1	19
2009	Kenya Airports Authority	10	4	2	1	18
2008	Kenya Airports Authority	10	3	2	1	17
2007	Kenya Airports Authority	10	5	2	1	16
2016	Kenya Literature Bureau	11	3	3	0	36
2015	Kenya Literature Bureau	11	4	3	0	35
2014	Kenya Literature Bureau	12	4	3	0	34
2013	Kenya Literature Bureau	11	3	3	0	33
2012	Kenya Literature Bureau	12	2	3	0	32
2011	Kenya Literature Bureau	11	4	3	0	31
2010	Kenya Literature Bureau	12	3	3	1	30
2009	Kenya Literature Bureau	12	4	3	1	29
2008	Kenya Literature Bureau	12	2	3	1	28
2007	Kenya Literature Bureau	12	3	3	1	27
2016	Kenya Ordnance Factories Corps	12	0	5	1	19
2015	Kenya Ordnance Factories Corps	12	0	5	1	18
2014	Kenya Ordnance Factories Corps	10	0	5	1	17
2013	Kenya Ordnance Factories Corps	10	0	5	1	16
2012	Kenya Ordnance Factories Corps	10	0	5	1	15

2011	Kenya Ordnance Factories Corps	10	0	5	1	14
2010	Kenya Ordnance Factories Corps	10	0	5	1	13
2009	Kenya Ordnance Factories Corps	10	0	5	1	12
2008	Kenya Ordnance Factories Corps	10	0	5	1	11
2007	Kenya Ordnance Factories Corps	12	0	3	1	10
2016	Kenya Pipeline Company	11	4	7	1	39
2015	Kenya Pipeline Company	11	4	7	1	38
2014	Kenya Pipeline Company	11	9	7	1	37
2013	Kenya Pipeline Company	11	9	7	1	36
2012	Kenya Pipeline Company	12	6	7	1	35
2011	Kenya Pipeline Company	10	8	6	1	34
2010	Kenya Pipeline Company	10	8	6	1	33
2009	Kenya Pipeline Company	10	8	6	1	32
2008	Kenya Pipeline Company	10	8	6	1	31
2007	Kenya Pipeline Company	10	8	6	1	30
2016	Kenya Ports Authority	11	3	5	1	38
2015	Kenya Ports Authority	11	2	5	1	37
2014	Kenya Ports Authority	8	2	5	1	36
2013	Kenya Ports Authority	11	2	5	1	35
2012	Kenya Ports Authority	11	2	5	1	34
2011	Kenya Ports Authority	11	2	6	1	33
2010	Kenya Ports Authority	11	4	5	1	32
2009	Kenya Ports Authority	11	2	5	1	31

2008	Kenya Ports Authority	11	4	5	1	30
2007	Kenya Ports Authority	11	2	7	1	29
2016	Kenya Railways Corporation	12	5	6	1	38
2015	Kenya Railways Corporation	12	5	6	1	37
2014	Kenya Railways Corporation	12	5	6	1	36
2013	Kenya Railways Corporation	12	4	6	1	35
2012	Kenya Railways Corporation	12	3	6	1	34
2011	Kenya Railways Corporation	12	4	6	1	33
2010	Kenya Railways Corporation	12	5	6	1	32
2009	Kenya Railways Corporation	12	4	6	1	31
2008	Kenya Railways Corporation	12	5	6	1	30
2007	Kenya Railways Corporation	12	3	6	1	29
2016	Kenya Civil Aviation Authority	11	2	3	1	14
2015	Kenya Civil Aviation Authority	11	4	2	1	13
2014	Kenya Civil Aviation Authority	11	4	2	1	12
2013	Kenya Civil Aviation Authority	11	3	2	1	11
2012	Kenya Civil Aviation Authority	11	2	2	1	10
2011	Kenya Civil Aviation Authority	12	4	2	1	9
2010	Kenya Civil Aviation Authority	12	4	2	1	8
2009	Kenya Civil Aviation Authority	12	5	2	1	7
2008	Kenya Civil Aviation Authority	12	3	2	1	6
2007	Kenya Civil Aviation Authority	12	3	2	1	5
2016	Kenya Safari Lodges & Hotels	6	4	2	1	50

2015	Kenya Safari Lodges & Hotels	4	2	1	1	49
2014	Kenya Safari Lodges & Hotels	4	3	1	1	48
2013	Kenya Safari Lodges & Hotels	6	2	1	1	47
2012	Kenya Safari Lodges & Hotels	5	2	1	1	46
2011	Kenya Safari Lodges & Hotels	8	2	4	1	45
2010	Kenya Safari Lodges & Hotels	6	3	1	1	44
2009	Kenya Safari Lodges & Hotels	10	2	6	1	43
2008	Kenya Safari Lodges & Hotels	10	2	6	1	42
2007	Kenya Safari Lodges & Hotels	10	2	6	1	41
2016	Kenya Seed Company Limited	11	2	4	1	60
2015	Kenya Seed Company Limited	11	4	4	1	59
2014	Kenya Seed Company Limited	11	4	4	0	58
2013	Kenya Seed Company Limited	11	4	4	0	57
2012	Kenya Seed Company Limited	11	4	4	0	56
2011	Kenya Seed Company Limited	11	4	4	0	55
2010	Kenya Seed Company Limited	11	4	4	0	54
2009	Kenya Seed Company Limited	11	4	4	0	53
2008	Kenya Seed Company Limited	11	4	3	1	52
2007	Kenya Seed Company Limited	11	4	3	1	51
2016	Kenya Wine Agencies	5	6	3	0	47
2015	Kenya Wine Agencies	5	7	3	0	46
2014	Kenya Wine Agencies	5	4	3	0	45
2013	Kenya Wine Agencies	5	4	3	0	44

2012	Kenya Wine Agencies	5	4	3	0	43
2011	Kenya Wine Agencies	5	4	3	0	42
2010	Kenya Wine Agencies	5	4	3	0	41
2009	Kenya Wine Agencies	5	8	3	0	40
2008	Kenya Wine Agencies	5	9	3	0	39
2007	Kenya Wine Agencies	5	3	3	0	38
2016	NCPB	9	2	4	1	31
2015	NCPB	9	2	4	1	30
2014	NCPB	9	2	4	1	29
2013	NCPB	9	2	4	1	28
2012	NCPB	9	2	4	1	27
2011	NCPB	11	2	4	1	26
2010	NCPB	11	2	4	1	25
2009	NCPB	11	2	4	1	24
2008	NCPB	11	2	4	1	23
2007	NCPB	11	2	4	1	22
2016	National Housing Corporation	9	2	3	1	63
2015	National Housing Corporation	9	2	4	1	62
2014	National Housing Corporation	9	2	4	1	61
2013	National Housing Corporation	9	2	4	1	60
2012	National Housing Corporation	11	1	4	1	59
2011	National Housing Corporation	11	2	4	1	58
2010	National Housing Corporation	11	2	4	1	57
2009	National Housing Corporation	11	2	4	1	56
2008	National Housing Corporation	11	2	4	1	55
2007	National Housing Corporation	11	2	4	1	54
2016	National oil	11	3	7	0	35
2015	National oil	11	5	7	0	34
2014	National oil	11	3	7	0	33

2013	National oil	11	4	7	0	32
2012	National oil	12	2	7	0	31
2011	National oil	12	6	6	0	30
2010	National oil	11	4	6	0	29
2009	National oil	11	6	6	0	28
2008	National oil	11	4	6	0	27
2007	National oil	11	5	6	0	26
2016	Numerical Machining Complex	10	3	4	1	22
2015	Numerical Machining Complex	10	2	4	1	21
2014	Numerical Machining Complex	8	2	3	1	20
2013	Numerical Machining Complex	8	2	4	1	19
2012	Numerical Machining Complex	6	4	3	1	18
2011	Numerical Machining Complex	10	3	3	1	17
2010	Numerical Machining Complex	10	2	3	1	16
2009	Numerical Machining Complex	10	2	3	1	15
2008	Numerical Machining Complex	10	4	3	1	14
2007	Numerical Machining Complex	10	2	3	1	13
2016	Nat Water Conservation	10	4	5	2	28
2015	Nat Water Conservation	10	2	5	2	27
2014	Nat Water Conservation	11	4	7	3	26
2013	Nat Water Conservation	11	5	7	3	25
2012	Nat Water Conservation	10	4	6	1	24
2011	Nat Water Conservation	11	3	7	3	23
2010	Nat Water Conservation	11	2	7	1	22
2009	Nat Water Conservation	14	2	8	1	21
2008	Nat Water Conservation	11	3	7	3	20

2007	Nat Water Conservation	11	2	7	3	19
2016	Nzoia Sugar Co Limited	11	2	5	1	41
2015	Nzoia Sugar Co Limited	11	4	5	1	40
2014	Nzoia Sugar Co Limited	7	3	1	1	39
2013	Nzoia Sugar Co Limited	7	3	1	1	38
2012	Nzoia Sugar Co Limited	12	4	5	1	37
2011	Nzoia Sugar Co Limited	12	4	5	1	36
2010	Nzoia Sugar Co Limited	12	6	5	1	35
2009	Nzoia Sugar Co Limited	12	4	5	1	34
2008	Nzoia Sugar Co Limited	12	2	5	1	33
2007	Nzoia Sugar Co Limited	12	4	5	1	32
2016	Postal Corporation of Kenya	9	2	4	1	18
2015	Postal Corporation of Kenya	9	2	4	1	17
2014	Postal Corporation of Kenya	11	2	6	3	16
2013	Postal Corporation of Kenya	9	2	5	3	15
2012	Postal Corporation of Kenya	9	2	5	1	14
2011	Postal Corporation of Kenya	9	2	4	1	13
2010	Postal Corporation of Kenya	9	2	4	1	12
2009	Postal Corporation of Kenya	9	2	4	1	11
2008	Postal Corporation of Kenya	9	2	4	1	10
2007	Postal Corporation of Kenya	9	2	4	1	9
2016	School Equip Production Unit	7	5	7	1	40
2015	School Equip Production Unit	7	4	7	1	39

2014	School Equip Production Unit	7	3	7	1	38
2013	School Equip Production Unit	7	2	7	1	37
2012	School Equip Production Unit	7	4	7	1	36
2011	School Equip Production Unit	7	4	7	1	35
2010	School Equip Production Unit	7	4	7	1	34
2009	School Equip Production Unit	7	2	4	1	33
2008	School Equip Production Unit	7	4	7	1	32
2007	School Equip Production Unit	7	4	7	1	31
2016	South Nyanza Sugar Co Ltd	11	5	5	1	40
2015	South Nyanza Sugar Co Ltd	11	5	5	1	39
2014	South Nyanza Sugar Co Ltd	9	3	4	1	38
2013	South Nyanza Sugar Co Ltd	11	4	4	1	37
2012	South Nyanza Sugar Co Ltd	11	5	4	1	36
2011	South Nyanza Sugar Co Ltd	12	7	4	1	35
2010	South Nyanza Sugar Co Ltd	13	4	7	1	34
2009	South Nyanza Sugar Co Ltd	13	4	9	1	33
2008	South Nyanza Sugar Co Ltd	7	6	4	1	32
2007	South Nyanza Sugar Co Ltd	7	4	4	1	31
2016	East African Portland	8	5	4	0	83
2015	East African Portland	8	5	4	0	82
2014	East African Portland	7	5	4	0	81
2013	East African Portland	8	6	4	0	80
2012	East African Portland	8	4	4	0	79
2011	East African Portland	9	5	4	0	78
2010	East African Portland	9	5	4	0	77
2009	East African Portland	9	5	4	0	76
2008	East African Portland	9	5	4	0	75

2007	East African Portland	9	5	4	0	74
2016	UNES Limited	14	4	3	0	20
2015	UNES Limited	15	4	0	0	19
2014	UNES Limited	16	4	0	0	18
2013	UNES Limited	16	4	0	0	17
2012	UNES Limited	16	4	0	0	16
2011	UNES Limited	15	4	0	0	15
2010	UNES Limited	16	4	0	0	14
2009	UNES Limited	16	4	0	0	13
2008	UNES Limited	15	4	0	0	12
2007	UNES Limited	15	4	0	0	11
2016	New KCC	10	4	3	1	13
2015	New KCC	11	4	3	1	12
2014	New KCC	11	4	3	1	11
2013	New KCC	11	4	3	1	10
2012	New KCC	12	4	4	1	9
2011	New KCC	10	4	4	1	8
2010	New KCC	10	4	3	1	7
2009	New KCC	10	4	3	1	6
2008	New KCC	10	4	3	1	5
2007	New KCC	10	4	3	1	4
2016	Kenya Electricity Transmission Company	11	7	4	0	8
2015	Kenya Electricity Transmission Company	11	4	4	0	7
2014	Kenya Electricity Transmission Company	11	5	4	0	6
2013	Kenya Electricity Transmission Company	11	3	4	0	5
2012	Kenya Electricity Transmission Company	11	3	4	0	4
2011	Kenya Electricity Transmission Company	11	5	4	0	3
2010	Kenya Electricity Transmission Company	11	2	4	0	2
2009	Kenya Electricity Transmission Company	11	0	4	0	1