KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI

COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

SCHOOL OF BUSINESS

IMPACT OF BOARD CHARACTERISTICS ON EARNINGS MANAGEMENT: A CASE OF SELECTED LISTED COMPANIES IN GHANA.

BY

NATOGMAH S HAFEEZ

BSc. COMPUTING WITH ACCOUNTING

A thesis submitted to the institute of Distance Learning, Department of Accounting and Finance, School of Business, College of Humanities and Social sciences, KNUST in patial fulfilment of the requirements for the degree of

MASTER OF SCIENCE IN ACCOUNTING AND FINANCE

NOVEMBER, 2023

DECLARATION

I hereby declare that this thesis is submitted in partial fulfilment of the requirements for the award of MSc, Accounting and Finance is my work, and that it contains no material previously submitted by another person or any material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

Natogmah S. Hafeez ……………………….. ………………………

(PG9398921) Signature Date

Certified by:

Dr. Kwame Mireku ……………………. ………………………

(Supervisor's Name) Signature Date

Prof. Kingsley Opoku Appiah ………………….. …………………..

(Head of Department) Signature Date

DEDICATION

I dedicate this work to my siblings. This achievement would not have seen day light without their unending support, resources and motivation. I would also like to dedicate this work to my lovely wife who supported me throughout this programme.

ACKNOWLEDGEMENT

I would like to first express my profound gratitude to my supervisor Dr Kwame Mireku for his invaluable guidance throughout the project work. It was a privilege to be under your supervision.

Many thanks also go to the management and my co-workers at Best Labour Company Limited for the consideration and support they gave me in order to fulfil the requirements for this programme.

Also, I would like to say a big thank you to my family for the emotional and financial support they extended to me throughout the programme, I’m eternally grateful.

Lastly, I am very grateful to my colleague students and all other persons who helped me in diverse ways to make this thesis a success.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

The study sought to assess the impact of board characteristics on earnings management using a case of selected listed companies in Ghana. The study employs a quantitative explanatory research design within a positivist paradigm. A sample of 13 companies listed on the Ghana Stock Exchange, consisting of 9 banks and 4 manufacturing firms, is used. Secondary data from annual reports is collected over 12 years (2010-2021) and analysed using the Generalized Least Square (GLS) Random-Effects model in STATA software. The model specification includes variables such as CEO duality, board independence, board size, firm age, firm size, inflation, and interest rate. Diagnostic tests for heteroscedasticity, autocorrelation, and the Hausman test are conducted to ensure the reliability of the results. The study found that independent directors have a positive impact on reducing earnings management practices, while board size does not significantly affect earnings management. However, CEO-chair duality was found to increase the likelihood of earnings management, indicating potential risks associated with concentrated power and limited oversight. The presence of independent directors can contribute to enhanced transparency and accountability, while the risks associated with CEO-chair duality highlight the need for the separation of roles to mitigate the potential for earnings management and ensure effective oversight within organizations. Future research should consider examining the impact of other board characteristics, such as board diversity, board committees, and board tenure, on earnings management practices. Additionally, investigating the effectiveness of regulatory mechanisms and governance reforms in mitigating earnings management could provide valuable insights for policymakers and practitioners in improving corporate governance practices.

CHAPTER ONE

INTRODUCTION

1.0 Background of Study

For many stakeholders, financial statements are a key information source; however, businesses frequently employ various earnings management strategies to enhance the visual appeal of their financial statements (Firnanti, et al., 2019). The agency theory, which explains why there is a conflict between management's and shareholders' interests, is a major cause of earnings management. The most common metric for assessing a company's financial performance is accounting earnings. It is expected that a growing amount of work in the accounting literature has been devoted to understanding the causes of earnings management given that financial reporting standards and accounting regulations give managers of a firm significant chances to manipulate earnings (Githaiga, et al., 2022). Earnings manipulation is one of the biggest worries of a company's stakeholders among its many financial issues (Dieu, 2019).

According to Ado, Rashid, Mustapha and Ademola (2020), corporate managers have moved their attention from accrual-based earnings management to the manipulation of real activities, thus real earnings management. They support this claim with evidence that actual actions occur when management purposefully fudges the actual operational activity, and manipulation has occurred. According to the firm's profit distribution policies and in a way that guarantees the stability of its dividend policy or the increase in the price of its shares on financial markets, managers turn to increasing or decreasing the returns achieved during a time (Afifa, et al., 2021). Recent financial scandals have, however, eroded investors' confidence in the veracity of the data disclosed by publicly traded corporations. In light of recent scandals involving well-known firms and accounting scandals, investors and creditors are using financial statements with greater caution than before due to doubts about their integrity (Yahaya, 2022). Earnings provided in financial statements are among the most specific data and have an effect on management, investment, and company decisions.

Enron, WorldCom, Tyco, HealthSouth, Freddie Mac, American International Group (AIG), Lehman Brothers and Bernie Madoff are just a handful of the corporate accounting scandals that have come to light since 2000. With the negative impact of financial scams, the United States passed the Sarbanes-Oxley Act (SOA) in 2002, which was a new corporate reform law (Huang, et al., 2021). They further observed that, following the deployment of SOA, accrual-based earnings management tended to attract investor attention. Ghana is no exception to these corporate scandals; recently, there has been an upsurge in worry about corporate fraud, which has resulted in the loss of billions of cedis and undermined investor confidence in the financial markets (Bonsu, et al., 2018).

1.1 Problem Statement

The amount left over after operating costs, taxes, dividends on preferred shares and interest charges have been subtracted is referred to as earnings or net income. As a result, since profits are crucial to any organization, their management becomes crucial; management of earnings may be reasonable or legal for managerial decision-making, but it may also be dishonest, immoral or criminal (Osemene, et al., 2018). There is a growing concern around the world about the problem of earnings manipulation. Earnings management can be commonly divided into four categories: sales manipulation, overproduction, reduction in discretionary expenses and discretionary accruals to achieve short-term sales targets and the manipulation of intangible assets (Huang, et al., 2021).

Ghana has not been exempted from the ugliness of financial accounting fraud and manipulation. Many investors were taken advantage of in the 1990s by the microfinance firms Pyram and Resource 5 (R5) because of several manipulations that prevented Diamond Micro-Finance Limited (DKM), a microfinance company situated in Ghana's Brong Ahafo

Region, from returning investors' money, the Bank of Ghana suspended DKM's operations in 2015. There were seven (7) bank failures in Ghana between August 2017 and August 2018; there were reports by the Bank of Ghana (BoG) that the majority of these banks had used some accounting manipulations (Adu-Gyamfi, 2020).

For the trustworthiness of the issued financial statements, earnings management remained a major challenge; according to academic research, publicly listed companies frequently use the technique of earnings management. Due to their generally weak legal administration capacities, emerging countries like Ghana are more likely to practise earnings management issues (Ado, Rashid, Mustapha, and Ademola, 2020). Public trust has been damaged as a result of this incident, especially among individuals in the accounting community; it has also drawn attention to the problems with inadequate internal control systems and the calibre of financial reporting among businesses (Ado, Rashid, Mustapha, and Ademola, 2020).

The management's practice of managing earnings to further their interests and insufficient board oversight were the main contributors to the accounting fraud instances since it is the board of directors that assesses the performance of corporate management by looking at operating results (Huang, et al., 2021). A company's objective and business strategy are decided by the board of directors. As a result, the path of the companies that these directors oversee is greatly influenced by their actions and their honesty.

Research on board of directors has recently centred on board diversity and whether the backgrounds of the directors have an impact on the board's effectiveness (Huang, Liang, Chang and Hsu 2021; Bonsu, Dui, Muyun, Asare and Amankwaa, 2018). The manufacturing and retail industries were the focus of the existing literature's investigation on earnings management. Additionally, earlier research looked at the impact of earnings management and the use of financial measurements to represent business performance (Le and Nguyen, 2023). Only a few studies have attempted to investigate the board characteristics' impact on earnings management in Ghanaian listed enterprises, despite the growing importance and interest of earnings management activities by managers. This study aims to close this gap in the literature.

1.2 Objectives of the Study

The general objective of the study is to assess the impact of board characteristics on earnings management using a case of selected listed companies in Ghana. However, the specific objective of the study sought the following:

1. To examine the impact of CEO- chair duality on earning management.

2. To examine the impact of Board independence on earning management.

3. To examine the impact of Board size on earning management.

1.3 Research Questions

1. What is the impact of CEO- chair duality on earning management?
2. How does Board independence affect earnings management?
3. What is the impact of Board size on earning management?

1.4 Significance of the Study

This study on the impact of board characteristics on earnings management in selected listed companies in Ghana holds significant importance for various stakeholders. The following are the contributions and significance of the study grouped into practice, policy, and literature.

The findings of this study provide valuable insights for company managers, board members, and executives. Understanding the impact of board characteristics, such as board size, board independence, and CEO-chair duality, on earnings management practices can help them make more informed decisions regarding corporate governance practices and financial reporting strategies. It enables them to implement effective measures to mitigate earnings management and enhance transparency in financial reporting. The study addresses concerns about earnings manipulation, which can erode investor confidence. By examining the relationship between board characteristics and earnings management, the study enhances transparency and accountability within organizations. This, in turn, helps investors make more informed investment decisions and improves trust in the financial markets.

The findings of this study can inform policymakers and regulators in Ghana about the effectiveness of current corporate governance regulations. If the study identifies significant impacts of board characteristics on earnings management, policymakers can consider incorporating these findings into governance reforms. This can lead to the development of more robust regulations that promote transparency, accountability, and integrity in financial reporting. The study's results can contribute to the formulation of governance guidelines for listed companies in Ghana. By highlighting the importance of independent directors and the potential risks associated with CEO-chair duality, the study provides insights that can guide the establishment of best practices and guidelines for board composition and structure.

This study contributes to the existing body of knowledge in the field of accounting and finance. Exploring the relationship between board characteristics and earnings management, it adds to the understanding of corporate governance mechanisms and their impact on financial reporting integrity. The study's findings can serve as a basis for further research and scholarly discussions on the topic. The study presents a conceptual framework that outlines the relationships between board characteristics and earnings management. This framework can serve as a foundation for future studies investigating similar relationships in different contexts or examining the impact of other board characteristics on earnings management practices.

1.5 Brief Methodology

The study made use of secondary panel data that spans time periods from 2012 to 2021 with data extracted from the annual reports of listed companies in Ghana. The study selected eighteen (18) companies out of the forty (40) listed firms to undertake the study since they had the fully required data needed within the timeframe. The dependent variable of this study is earnings management which is measured using the Jones (1991) and Kori et al., (2005) model while CEO-chair duality, the board size, and board independence serve as the independent variables and firm size and leverage serving as control variables. The study employed the Statistical Package for Social Sciences (SPSS) version 20 to analyse both descriptive and inferential statistics. The descriptives concern the mode, median, mean, and standard deviation of the data results while the inferential statistics aided with the regression and correlation analysis. The regression analysis assisted in assessing the effect of board characteristics on earnings management as stated in the research objectives while the correlation analysis helped to test the study hypothesis.

1.6 Scope and Limitation

Only businesses that are listed on the GSE are the subject of this investigation. The study focused on forty (40) Ghana Stock Exchange-listed firms (GSE, 2023), and it solely used data taken from those companies' annual financial reports for the years 2012 to 2021. The data study includes the selected businesses with a full set of data for the time period.

The study is limited to only companies listed on the GSE from 2012 to 2021 to fulfil the objectives of the study; thus, it is possible that the findings from this study cannot be applied to the same business in other countries. However, efforts were made to ensure that the selected companies represent different industries to enhance the diversity of the sample, rigorous data collection procedures were followed, and data analysis techniques were applied to ensure the reliability of the results.

Furthermore, some of the listed companies did not possess all the required data needed especially within the research timeframe; hence hindering their inclusion which may affect the findings of the study in terms of its generalisation. The results of this study might not apply to other emerging markets that have adopted different policies. Such restrictions reveal potential directions for future research on this subject that might be anticipated in the future, for example, to examine another aspect of earnings management that might affect earnings management, such as CEO gender, power, ethnicity, and founder.

1.7 Organisation of the Study

The study encompasses five chapters: one to five where chapter one discussed the study background, problem statement, research objectives, research hypothesis as well as study significance; chapter two reviewed relevant literature in relation to board characteristics and earnings management: this is composed of empirical and theoretical reviews and the conceptual framework. The research methodology is addressed in chapter three of the study: it covers the research design, study population, sampling methods, instrumentation for data collection, and method of data analysis. The findings and interpretation of results are discussed in chapter four of the study. Chapter five discusses the summary, conclusion, and study recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Chapter two of this thesis is organised into four main sub-headings. The chapter provides information organised under conceptual review, theoretical review, empirical review, and finally the research model and hypotheses development. The Conceptual review section provides definitions, operationalisations, and how the constructs have been used in this study. The theoretical review section also provides the theoretical underpinnings of the study. The various prepositions proposed in this study were depicted using a conceptual framework and various relationships were well discussed. The Chapter ends with research gaps highlighted in the study.

2.1 Conceptual Review

Definitions, operationalisations, and an explanation of how the constructs were applied in this study are provided in this section. There are three main constructions in the model (Board Characteristics, and Board Independence).

2.1.1 Board Characteristics

There is no single definition of CG since national economic, legal, political, and cultural systems vary so greatly, that is acknowledged everywhere. How corporate governance is defined to emphasize its most salient features determines the weight accorded to various aspects of CG. CG is a word which has been defined in a number of different ways. The concepts of CG that are most widely used are examined in the subsequent sections. Hendra-Titisari et al. (2019) referred to corporate governance (CG) from the perspective of the shareholder as the assurance of getting back a decent return on capital invested as well as the willingness to run a firm effectively given investment.

The relationship between shareholders, top executives, and top management as it relates to decision-making regarding the organization's direction and execution is another definition of CG in relation to corporate management provided by Andersen (2019). It includes how different stakeholders engage with the management objectives of the firm. According to Pacces (2019), CG strikes a balance between individual and community goals, as well as economic and social ones, in order to advance resource efficiency and call for accountability for managing resources. Non-executive boards, executive directors, executive officers, investors, and other stakeholders are all entwined in a web of relationships that make up the OECD. It offers a structure for establishing organizational objectives, assigning resources, and efficiently tracking and summarizing results.

The OECD (2019) states that CG develops procedures for establishing the company's objectives and upholding them in societal, governmental, and business situations. CG helps companies put in place sensible decision-making procedures and frameworks that safeguard the interests of all parties involved, including employees, suppliers, consumers, and society (Gulzar et al., 2020). CG is a method for settling the principal-agent dispute by assigning blame to parties (Addink, 2019). According to Kumar and Zattoni (2017), the purpose of CG is to handle the possible agency conflicts that arise from the separation of property and control.

Moreover, Kasraoui and Kalai (2018) describe CG as a system for successfully overseeing, policing and managing enterprises that allow both internal as well as external approaches to achieve predetermined goals. External methods include statutory audits, the market for centralized governance, and stock market assessments of CG. Internal mechanisms also include the make-up of the board of directors, management ownership, and non-managerial shareholding, including institutional holdings. In order to ensure ethical corporate behaviour and increase a company's effectiveness and profitability, Dube (2019) defines CG as controlling and monitoring corporate behaviour as well as safeguarding the needs of all internal stakeholders and other groups that the company's behaviour may affect. In other terms, CG is the procedure of making sure a business behaves ethically and therefore can optimize its productivity and profitability. According to Girella (2021), corporate governance is a procedure designed to control and direct the operations of commercial entities with the main goal of maximizing value for shareholders.

The CG framework describes the guidelines and processes for corporate decision-making as well as the distribution of rights and duties among the several stakeholders in the company, such as the board, CEO, investors, and other stakeholders. CG is "the platform within which industrial businesses are controlled and managed," according to Nordberg (2020). In order to ensure that a corporation fulfils its obligations to those accountable, corporate directors must establish control systems. Handling the relationship between an organization's corporate governance procedures and the extent to which society's citizens establish the parameters of corporate accountability is known as CG (Aziz, 2021).

According to the Stock and Exchange Commission of Ghana (2020), CG is the mechanisms and methods used to oversee and regulate the relations of a corporate entity with the basic goal of maintaining stability between the accomplishment of corporate goals, societal expectations, and accountability to the interests of shareholders and other stakeholders. In order to maintain the corporation body's long-term existence, this notion underlines the crucial requirement to strike a balance between corporate and social goals. It is an organization and management technique that seeks to maximize value for shareholders and has traditionally been primarily linked to agency problems (Bunderson and Thakor, 2020; Sulimany et al., 2021). CG is all about striking a balance between the rights, obligations, and duties of the company's owners, managers, and employees. For all employees, stockholders, and other members of the corporate community, this system is meant to be transparent and ethical.

CG is the procedure through which a Regulatory Financial Organisation's board of directors, as well as upper management, oversee its financial activities, along with how its technique and goals are developed, its risk appetite and acceptance are ascertained, how its day-to-day activities are carried out, how depositors' interests are kept safe, and how shareholders' obligations are met while considering the needs of other stakeholders. This definition was provided by the Bank of Ghana in its 2018 CG guideline. A range of important public policy objectives may be accomplished in markets that are emerging with the aid of improved corporate governance. By reducing transaction costs and the cost of capital and supporting the expansion of the financial system, good corporate governance reduces the vulnerability of emerging economies to financial crises.

Systems of poor corporate governance threaten investor confidence and may discourage external investment. In recent years, a rising body of empirical literature has highlighted the importance of corporate governance. Strong corporate governance practices have been linked to increased profitability, increased productivity, and a lower risk of systemic financial failures for countries, according to studies (Col and Sen, 2019; Zhang, 2019; Owiredu and Kwakye, 2020). CG is a broad topic with many subtopics. CG is primarily focused on accountability and fiduciary responsibility, promoting the creation of standards and procedures to ensure moral behaviour and protect investors. Since the limited liability company's formation, CG has operated in a certain capacity. Internally and publicly, a well-run business will promote greater loyalty, giving it an advantage in comparison to its competitors.

Ghana's Securities and Exchange Commission (SEC), which was established in 2001, has created the CG Principles on Quality Standards for Listed Firms, which provide recommendations on developing internal corporate governance systems. The guidelines are designed to minimize the agency problem and improve business financial performance while ensuring that corporate governance processes are regularly evaluated by corporations. With the help of efficient administration and control of their operations, organizations may achieve their objectives thanks to CG, a dynamic collection of rules and processes. In Ghana, a new phase of corporate governance regulations intended to modernize the nation's administration of enterprises has been ushered in by the new Companies Act 2019 (Act 992) and instructions issued by regulatory agencies including the Registrar of Companies, the Bank of Ghana (BoG), and the SEC. Such regulations contain provisions recognizing the interests of minority shareholders and permitting the use of technology to resolve corporate regulatory issues.

The main goal of CG is to guarantee associated parties' transparency and responsibility in both financial and non-financial activities (OECD, 2019). Successful CG systems give shareholders peace of mind that their money will be returned together with a reasonable return. CG is essential to a company's long-term success, and its absence causes financial instability and sorrow (Srivastava et al., 2018). Hence, strong corporate governance fosters long-term economic growth by boosting business performance and increasing access to outside capital. It is based on the values of transparency and fairness in business dealings, in addition to the additional disclosures that are required to protect the values of many stakeholders (Arora and Bodhanwala, 2018). CG increases the firm's access to financing, fosters financial sustainability, and safeguards investors from inappropriate board misuse (Col and Sen, 2019).

Nonetheless, after a corporate crisis that damages the confidence of investors and the general public in the stock markets, standard procedures in CG are routinely pushed. Prior to corporate failures brought on by unethical behaviour at the top levels of management, good governance was not required by law and compliance was optional. As a response, the majority of nations have now enacted mandatory standards and rules to enhance CG systems. In the United Kingdom and the United States, respectively, the Cadbury Committee report from 1992 and the Sarbanes-Oxley (SOX) Act from 2002 are regarded as fundamental advances in CG rules and have been imitated by comparable codes of good governance across the world. The governance rules serve as a form of institutional normative pressure for national convergence (Heldeweg, 2017).

To ensure a company's long-term existence, CG is essential for understanding institutional effectiveness and productivity. It is challenging to offer accurate recommendations for future modifications since CG performance and procedures are so complex. Businesses can achieve their corporate objectives, protect investors' interests, and follow regulations thanks to a solid CG strategy (Varottil, 2021). By reducing agency issues that might affect both employees and others, CG, in particular, works to avoid opportunistic behaviour (Zhang, 2019). It creates systems for setting organizational goals and strategies for accomplishing them as well as for keeping track of performance. Wang and Muhammad (2020) contend that a strong corporate structure benefits a company's operations by cutting funding costs, boosting performance, and handling all stakeholders fairly. According to their argument, weak CG fosters hazardous financing methods, poor financial performance, and macroeconomic disasters like the East Asia Crisis of 1997.

CG is essential to modern business strategy and operations because it addresses important issues that have an impact on the company's existence and profitability. It covers every facet of a business, from choosing the board of directors and making strategic decisions to carrying out day-to-day tasks and adhering to the law. It makes it possible for companies to create a structure for sound business procedures, ongoing development, and risk mitigation. Paminto (2015). writes that "best practice corporate governance reduces risks for investors, attracts investment capital, and improves the performance of companies," all of which have "significant implications for the growth prospects of an economy."

Stakeholders and even whole economic sectors might stand to gain from better company governance. Stakeholders benefit from addressing conflicts of interest, implementing controls, creating an ethical framework, and mandating and promoting openness. Fundamentally, trust is linked to a corporation with a reputation for solid corporate governance, as stated by Bulathsinhalage and Pathirawasam (2017). The presence of an active group of independent directors on the board adds substantially to ensuring market confidence, which is especially important as foreign institutional investors increasingly use corporate governance as a consideration for determining which companies to invest in. It has also gained notoriety for the positive impact it has on the stock price of the company. It may be simpler for businesses to get affordable sources of finance if they have a clean corporate governance record (Bulathsinhalage and Pathirawasam, 2017). This suggests that corporate governance is crucial not only for shareholders but for the economy as a whole.

Similarly, González, Durán-Santomil and Alaraj (2021) argue that improved management, usage of the company's resources more strategically, and higher levels of corporate performance are the results of effective corporate governance, all of which boost the shareholder's investment value in the company's stock. The successful utilisation of administration practices concepts in businesses depends on board characteristics (Rajeevan and Ajward, 2020). Amongst some of the crucial characteristics of the board that have an immediate impact on effective internal control, the guidelines can be described: senior management duality, board composition, independent directors, balance with both non-officials and principal board members, the autonomy of trustees, recruitment and training of senior executives, and the function of provision of advice like the Candidacy, Compensation, and Independent Auditors in the firm's leadership, among others (Vitolla et al., 2020). As a result, the board's position is highly tough as it attempts to fulfil a variety of demanding obligations.

In addition to preventing incompetent management techniques that might result in bad decisions or controversies, the directors should make sure that businesses take advantage of possibilities that increase value to all parties involved (Lei et al., 2022). Recognizing that boards are made up of a group of people who integrate their skills and talents to aggregate and reflect the socially significant improvements to the take significant of their company is essential to understanding the work of the panel (Nursimloo et al., 2020). The board is tasked with coming up with and choosing original solutions for the company's progress as a vital asset. Given the ever-increasing significance of boards, it's critical to pinpoint the qualities that set certain boards apart from others. For the purpose of this study, the definition of board characteristics by Rajeevan and Ajward (2020) will be adopted by the study. It states that the successful utilisation of administration practices concepts in businesses depends on board characteristics.

The four theoretical views that were examined are taken into consideration while analyzing the four primary board elements that affect firm performance: composition, characteristics, structure, and procedure. According to Blagburn (2020), these four characteristics are highly connected but do not fully capture the nature of the boards of directors. Nonetheless, these four characteristics play a significant role in the study done on the connection between the performance of boards and that of companies. The various director kinds and the board's size are incorporated into Blagburn's (2020) definition of the board composition characteristic. They combine the director's history and personality when describing traits. Finally, the board structure attribute takes into account things like the sorts of committees and how they share information. The board's methods for deliberation are covered by the procedure characteristic, which is the last one. Arianpoor, (2019) identifies three board characteristics, including board size, board makeup, and independence, which are crucial in assessing the performance of a firm's corporate governance and the board. The authors go on to emphasize the importance of these traits in increasing board oversight and monitoring in order to ensure good company performance. In contrast, some scholars, like Kanakriyah, (2021), focus on the frequency of board meetings, while others, like Fariha et al. (2022), emphasize the significance of board committee structure on the efficacy of corporate governance practice in corporations.

Other scholars, like Bazhair, (2021), emphasize board diversity as the imperative feature in assessing a firm's corporate governance practice and board performance.

The tenets of agency theory indicate that agents (i.e., management) may be wary of enforcing rigid and enforceable corporate governance standards that would restrict the agents' freedom to act in their own best interests (Okolie and Uwejeyan,2022; Kabwe,2023). As a result, the board of directors is necessary for stakeholders to have so that it may play a part in controlling and overseeing the firm's operations on their behalf (Thakolwiroj and Sithipolvanichgul, 2021; Mendiratta, 2023; Khudhair et al., 2019).

According to earlier studies, boards have two sets of tasks that can and frequently do conflict with the board's attention. Companies specifically elect a board to act as a measure of control for company management and to offer operational direction to the company's leadership team (e.g., Badru et al.,2020; Eldaia et al.,2019; Li and Wang,2022).

The board of director components discussed and used in this study apply to boards that focus on either managing management or giving it advice. Boards do not view these two goals as being incompatible with one another, and there is no "one size fits all" paradigm that all boards may use (Li and Wang, 2022). (Badru et al.,2020; Joo et al.,2021). As a result, the traits that are crucial to both the monitoring and the directing roles obviously overlap. In light of this, the same fundamental qualities are crucial regardless of the board's primary emphasis (Badru et al.,2020; Chung et al.,2019; Li and Wang,2022). According to prior studies (e.g., Rossignoli et al., 2021; Deutsch 2005; Brown et al. 2011; Roberts 2012), the effectiveness of the board of directors can be influenced by a number of factors, including the members' competence or expertise, their knowledge of the industry, and how active they are (i.e., how frequently they meet with the CEO and CFO to monitor their activities and offer advice).

2.1.1.1 Board Size

The overall number of directorships is the concept of board size (Potharla and Amirishetty, 2021). All managing directors and non-principal directors should be on a panel with the ideal number of members (Chindasombatcharoen et al., 2022). For the purpose of running the business, the board's efficacy in terms of structure is crucial. Board composition was first discussed by researchers by L McLeod et al. (2021). According to Potharla and Amirishetty (2021), the tendency for board size is a result of managerial and technical development, which eventually results in cost-cutting and shrinking. Potharla and Amirishetty (2021) hypothesised that bigger boards might not be as useful as smaller ones. Just so many governors in a company may result in agency conflicts since some may cling along for the externalities (Shahwan and Almubaydeen, 2020).

2.1.1.2 Board Independence

The executive director is a top executive who, with the exception of attendance charges, has no substantive or financial connection to the corporation or its connected parties (Musleh Alsartawi,). The concerns of investors and other collaborator are better protected when board independence make up the majority of the panel (Al Amosh and Khatib, 2022). Expanding the number of them can improve board effectiveness by improving a business's accessibility to outside assets and contacts (Naciti, 2019).

2.1.1.3 CEO Chair Duality

Whenever a company's CEO and board chairman are the same person, this is known as CEO duality (Freire, 2019). Directors must try to find a middle ground between the conflicting implications of CEO duality (Li and Yang, 2019). On the other hand, agency authors emphasised the negative effects of CEO dualities on organisational effectiveness, since the dual role of a CEO may cause him or her to prioritise monetary benefit above the success of a company (Nuanpradit, 2019). Therefore, it stands to reason that CEO duality might result in problems with responsibility between investors and executives (Alves, 2021).

2.1.2 Earnings Management

Bisogno and Donatella (2022) defined earnings as consumable or upshot revenue, a separate component of the accounting records. The current value of potential income received from a business is its characteristic peak (Santos-Jaén et al., 2021). Greater profits indicate a rise in the institution's worth, whereas declining profits indicate a reduction in the institution's value (Kliestik et al., 2021). In accordance with Lev's concept, earnings management as a sequence of decisions made by the leadership of businesses to increase the existing quarterly revenue with no need for a matching increase in the long-term profit margins of the businesses (Durana et al., 2021). Earnings reflect a corporation's economic success and future development potential, inspiring corporate clients to evaluate existing efficiency to enhance management tasks (Fan et al., 2019). As a result, businesses must publish comprehensive financial information that allows investors and other interested parties to track their economic growth and make investment strategies (Ruwanti et al., 2019). The division of ownership and administration is the norm in the company.

In order to maximise earnings, shareholders need qualified management to serve as their representatives (Yung and Root, 2019). When shareholders and leaders are separated, there may be an informational imbalance that permits managers to act contrary to their obligations to operate a business in the best interests of shareholders (Nalarreason et al., 2019). For the purpose of this study, the definition of earnings management by Durana et al. (2021) will be adopted by the study. It states that earnings management is a sequence of decisions made by the leadership of businesses to increase the existing quarterly revenue with no need for a matching increase in the long-term profit margins of the businesses.

2.2 Theoretical Literature Review

An abundance of knowledge and information in the scope of innovation makes the research process challenging, difficult, and lengthy (Ghaleb et al., 2022). Thus, to focus the research direction, three underpinning theories were used as a research foundation in supporting and addressing the gap, and as a guide to align this research into an appropriate direction. The researcher examines underlying ideas in this part, as well as the impact of board characteristics on earnings management: a case of selected listed companies in Ghana. The Agency Theory and its extension to the Accountability and local governance theory serve as the foundational theories for this investigation. Theoretical frameworks provide a clear prism or context through which a subject is studied; they explain the context and the connections between the various factors and dimensions.

2.2.1 Agency Theory

Agency theory is the most well-liked and has drawn more recognition from scholars and professionals, based on the most recent Kajola et al. (2020). Therefore, the central tenet of institutional theory is that decision-makers act for their own advantage and are self-centered, which results in them paying less consideration to large shareholders (Firnanti and Pirzada, 2019). This concept depends on the assumption that in a corporate entity, there is a significant differentiation (superintendent) and managerial staff (operative), and this leads directly to expenses involved with solving the dispute only among stockholders and the representatives (Ghaleb et al., 2022). According to the agency theory, a key component of good administration practices is balancing the competing fascination of directors and investors (Rajeevan and Ajward, 2020). According to Vitolla et al. (2020), one of the institutional arrangements that have attracted the greatest interest in leadership studies is the board of trustees. As a result, numerous investigations regard a variety of independent directors and composition-related qualities to be the key elements of corporate governance excellence that can improve business success (Al-Absy et al., 2020). In accordance with the agency hypothesis, the involvement of non-executive boards will improve corporate administration since it would serve the proprietors' (stockholders') paramount objectives (Kajola et al., 2020). Therefore, the dual job of chairing the board and serving as the chief executive officer or management team poses a danger to effective internal control (Firnanti and Pirzada, 2019). The theory outlines the basic agency issue that arises when proprietorship and oversight are dissociated in contemporary organizations. Small private businesses must expand beyond the financial means of a single owner in order to thrive in this cutthroat commercial climate. As a result, "coming public," as it is often known, is seen as an effective and inexpensive approach to generate money (which is interest-free) for corporate development (Ghaleb et al., 2022).

2.3 Empirical Literature Review

This section assessed the research on prior studies that addressed the study's objective. These include the impact of board characteristics on earnings management: a case of selected listed Companies in Ghana. Literature related to the study's goal of the impact of board characteristics on earnings management: a case of selected listed Companies in Ghana in previous and ongoing research projects was evaluated.

The research of Githaiga et al. (2022) adds to the current body of knowledge by empirically investigating the impact of board features on earnings management (EM) from the viewpoint of emerging regions. To address the possibility of endogeneity and reverse causation, the researchers used the system generalized method of moments (SGMM) estimation model. The results showed that the larger the board, the greater the EM. There was a negative and statistically significant relationship between board independence, board gender diversity, board financial competence, and EM, according to the results. In the future, we need to distinguish between an accounting expert and a non-accounting expert based on additional criteria for financial knowledge.

Al Azeez et al. (2019) investigated if the Board Characteristics had any influence on Earnings Management across the world's international Oil and Gas Corporations. Indicators of Board Quality (board independence, board size, board diversity, and CEO duality). For this study, researchers used secondary data and a quantitative methodology to collect information on 71 businesses picked from the Fortune 250 over the course of a year (2016). According to the results of this research, an independent board may greatly help reduce profit management. A bigger board makes it harder for its members to keep tabs on management; therefore it has little bearing on the efficiency with which earnings management may be reduced. In spite of the fact that gender diversity helps cut down on earnings management, Separating the roles of CEO and Chair of the Board may strengthen the Board of Directors monitoring and control capabilities, as well as the Directors' information processing capabilities, as The CEO Duality has a substantial influence on the rise of profits management.

The purpose of the research conducted by Rajeevan and Ajward (2020) is to determine whether and how much earnings management occurs at a subset of publicly traded Sri Lankan firms that meet certain criteria for good corporate governance. Seventy of the largest publicly traded companies on the Colombo Stock Exchange (CSE) were chosen to represent the beverage, food and tobacco, diversified, hotel and travel, manufacturing, oil palms, and health care sectors, together accounting for 59.9% of the CSE's total market capitalization in the period 2015–2017. Executive leadership by combining the roles of CEO and chair has been shown to improve financial performance, according to this research.

Using an Indian case study, Kapoor and Goel (2017) investigate whether or not there is a connection between earnings management and the composition of the board of directors and the firm's bottom line. The promoter-dominated shareholders model predominates in Indian business ownership. This investigation is the first of its kind to use a panel data framework and a fixed effect model to account for endogeneity that varies with time. Furthermore, it adds to the literature by investigating the link between audit committee independence and earnings management via the lens of a company's profitability. Earnings management is shown to be correlated with the independence of the audit committee, although this relationship is tempered by profitability. Managers of a successful business would have little incentive to fiddle with their pay. This indicates that in successful companies, independent audit committees are more effective at monitoring profit management than in non-profit companies. We also find that independent directors who hold numerous directorships perform poorly in their monitoring duties. The results have substantial implications for policymakers interested in analyzing board efficiency and profit management and enhancing policies for corporate governance via the lens of profitability and associated factors.

Saona et al. (2020) analyze the characteristics of the ownership structure and the board of directors and how they influence managerial opportunism, as shown in the management of accounting profits. This research adds to the existing body of knowledge by exploring the impact of corporate governance practices in Spain on earnings management at both the business and national levels. The findings show that accounting discretion is exercised differently depending on the effectiveness of the corporate governance structures in place. We showed that there is a U-shaped inverse link between insider ownership and earnings manipulation and that the degree to which profits are manipulated is inversely proportional to the voting rights of the controlling shareholder. In terms of board composition, we find that boards with a higher number of women members, an audit committee, and a bigger proportion of outside independent directors effectively monitor management and limit their ability to manipulate profits. The opposite is true; when there are two people on the board, there is a greater chance that financial statements may be manipulated for ulterior motives. We discovered that the business sector's discretionary capacity to inflate financial statements is diminished when the institutional framework in Spain is improved. The results show how important it is to strengthen the laws and regulations toward a more open disclosure of financial statements.

Cho and Chung (2022) examine the connection between profit management, board makeup, and ownership structures of Vietnamese companies. The size of the board and the number of independent directors are two measures I use to characterize boards, whereas ownership stakes held by board members, independent directors, and the CEO are indicators of how companies are run. To approximate the practice of earnings management, I use a modified version of the Jones model to evaluate discretionary accruals. Earnings management is inversely correlated with board size, outside director ownership, and CEO ownership, and positively correlated with board ownership, according to my analysis of companies listed on the Ho Chi Minh and Hanoi Stock Exchanges between 2012 and 2017. There is no statistically significant relationship between the percentage of outside directors and profit manipulation. Learn how to implement regulatory changes that will increase financial disclosure among Vietnamese businesses with the help of this research. Companies should have a minimum number of directors mandated by law. Establishing an independent outside director system inside Vietnam's corporate legislation may improve the board of directors' long-term viability, thus a policy requiring boards to include such directors is essential.

2.4 Conceptual Model/ Framework

The two major pillars of the theoretical model are the Agency Theory (see Figure 2.1). For businesses that have historically controlled earnings, embezzlement is far more prevalent. Customer requirements drive the leadership or those responsible for accountability to use deceptive accounting procedures or value-destroying earnings manipulation techniques. According to the fraud triangle hypothesis, incentives to satisfy internal and exterior requirements, possibilities, and justifications lead to financial declaration deception. Administrators moderate revenues using real earnings administrations, according to the circumstances. The committee and board-related features are crucial components of a company's structure and oversight and can serve as a preventative measure against further earnings control illegalities, as stated by Rankin (2012). Independent (Board size, Board Independence, and CEO Chair Duality), and variables are all included in the overall idea dependent (Earning Management). In this study, three types of variables were employed. It is anticipated that the impact of board characteristics on earnings management: a case of selected listed Companies in Ghana.

An essential topic of research in the fields of accounting, finance, and corporate governance is the relationship between corporate governance and earnings management. Corporate governance is the term used to describe the procedures and frameworks used to direct and manage businesses. On the other side, earnings management entails the modification of financial statements to bring about particular financial results or to paint a more favourable picture of a company's financial performance. Stronger corporate governance is often correlated with lower levels of profit management, according to research in this field. Better-governed companies typically publish their financial data more transparently and use manipulative tactics less frequently. In conclusion, there is a considerable connection between corporate governance and earnings management. Earnings management can be significantly discouraged by good corporate governance practices, such as independent boards, audit committees, adherence to accounting standards, and regulatory scrutiny. Strong governance practices increase a company's likelihood of providing accurate and trustworthy financial information, which can increase investor confidence in the financial markets.

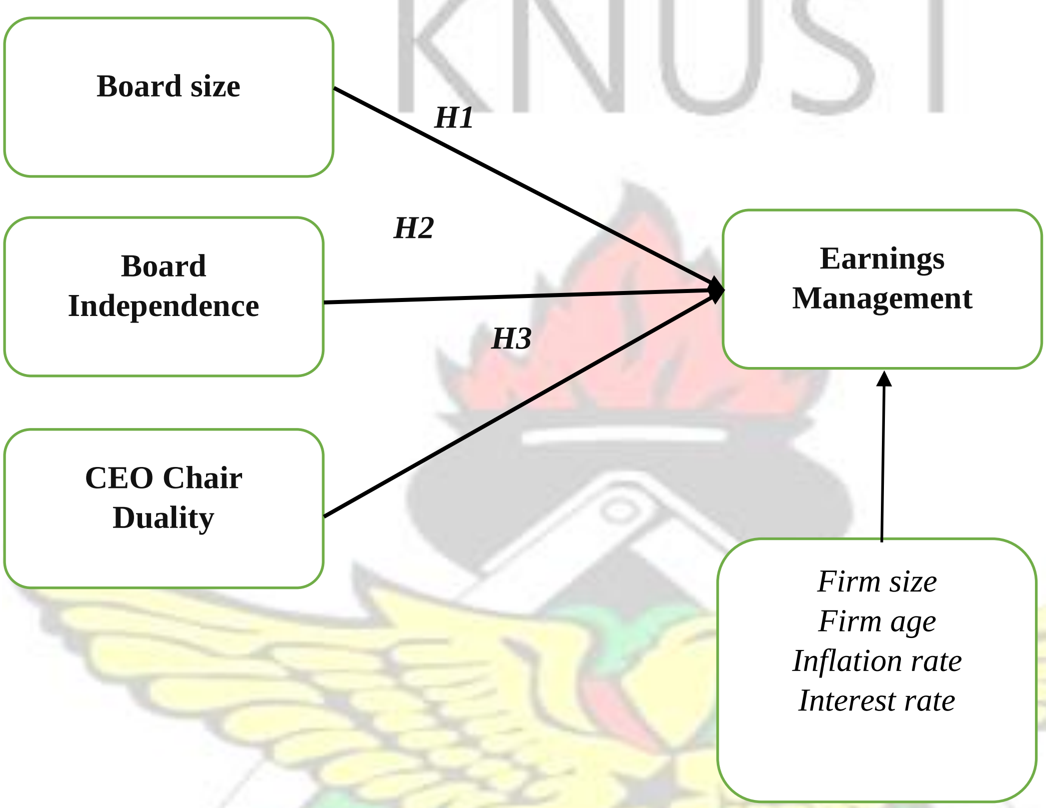

Figure 2. 1 Conceptual Framework

2.4.1 Hypothesis 1: Board Size on Earning Management

Corporate governance and accounting research are interested in the relationship between board size and earnings management. In order to fulfil specific profit targets or to offer a more favourable financial picture than the underlying economic reality, a company's financial statements may be altered as part of earnings management. On the other hand, board size refers to the number of directors on the board of directors of a corporation. A principal-agent relationship between shareholders (the principals) and managers (the agents), according to agency theory, exists. Greater boards' ability to supervise managerial behaviour and lessen the risk of earnings management may be enhanced. A bigger board may be able to offer a wider range of viewpoints and be more independent from management. According to the Resource Dependence Theory, a firm's requirement for outside resources may have an impact on the size of the board. bigger access to resources may be correlated with larger boards, and businesses with bigger resources may be less likely to use earnings management to achieve short-term financial objectives.

In conclusion, there is a complicated and context-specific relationship between board size and earnings management. Although there is theoretical potential for a larger board to provide better supervision and potentially lower earnings management, empirical evidence is conflicting and other factors, such as board makeup, managerial control, and regulatory influence, play a considerable effect. Companies should think about adopting a comprehensive approach to corporate governance, paying attention not just to the size of the board but also to the calibre and independence of the directors, as well as to their capacity to properly monitor and stop earnings management.

The function of board size in the management of business earnings has been the subject of numerous research, and the majority of those investigations found that the number of directors had a substantial and positive impact on managing earnings (Shahwan and Almubaydeen, 2020). According to Al Azeez et al. (2019), one of the key factors that significantly affects the administration of corporate profitability is board size. Statistical evidence from earlier studies has shown a weak correlation between board size and efficient manager oversight. According to Buertey et al. (2020), the likelihood of divulging potential aspects of financial information is significantly higher than the likelihood of revealing significant risks because the size and gender inequality of the board are more important and have a larger impact on risk financial reporting (Bzeouich et al., 2019). The size of the board is regarded as a major instrument in this research. Hence, it is anticipated that a positive influence of Board size on Earning Management:

H_1*. *Board size has a positive and significant effect on Earning Management

2.4.2 Hypothesis 2: Board Independence on Earning Management

One of the most important aspects of corporate governance and financial reporting is the connection between board independence and earnings management. Earnings management is the practise of modifying financial statements to produce particular financial results or to provide a better picture of a company's financial health. On the other hand, board independence refers to the make-up of a firm's board of directors in terms of how free from conflicts of interest and influence from company management its members are. In conclusion, there is evidence that board independence and earnings management are related. Independent directors are frequently regarded as crucial defences against managerial opportunism and falsified financial reporting.

The credentials of independent directors, the regulatory framework, and the particular context in which they operate are only a few of the variables that affect how effective they are. Board independence is prioritised by companies that are more likely to have sound corporate governance and trustworthy financial reporting. According to Alqatan (2019), a board with a preponderance of outside shareholders offers the business a broader range of expertise and is better able to oversee and control the administrators, which reduces profits administration. Board independence is regarded as a major Independent director is regarded as a major (Orazalin, 2020). Chatterjee (2020) offered proof that the inclusion of impartial non-executive members on the board and the independent auditor, as well as the financial management professionals on the internal auditors, results in less earnings manipulation in terms of monetary and accountancy knowledge (Ferris and Liao, 2019). The number of conferences held is thought to be an important indirect indicator (Ferris and Liao, 2019). Hence, it is anticipated that a positive influence of Internal Board Independence on Earning Management:

H₂*. *Board Independence has a positive and significant effect on Earning Management

2.4.3 Hypothesis 3: CEO Chair Duality on Earning Management

Research on corporate governance and accounting is particularly interested in the connection between CEO-chair duality and earnings management. The term "CEO-chair duality" describes the circumstance in which the same person serves as a company's CEO (Chief Executive Officer) and as its board chair. When these responsibilities are divided, however, there is a distinct chairperson of the board and a CEO. Here, we'll talk about how CEO-chair duality and earnings management could be related. The separation of the CEO and chairperson duties can be viewed as a governance tool that reduces conflicts of interest, in accordance with agency theory. The chairman can independently oversee the CEO's operations, including financial reporting, where the responsibilities are distinct. This division of powers may not exist in CEO-chair duality, potentially allowing the CEO to have more control over choices about financial reporting. According to stewardship theory, CEOs are accountable stewards of the company's resources, and there may be circumstances in which merging the CEO and chair responsibilities improves the effectiveness of decision-making. In such circumstances, if the CEO acts in the best interests of shareholders, earnings management may not always improve with CEO-chair duality.

In conclusion, there is a complicated and context-dependent relationship between CEO-chair duality and earnings management. Although there is some evidence that CEO-chair duality may boost earnings management because it reduces scrutiny, other factors including firm size, industry, and regulatory environment can also have a big impact. In order to reduce the possibility of earnings management, effective corporate governance should put special emphasis on the calibre and independence of the board members, their capacity to supervise financial reporting, and the alignment of management and shareholder interests. This is true independent of the CEO-chair duality. An autocratic individual can give a specific pathway and be more open to adjustments with concentrating responsibility, therefore the CEO-Chairman duality arrangement can enhance the company's economic effectiveness and quality of income statement (Nuanpradit, 2019). CEO-Chairman duality is regarded as a major independent factor (Rajeevan and Ajward, 2020). Hence, it is anticipated that a positive influence of CEO Chair Duality on Earning Management:

H_3**.** *CEO Chair Duality has a positive and significant effect on Earning Management*

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The primary goal of this research is to analyse how board characteristics affect earning management. In this section, details of the methods that are employed in the theoretical framework to test the hypotheses are provided. The parts that follow describe the study's research design, data, operationalisation and measurement, and analysis.

3.2 Research Design

In a study, research design refers to the steps taken before data collection ever begins (Creswell and Plano Clark,2007). While Saunders, Lewis, and Thornhill (2007), claim that research design provides the frameworks for collecting and evaluating the necessary data, Rowley (2002) argues that research design preferences are based on the goals and purposes of the research prepositions, the level of knowledge, and the research viewpoint. To this end, this study employs a quantitative explanatory research design. Quantitative research, as explained by Yilmaz (2013), involves the systematic collection, tabulation, and analysis of numerical data to establish causal relationships between previously unrelated factors. Therefore, the purpose of this research is to apply statistical methods to explore the connection between board characteristics and financial performance.

The choice of research design and method in this study was influenced by the researcher's underlying philosophies and beliefs, known as the research paradigm. Researchers have the option to adopt quantitative, qualitative, or mixed methods of research based on their understanding and perspectives. Creswell and Creswell (2017) emphasized that researchers need to consider strategies of inquiry, assumed philosophies, and research methods when deciding on the research design.

According to Saunders et al. (2019), the philosophy of research aims to acquire quantifiable and measurable knowledge through observation, data collection, and interpretation. Positivists, for example, are interested in understanding the relationships between variables and proving hypotheses. They believe that events in the physical world should be objectively understood based on observable evidence (Hiller, 2016). In line with the positivist worldview and the emphasis on the quantitative approach, this study adopts a positivist paradigm. The quantitative approach, like positivism, focuses on the application of statistical tools to establish causality (Kivunja and Kuyini, 2017). This method allows for a clear examination of the scope and complexity of variable-cause relationships, enabling researchers to analyze data using statistical techniques and draw objective conclusions.

According to Campbell, Moore, and Shrives (2006), there is a shift toward a stronger emphasis on the explanatory research design in the study of corporate governance as it is an effort to lessen the role of subjectivity in findings. Therefore, the explanatory design is used in various studies of corporate governance (Hennigs, Wiedmann, Behrens, and Klarmann, 2014; Liem, 2016) to determine the scope and nature of the causal links between board size, CEO duality, and board independence, and earnings management. The purpose of this design is to analyze the context to explain the patterns of interactions between the study's variables and to evaluate the effects of specific modifications on preexisting standards and diverse processes (Cresswell, 2013).

3.3 Sample

The population includes companies trading on the Ghana Stock Exchange. Listed companies are considered because they are the most prominent businesses in Ghana from which information on board characteristics and revenue management can be easily accessed. Being publicly traded increases the likelihood that these companies will be able to hire a high-quality board of directors and reap the benefits of their efforts. Companies in this category have easy access to the funds and materials they need to not only stay afloat but also thrive and advance in the market. The companies are surveyed for a period of 12 years, thus, from 2010 to 2021. In the end, data is collected from 14 different companies, which yields a sample size of 168 observations. Only 13 companies serve as the final sample for this study because of incomplete data from 2010 to 2021 of some companies. Therefore, only the 13 companies that have complete data within the years under study are considered for this study. This includes all 9 banks and 4 manufacturing firms. Therefore, the 9 banks and 4 manufacturing firms are used for this study because they have complete data on variables used to measure earning management and board characteristics in this study.

3.4 Data

Businesses that are traded on the Ghana Stock Exchange are used for this study. Particularly, companies in the manufacturing and financial sectors. The study uses secondary data extracted from the annual reports of the selected firms. Secondary data refers to information that has been collected over time, while primary data is information gathered directly by the researcher in order to better understand and handle the study topic at hand (Dwigo, 2019). Since secondary data sources on the variables of interest in this study are readily available, secondary sources of data are preferred in this study compared to primary data which would have been collected firsthand from respondents. Thus, the financial statements of companies listed on the Ghana Stock Exchange are the source of information for this study. Given the nature of the variables under consideration, the data acquired for this study is to take the form of panel data. This is achieved by compiling information from the last 12 years (2010-2021), Panel data, also known as longitudinal or cross-sectional time-series data, is a type of data collection in which the actions of entities are observed over time (Costa and Sarmento, 2021).

3.5 Data Analysis

The STATA statistical software is the software of interest in this study. In order to verify the assumptions, the Generalized Least Square (GLS) Random- Effects model is used to examine the relationship between the variables. In this investigation, the GLS regression is chosen over a pooled OLS regression, to account for time series data's inherent autocorrelation and heteroskedasticity, as well as the omitted variable bias, the GLS regression is a better choice. To improve the trustworthiness of the coefficient estimations, it makes the assumption that the regression parameters do not vary over time or across different cross-sectional units. If the unobserved heterogeneity is not connected with the independent variables, then random-effect estimating is the appropriate method to use. As a result, the Hausman test's assumption and validity for random-effects estimate are used. Considering the lack of significance in the Hausman test statistic, it seems reasonable to conclude that random effects estimation did not violate its assumptions.

3.6 Model Specification

$$EM_{it} = \beta_0 + \beta_1 CD_{it} + \beta_2 BS_{it} + \beta_3 BI_{it} + \beta_4 AGE_{it} + \beta_5 FSZ_{it} + \beta_6 In_{it} + \beta_6 IR_{it} + \epsilon_{it}$$

(1)

Where: EM is the earning management; CD is a CEO-duality, BI is board independence; BS is board size; AGE is the age of the firm; FSZ is the firm size, In is inflation, IR is the interest rate and ϵ_{it} is the error term unique for each equation.

3.7 Diagnostic Test

3.7.1 Heteroscedasticity and Autocorrelation

Economic issues like heteroscedasticity and autocorrelation, which could introduce errors in the estimate, undermine the credibility of the results. This is because most indicators of the financial and economic climate are inherently unpredictable. It is common for panel data sets to exhibit heteroscedasticity, a statistical phenomenon in which the variance of the error term varies over time. The term "autocorrelation" refers to a non-zero correlation between error components across time periods (Shin and Sung). Statisticians address these worries by employing the Breusch-Godfrey and Breusch-Pagan tests, which assess autocorrelation and heteroscedasticity, respectively. Alternatively, the Breusch-Pagan test accepts the null hypothesis that heteroscedasticity does not exist and rejects the alternative hypothesis that it does. It is crucial for Breusch Godfrey that the error terms be assumed to be unconnected. In the event that the results of these tests are statistically significant at the 5% level, the null hypothesis is rejected; otherwise, it is accepted.

3.7.2 Hausman Test

A Hausman Specification Test is used to decide between using fixed and random effects. Before doing a panel data regression, researchers often use the Hausman specification test to decide if the fixed effect or random effect model estimation is more appropriate. Generally speaking, the fixed effect is used in the model estimation if the probability value is less than 0.05 (i.e., p 0.05), indicating a link between the error terms and explanatory variables; otherwise, the random effect is a more effective estimator of the parameters in question (Greene, 2012). Here, the Hausman test is used to choose between the two estimators.

3.8 Variable Description

Variable	Measurement	Sign	Reference
Dependent			
Earnings Management (REMi,t)	The dependent variable of this study is the earnings management measured using the Jones (1991) and Kori et al.,(2005) model.		Dang, Hoang and Tran, (2017); Githaiga, Muturi Kabete and Caroline Bonareri, (2022)
Independent Variable			
CEO-Chair duality (CEOCHAIR)	Coded as “1”, if the CEO and Chairman roles are separated, and “0” otherwise	+/-	Rajeevan and Ajward, (2019)
Board Size (BSIZE)	Total number of board of directors	+/-	Rajeevan and Ajward, (2019)
Board Independence (INDBD)	Number of independent non-executive directors on the board	+/-	Rajeevan and Ajward, (2019)
Control Variables			
Firm size	log of total assets	+/-	Rajeevan and Ajward, (2019)
Firm age	Number of years since incorporation	+/-	Rajeevan and Ajward, (2019)
Inflation rate	The annual growth rate of the GDP implicit deflator	+/-	Salem Dezfuli et al. (2019)
Interest rate	Lending interest rate adjusted for inflation as measured by the GDP deflator.	+/-	Salem Dezfuli et al. (2019)

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter deals with the presentation and interpretation of the findings of the research analysis. The following outcome comprises variable descriptions, correlation, and panel regression model estimations, specifically random effect. This is followed by an interpretation and discussion of the results with existing literature and theories

Table 4. 1 Descriptive Statistics

Variable	Mean	Max	Min	Std. Dev	Observation
ERM	9.231	511.567	-117.171	44.543	156
CEOD	0.103	1.000	0.000	0.304	156
BSIZE	9.186	15.000	5.000	1.759	156
INDBD	3.981	9.000	0.000	1.936	156
FS	17.625	23.636	0.000	8.311	156
FA	41.346	125.000	1.000	28.461	156
INFR	12.793	23.896	7.144	4.681	156
INR	3.739	7.839	1.430	1.861	156

Source: Author Output (2023):

Where ERM is Earnings Management, CEOD is CEO-Chair duality, BSIZE is Board Size, INDBD is Board Independence, FS is Firm size, FA is Firm age, INFR is the Inflation rate, and INR is the Interest rate

Earnings Management (ERM), the mean value is 9.231, indicating an average level of earnings manipulation within the firms. The maximum value of 511.567 suggests that some companies may engage in substantial manipulation practices, while the minimum value of -117.171 implies the presence of negative earnings management in certain cases. The standard deviation of 44.543 signifies a moderate level of dispersion in earnings management across the firms. CEO-Chair duality (CEOD), the mean value of 0.103 indicates a relatively low occurrence of CEO-Chair duality within the companies. The variable takes a binary form, where 0 represents the absence of duality, and 1 represents its presence. The maximum value of 1.000 suggests that some companies have combined the roles of CEO and Chair, while the minimum value of 0.000 indicates cases where these roles are separate.

The standard deviation of 0.304 signifies some variability in CEO-Chair duality across the firms. Regarding Board Size (BSIZE), the mean value is 9.186, indicating an average number of members serving on the board of directors. The range between the maximum value of 15.000 and the minimum value of 5.000 shows that board sizes vary within the observed companies. The standard deviation of 1.759 suggests a moderate level of dispersion in board sizes, indicating that some companies have larger or smaller boards compared to the average.

Also, Board Independence (INDBD), the mean value of 3.981 suggests a moderate level of board independence within the sample. The variable represents the number of independent directors serving on a company's board. The maximum value of 9.000 indicates cases where the board is entirely composed of independent directors, while the minimum value of 0.000 suggests the absence of independent directors.

The standard deviation of 1.936 indicates variability in board independence across the observed companies. Firm Size (FS) is represented by a mean value of 17.625, which indicates an average size for the companies in the sample. The maximum value of 23.636 suggests the presence of larger firms, while the minimum value of 0.000 implies the inclusion of smaller firms. The standard deviation of 8.311 signifies a considerable dispersion in firm sizes, indicating the presence of both small and large companies within the dataset. Firm Age (FA), the mean value of 41.346 indicates an average age for the companies in the sample. The maximum value of 125.000 suggests the presence of relatively older firms, while the minimum value of 1.000 implies the inclusion of younger companies. The standard deviation of 28.461 indicates a considerable dispersion in firm ages, representing a range of both established and recently formed companies.

Regarding the Inflation Rate (INFR), the mean value is 12.793, indicating an average inflation rate within the sample. The range between the maximum value of 23.896 and the minimum value of 7.144 shows variation in inflation rates across the observed companies.

The standard deviation of 4.681 signifies some level of dispersion in inflation rates, reflecting different economic conditions affecting the firms.

Table 4. 2 Correlation Matrix

S/N	Variables	1	2	3	4	5	6	7	8
1	ERM	1							
2	CEOD	0.091*	1						
3	BSIZE	0.0893*	0.4904*	1					
4	INDBD	-0.0639	0.5033*	0.2820*	1				
5	FS	0.0409*	-0.083	0.0594*		1			
6	FA	0.0994*	0.0342	.0489*	0.0440*		1		
7	INFR	0.2094*	0.0499*	0.1803*	0.0342	0.0309	0.049*	1	
8	INR	-0.148*	0.0299*	0.0438*	0.0334	-0.004	.0499*	0.0308	1

Source: Author Output (2023):

Where ERM is Earnings Management, CEOD is CEO-Chair duality, BSIZE is Board Size, INDBD is Board Independence, FS is Firm size, FA is Firm age, INFR is the Inflation rate, and INR is the Interest rate

Table 4.2 presents a correlation matrix that measures the relationships between different variables included in the analysis. The correlation coefficients range from -1 to 1, with positive values indicating a positive correlation, negative values indicating a negative correlation, and values close to zero indicating a weak or no correlation. "ERM," which represents Earnings Management, shows a weak positive correlation (0.091) with the variable "CEOD," CEO-Chair duality. This suggests that there is a slight tendency for companies with CEO-Chair duality to engage in some degree of earnings management. However, the correlation coefficient is relatively low, indicating a weak relationship. "BSIZE," which represents Board Size, exhibits a weak positive correlation (0.0893) with both "CEOD" and "INDBD" (Board Independence). This implies that larger board sizes are slightly associated with CEO-chair duality and higher board independence. The correlation coefficients suggest a weak relationship, indicating that board size alone does not strongly determine CEO-chair duality or board independence.

"INDBD," Board Independence, shows a weak positive correlation (0.5033) with "CEOD" and a weak positive correlation (0.2820) with "FS" (Firm Size). This suggests that companies with higher board independence are slightly more likely to have CEO-chair duality and be larger. Again, the correlation coefficients indicate weak relationships, implying that board independence is influenced by multiple factors beyond firm size and CEO-chair duality. Also, "FS," Firm Size, displays a weak positive correlation (0.0594) with "BSIZE" and a weak negative correlation (-0.083) with "CEOD." This suggests that larger firms tend to have slightly larger board sizes but are less likely to have CEO-chair duality. However, the correlation coefficients indicate weak relationships, indicating that firm size alone does not strongly determine board size or CEO-chair duality. "FA," Firm Age, shows weak positive correlations with "ERM," "CEOD," and "INFR" (Inflation rate), suggesting that older firms may have slightly higher levels of earnings management, CEO-Chair duality, and inflation rates. However, the correlation coefficients are relatively low, indicating weak relationships.

Regarding "INFR," Inflation Rate, exhibits weak positive correlations with "ERM," "CEOD," "BSIZE," and "INDBD," indicating that higher inflation rates are weakly associated with higher levels of earnings management, CEO-Chair duality, larger board sizes, and higher board independence. However, the correlation coefficients suggest relatively weak relationships. Finally, "INR," Interest Rate, shows a weak negative correlation (-0.148) with "ERM," indicating that higher interest rates are weakly associated with lower levels of earnings management. The variable "INR" also displays weak positive correlations with "CEOD," "BSIZE," "INDBD," and "INFR," suggesting weak relationships with these variables.

4.2 Panel Regression Estimation

The presented findings below are the results of a random effects estimation model, which aims to understand the relationship between the predictors (CEOD, BSIZE, INDBD, FS, FA, INFR, and INR) and the dependent variable (Earnings Management). The coefficients, standard errors, t-statistics, and p-values are provided for each predictor, along with additional statistical measures such as R-squared, adjusted R-squared, Durbin-Watson statistic, Breusch-Pagan test, and Hausman test.

Table 4. 3 Random Effect Estimation

	Earnings Management			
Predictors	**Coefficient**	**Standard error**	**T-statistics**	**P-Value**
Intercept	0.300	6.25	4.8	<0.001
CEOD	0.015	4.72	3.18	<0.001
BSIZE	0.017	1.3	1.03	0.191
INDBD	0.005	2.52	2.04	0.012
FS	0.016	3.62	3.59	<0.001
FA	0.007	1.52	1	0.13
INFR	0.0002	0.02	0.01	0.981
INR	0.003	2.59	2.44	0.008
R-squared	0.614			
Adjusted R-squared	0.593			
Durbin-Watson stat				0.845
Breusch-Pagan Test				0.687
Hausman Test				0.845

Source: Author Output (2023):

Where ERM is Earnings Management, CEOD is CEO-Chair duality, BSIZE is Board Size, INDBD is Board Independence, FS is Firm size, FA is Firm age, INFR is the Inflation rate, and INR is the Interest rate

The intercept coefficient of 0.300 indicates the expected value of earnings management when all other predictors are zero. The standard error of 6.25 reflects the precision of the coefficient estimate, while the t-statistic of 4.8 suggests that the intercept is statistically significant at a high level of confidence ($p < 0.001$). Among the predictors, "CEOD" (CEO-Chair duality) has a coefficient of 0.015, indicating that an increase in CEO-Chair duality is associated with a positive change in earnings management. The coefficient is statistically significant with a t-statistic of 3.18 ($p < 0.001$), suggesting that CEO-Chair duality has a significant impact on earnings management. The coefficient for "BSIZE" (Board Size) is 0.017, indicating a positive relationship between board size and earnings management. However, the coefficient is not statistically significant at the conventional level ($p = 0.191$), as the t-statistic of 1.03 does not exceed the critical value. Regarding "INDBD" (Board

Independence), the coefficient of 0.005 suggests a positive association between board independence and earnings management. This coefficient is statistically significant with a t-statistic of 2.04 ($p = 0.012$), indicating that higher levels of board independence are associated with increased earnings management.

The coefficient for "FS" (Firm Size) is 0.016, indicating a positive relationship between firm size and earnings management. The coefficient is statistically significant with a t-statistic of 3.59 ($p < 0.001$), suggesting that larger firms are more likely to engage in earnings management. The coefficient for "FA" (Firm Age) is 0.007, implying a positive relationship between firm age and earnings management. However, the coefficient is not statistically significant at the conventional level ($p = 0.13$), as the t-statistic of 1 does not exceed the critical value. The coefficient for "INFR" (Inflation Rate) is 0.0002, indicating a very weak positive relationship between the inflation rate and earnings management. The coefficient is not statistically significant ($p = 0.981$), as the t-statistic of 0.01 is substantially smaller than the critical value. Regarding "INR" (Interest Rate), the coefficient of 0.003 suggests a positive association between interest rate and earnings management. The coefficient is statistically significant with a t-statistic of 2.44 ($p = 0.008$), indicating that higher interest rates are associated with increased earnings management.

The Durbin-Watson statistic tests for the presence of autocorrelation in the model residuals. In this case, the reported value of 0.845 does not provide sufficient evidence to conclude the presence or absence of autocorrelation. Typically, a Durbin-Watson statistic between 1.5 and 2.5 is considered acceptable, indicating no significant autocorrelation. However, without the critical values or additional information, it is not possible to determine the significance of this statistic. The Breusch-Pagan test examines the presence of heteroscedasticity, which is the unequal variance of residuals across different levels of the predictors. The reported p-value of 0.687 suggests that there is no significant evidence of heteroscedasticity in the model.

Consequently, we can assume that the variance of the residuals is relatively constant across the predictors. The Hausman test assesses the appropriateness of using a random effects model compared to a fixed effects model. In this case, the reported p-value of 0.845 indicates that there is no significant difference between the random effects and fixed effects models. Therefore, based on this test, we can conclude that the random effects model is appropriate for the given data.

4.3 Discuss of Findings

4.3.1 The Impact of CEO-Chair Duality on Earning Management

The coefficient for CEO-chair duality (CEOD) in the regression model is 0.015, with a standard error of 4.72 and a t-statistic of 3.18 ($p < 0.001$), indicating a statistically significant positive impact of CEO-chair duality on earnings management. This finding aligns with previous research in the field of corporate governance and accounting, supporting the notion that CEO-chair duality influences earnings management practices (Huang, et al., 2021). Similarly, Bonsu, et al. (2018) argued that CEO-chair duality may create an environment conducive to opportunistic financial reporting. The positive coefficient for CEO-chair duality suggests that when the CEO also holds the position of the board chair, there is a higher likelihood of engaging in earnings management practices. This relationship is attributed to the increased concentration of power and reduced checks and balances in the decision-making process. When a single individual holds both positions, they may have more control over financial reporting and may be more inclined to manipulate earnings to meet personal or organizational goals. The findings from the regression analysis, including the significant coefficient for CEO-chair duality and its alignment with prior literature (Osemene et al., 2018; Huang, et al., 2021), contribute to our understanding of the impact of CEO-chair duality on earnings management. This relationship can be explained through agency theory, which posits that the separation of roles between the CEO and board chair enhances the independence and effectiveness of the board in monitoring and mitigating opportunistic behaviour.

4.3.2 The Impact of Board Independence on Earning Management

The coefficient for board independence (INDBD) is 0.005, which is statistically significant at the 5% level, suggesting that board independence has a positive impact on reducing earnings management practices. This finding aligns with existing literature on corporate governance and supports theoretical frameworks emphasizing the role of independent directors in enhancing transparency and accountability within organizations (Osemene, et al., 2018). The presence of independent directors on a company's board is crucial for effective governance. These directors, who are not affiliated with the company or its management, bring objectivity and a fresh perspective to decision-making processes. They act as a safeguard against potential management opportunism, exercising critical judgment and holding management accountable for their actions.

The positive coefficient for board independence in the regression model indicates that a higher level of independence is associated with a decrease in earnings management practices. This finding corroborates previous research, which has consistently emphasized the importance of independent directors in promoting ethical behaviour and preventing financial misconduct (Githaiga et al., 2022; Huang et al., 2021).

Board independence plays a crucial role in effective governance by ensuring that decisions are made in the best interests of shareholders. Independent directors, who are not affiliated with the company or its management, bring objectivity and a fresh perspective to board discussions and decision-making processes. They act as a check on potential management opportunism, exercising critical judgment and holding management accountable for their actions. The positive coefficient for board independence indicates that as the level of board independence increases, there is a decrease in earnings management practices. This finding supports the notion that independent directors serve as a powerful mechanism to promote ethical behaviour and prevent financial misconduct within organizations (Githaiga et al., 2022; Huang et al., 2021).

The presence of independent directors on boards strengthens the monitoring and control mechanisms, aligning management's incentives with shareholders' interests. Independent directors provide external oversight, ensure compliance with regulations and ethical standards, and contribute to the overall transparency and integrity of financial reporting. Furthermore, the positive relationship between board independence and reduced earnings management practices can be explained through the agency theory. According to agency theory, conflicts of interest may arise between shareholders (principals) and management (agents). Independent directors act as representatives of shareholders, protecting their interests and mitigating agency problems. Their objective perspective and expertise enable them to effectively monitor management, mitigate potential conflicts, and discourage opportunistic financial reporting.

4.3.3 The Impact of Board Size on Earning Management

The coefficient for board size (BSIZE) is 0.017, with a standard error of 1.3 and a t-statistic of 1.03 ($p = 0.191$), suggesting that the relationship between board size and earnings management is not statistically significant. Some scholars (e.g., Rajeevan and Ajward, 2020; Vitolla et al., 2020) argue that a larger board size can enhance monitoring capabilities and bring diverse perspectives to decision-making processes, thus potentially reducing the likelihood of earnings management practices. According to this perspective, a larger board provides more opportunities for independent directors to scrutinize financial reporting and mitigate the agency problems associated with opportunistic behaviour. Moreover, a diverse board composition can lead to more robust discussions and a broader range of expertise, which may discourage managerial misconduct (Daily et al., 2023).

However, contrasting arguments suggest that a larger board size may present challenges in coordination, decision-making efficiency, and conflicts of interest (Shahwan and Almubaydeen, 2020). With a greater number of directors, the board's effectiveness in overseeing management and controlling earnings management may be compromised. Coordination difficulties and divergent interests among directors could impede the timely and effective detection of irregular financial reporting practices. Additionally, larger boards may be prone to groupthink and a lack of accountability, which can hinder effective monitoring and lead to suboptimal decision-making (Rajeevan and Ajward, 2020). The non-significant coefficient for board size in the regression model implies that changes in board size do not have a substantial impact on earnings management practices.

4.4 Theoretical Contribution

The current study makes several theoretical contributions to the field of corporate governance and earnings management. Firstly, it adds to the existing body of literature by examining the impact of board characteristics, specifically board size and CEO-chair duality, on earnings management practices. While previous studies have explored the relationship between board characteristics and various corporate outcomes, the specific focus on earnings management contributes to our understanding of how these governance factors influence financial reporting practices. The study provides empirical evidence of the relationship between board characteristics and earnings management, thereby contributing to the theoretical foundations of corporate governance theories. Secondly, the study extends agency theory by highlighting the role of board characteristics in mitigating or exacerbating agency conflicts within organisations. The findings suggest that the concentration of power resulting from CEO-chair duality may lead to increased earnings management practices, emphasizing the importance of the separation of roles to enhance the independence and effectiveness of the board. This contributes to the theoretical understanding of agency theory, as it underscores the significance of corporate governance mechanisms in minimizing agency costs and aligning the interests of managers and shareholders.

Furthermore, the study adds to the growing literature on the effectiveness of corporate governance mechanisms in promoting financial transparency and accountability. By demonstrating the impact of board characteristics on earnings management practices, the study highlights the importance of strong governance structures in ensuring the integrity of financial reporting. This contributes to the theoretical underpinnings of corporate governance frameworks, emphasizing the need for robust governance mechanisms to safeguard shareholder interests and enhance organisational performance. Additionally, the study contributes to the broader understanding of the determinants of earnings management practices. Examining the specific influence of board characteristics provides insights into the factors that drive managers' decisions to engage in earnings management. This knowledge is valuable for researchers and practitioners seeking to identify and address the root causes of earnings manipulation, ultimately leading to improved financial reporting quality and more informed decision-making by stakeholders.

4.5 Practical Contribution

The present study also offers several practical contributions to practitioners and policymakers in the field of corporate governance and financial reporting. Firstly, the findings provide valuable insights for boards of directors and executive management teams. By highlighting the impact of board characteristics on earnings management practices, the study underscores the importance of board composition and structure in ensuring transparent and reliable financial reporting. Boards should consider the potential risks associated with CEO-chair duality and evaluate the benefits of separating these roles to enhance checks and balances within the organization. This practical recommendation can aid boards in making informed decisions regarding their governance structures and composition to promote effective oversight and accountability.

Secondly, the study's findings can guide regulatory bodies and policymakers in developing and implementing corporate governance regulations and guidelines. The evidence of a positive relationship between CEO-chair duality and earnings management practices emphasizes the need for regulatory measures that promote board independence and minimize the concentration of power. Policymakers can consider incorporating provisions that encourage the separation of CEO and board chair roles to enhance governance effectiveness and mitigate the risk of opportunistic behaviour. Additionally, the findings on the impact of board size can inform discussions on optimal board composition and the potential benefits of diverse perspectives in monitoring financial reporting practices.

Furthermore, the study's insights can be valuable for investors and financial analysts in assessing the quality and reliability of financial statements. The findings highlight the importance of considering board characteristics when evaluating a company's governance practices and financial reporting integrity. Investors can use this information to inform their investment decisions and prioritise companies with strong governance structures and effective board oversight. Financial analysts can incorporate the study's findings into their assessment frameworks, considering board characteristics as a factor influencing earnings management risks.

Lastly, the study's practical contributions extend to auditing and accounting professionals. The findings emphasize the importance of auditors and accountants in exercising professional scepticism and conducting thorough assessments of financial statements. These professionals play a crucial role in detecting and preventing earnings management practices, ensuring the accuracy and reliability of financial information. The study's findings can serve as a reminder to auditors and accountants to remain vigilant in their duties and to consider the potential influence of board characteristics on the financial reporting process.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1 Introduction

This is the ending chapter of the thesis since it contains the results' summary, conclusions, and suggestions. The chapter also discusses the research's recommendations and limitations. The chapter is divided into four sections. The first section provides an overview of the study's results. It presents a summary of the study. The second section of the conclusion is comprised of the conclusions taken from the study's results about its objective. The final section of the chapter is the recommendation, which provides pertinent ideas based on the study's primary results. The last part is captured as a suggestion for future research direction

5.2 Summary

The study sought to assess the impact of board characteristics on earnings management using a case of selected listed companies in Ghana. The study employs a quantitative explanatory research design within a positivist paradigm. A sample of 13 companies listed on the Ghana Stock Exchange, consisting of 9 banks and 4 manufacturing firms, is used. Secondary data from annual reports is collected over 12 years (2010-2021) and analysed using the Generalised Least Square (GLS) Random-Effects model in STATA software. The model specification includes variables such as CEO duality, board independence, board size, firm age, firm size, inflation, and interest rate. Diagnostic tests for heteroscedasticity, autocorrelation, and the Hausman test are conducted to ensure the reliability of the results. The results revealed that board independence (INDBD) had a statistically significant positive impact on reducing earnings management practices. This finding supports existing literature on corporate governance, highlighting the role of independent directors in enhancing transparency and accountability within organisations.

Second, the study found that board size (BSIZE) did not have a statistically significant relationship with earnings management. This result aligns with previous research that has yielded mixed findings on the impact of board size on earnings management practices. Third, CEO-chair duality (CEOD) was found to have a statistically significant positive impact on earnings management. This suggests that when the CEO also holds the position of the board chair, there is a higher likelihood of engaging in earnings management practices. This finding is consistent with the notion that CEO-chair duality may lead to increased concentration of power and reduced checks and balances in decision-making processes. The findings contribute to our understanding of the influence of board characteristics on earnings management. Specifically, they highlight the importance of independent directors in promoting transparency and accountability, while also shedding light on the potential risks associated with CEO-chair duality.

5.3 Conclusion

This study aimed to analyse the impact of board characteristics on earnings management practices. Through a quantitative explanatory research design and analysis of data from companies listed on the Ghana Stock Exchange, several key findings were obtained.

Firstly, the presence of independent directors on the board was found to have a significant positive impact on reducing earnings management practices. This highlights the importance of independent directors in enhancing transparency, accountability, and ethical behaviour within organizations.

Secondly, the study did not find a significant relationship between board size and earnings management. This suggests that changes in board size do not have a substantial impact on earnings management practices, which is consistent with previous research in this area.

Lastly, CEO-chair duality was found to have a significant positive impact on earnings management. When the CEO also holds the position of the board chair, there is a higher likelihood of engaging in earnings management practices. This finding raises concerns about the concentration of power and the potential for reduced checks and balances in decision-making processes.

5.4 Recommendation

Based on the findings of this study, several recommendations can be made to enhance corporate governance practices and mitigate earnings management practices within organisations.

Firstly, organisations should prioritise the appointment of independent directors to their boards. Independent directors bring external perspectives and expertise, and their presence can enhance the effectiveness of board monitoring and oversight. Companies should establish clear criteria and selection processes for independent directors, ensuring they possess the necessary qualifications, independence, and integrity to fulfil their roles effectively.

Secondly, it is important to establish and enforce strong ethical standards and codes of conduct within organizations. Clear guidelines should be in place regarding acceptable financial reporting practices and the avoidance of earnings management. Regular training programs and workshops can help board members, executives, and employees understand the ethical implications of earnings management and the importance of maintaining integrity in financial reporting.

Furthermore, organisations should promote a culture of transparency and accountability. This can be achieved by regularly communicating with stakeholders, providing clear and comprehensive financial disclosures, and fostering an environment where concerns and whistleblowing are encouraged and addressed appropriately. Effective communication and transparency can help prevent the occurrence of earnings management practices and build trust among stakeholders. To mitigate the risks associated with CEO-chair duality, companies should consider separating the roles of CEO and board chair. This separation of powers allows for greater checks and balances within the organisation, reducing the concentration of power and potential conflicts of interest. By appointing an independent board chair, organisations can ensure a more independent and effective oversight of financial reporting and decision-making processes.

Lastly, regulatory bodies and policymakers should continue to monitor and update corporate governance regulations to address emerging issues and challenges. Regular assessments of the effectiveness of existing regulations and the identification of gaps can help strengthen corporate governance frameworks. Collaboration between regulators, industry experts, and academic researchers can contribute to the development of best practices and guidelines to prevent and detect earnings management practices.

5.5 Suggestions for Future Research

Based on the findings and limitations of this study, several suggestions for future research can be proposed to further expand our understanding of the relationship between board characteristics and earnings management and to address the gaps identified in the current study. Firstly, future research could explore the impact of board composition beyond board size and CEO-chair duality. While this study focused on these two board characteristics, there are other important dimensions to consider, such as the diversity of board members in terms of gender, ethnicity, and expertise. Investigating how these factors influence earnings management practices could provide valuable insights into the effectiveness of board diversity in promoting financial transparency and accountability. Secondly, longitudinal studies could be conducted to examine the dynamic nature of the relationship between board characteristics and earnings management over time. This would involve examining how changes in board composition and structure influence earnings management practices and whether the impact varies in different stages of an organization's life cycle or during periods of economic downturns or crises. Longitudinal studies can provide a more comprehensive understanding of the causal mechanisms underlying the relationship between board characteristics and earnings management.

Furthermore, future research could delve deeper into the mechanisms through which board characteristics affect earnings management practices. This could involve exploring the mediating or moderating roles of other variables, such as corporate culture, CEO characteristics, or external governance mechanisms. Understanding the underlying mechanisms can provide a more nuanced understanding of how board characteristics interact with other factors to shape earnings management behaviour. In addition, it would be valuable to conduct comparative studies across different countries or regions with varying corporate governance frameworks and cultural contexts. This would enable the examination of how the relationship between board characteristics and earnings management may be influenced by institutional factors and cultural norms. Comparative studies can shed light on the generalizability of findings and the extent to which they are context-specific. Lastly, the use of qualitative research methods, such as interviews or case studies, could provide in-depth insights into the motivations and decision-making processes behind earnings management practices. Qualitative research can capture the complexities and nuances of board dynamics and decision-making that may not be captured through quantitative analysis alone.

REFERENCES

Ado, A. B., Rashid, N., Mustapha, U. A. and Ademola, L. S., 2020. The Financial Determinants of Earnings Management and the Profitability of Listed Companies in Nigeria. *Journal of Critical Review*, *7*(9).

Adu-Gyamfi, M., 2020. Investigating Financial Statement Fraud in Ghana using Beneish M-Score: A Case of Listed Companies on the Ghana Stock Exchange (GSE).

Afifa, M. A., Saleh, I. and Al-shoura, A., 2021. Nexus among board characteristics, earnings management and dividend payout: evidence from an emerging market. *International Journal of Emerging Markets.*

Al Amosh, H. and Khatib, S.F., 2022. Ownership structure and environmental, social and governance performance disclosure: the moderating role of the board independence. *Journal of Business and Socio-Economic Development*, *2*(1), pp.49-66.

Al Azeez, H.A.R., Sukoharsono, E.G. and Andayani, W., 2019. The impact of board characteristics on earnings management in the international oil and gas corporations. *Academy of Accounting and Financial Studies Journal*, *23*(1), pp.1-26.

Al-Absy, M.S.M., Ismail, K.N.I.K., Chandren, S. and Al-Dubai, S.A.A., 2020. Involvement of board chairmen in audit committees and earnings management: Evidence from Malaysia. *The Journal of Asian Finance, Economics and Business*, *7*(8), pp.233-246.

Alqatan, D., 2019. The association between board diversity, earnings management and firm performance in Kuwait: A research agenda. *Corporate Governance: Search for the Advanced Practices (2019)*.

Alves, S., 2021. CEO duality, earnings quality and board independence. *Journal of Financial Reporting and Accounting*, (ahead-of-print).

Appuhami, R. and Bhuyan, M., 2015. Examining the influence of corporate governance on intellectual capital efficiency: Evidence from top service firms in Australia. *Managerial Auditing Journal*.

Arifin, J., 2016. Corporate governance and intellectual capital on financial performance of bank sector companies: Indonesia stock exchange 2008-2012. *Journal of Administrative Sciences and Policy Studies*, *4*(1), pp.61-82. Available at: https://gse.com.gh/listed-companies

Bisogno, M. and Donatella, P., 2022. Earnings management in public-sector organizations: a structured literature review. *Journal of Public Budgeting, Accounting and Financial Management*, *34*(6), pp.1-25.

Bonsu, O.-A.M. et al., 2018. European Scientific Journal, 14(28).

Buertey, S., Sun, E.J., Lee, J.S. and Hwang, J., 2020. Corporate social responsibility and earnings management: The moderating effect of corporate governance mechanisms. *Corporate Social Responsibility and Environmental Management*, *27*(1), pp.256-271.

Bzeouich, B., Lakhal, F. and Dammak, N., 2019. Earnings management and corporate investment efficiency: does the board of directors matter?. *Journal of Financial Reporting and Accounting*.

Chatterjee, C., 2020. Board quality and earnings management: Evidence from India. *Global Business Review*, *21*(5), pp.1302-1324.

Chindasombatcharoen, P., Chatjuthamard, P., Jiraporn, P. and Treepongkaruna, S., 2022. Achieving sustainable development goals through board size and innovation. *Sustainable Development*, *30*(4), pp.664-677.

Cho, S. and Chung, C., 2022. Board Characteristics and Earnings Management: Evidence from the Vietnamese Market. *Journal of Risk and Financial Management*, *15*(9), p.395.

Costa, V. and Sarmento, R.P., 2021. Panel Data: A Case Study Analysis. In *Encyclopedia of Information Science and Technology, Fifth Edition* (pp. 637-657). IGI Global.

Creswell, J. W., and Plano-Clark, V.L., 2007. Designing and Conducting Mixed Methods Designs. Thousand Oaks, CA: SAGE Publications

Daoud, J. I (2017). Multicollinearity and Regression Analysis. IOP Conf. Series: Journal of Physics*: Conf. Series 949* (2017) 012009

Dieu, M. V. T., 2019. The effect of Board of Directors' characteristics on Earnings Management – Empirical evidence from Finnish non-financial listed companies, Helsinki: Hanken School of Economics.

Durana, P., Michalkova, L., Privara, A., Marousek, J. and Tumpach, M., 2021. Does the life cycle affect earnings management and bankruptcy?. *Oeconomia Copernicana*, *12*(2), pp.425-461.

Dźwigoł, H. 2019. Research methods and techniques in new management trends: research results. *Virtual Economics*, *2*(1), 31-48.

Fan, Y., Jiang, Y., Zhang, X. and Zhou, Y., 2019. Women on boards and bank earnings management: From zero to hero. *Journal of Banking and Finance*, *107*, p.105607.

Ferris, S.P. and Liao, M.Y., 2019. Busy boards and corporate earnings management: an international analysis. *Review of Accounting and Finance*, *18*(4), pp.533-556.

Firnanti, F., Pirzada, K. and Budiman, 2019. Company Characteristics, Corporate Governance, Audit Quality Impact on Earnings Management. *Accounting and Finance Review, 4*(2), pp. pp: 43-49.

Freire, C., 2019. Duality CEO-Chairman and its relation with the effectiveness of the board control. *Problems and Perspectives in Management*, *17*(4), pp.239-251.

Ghaleb, B.A.A., Kamardin, H. and Hashed, A.A., 2022. Investment in outside governance monitoring and real earnings management: evidence from an emerging market. *Journal of Accounting in Emerging Economies*, *12*(1), pp.52-76.

Githaiga, P.N., Muturi Kabete, P. and Caroline Bonareri, T., 2022. Board characteristics and earnings management. Does firm size matter?. *Cogent Business and Management*, *9*(1), p.2088573.

GSE, 2023. Ghana Stock Exchange. [Online]

Huang, H.-L., Liang, L.-W., Chang, H.-Y. and Hsu, H.-Y., 2021. The Influence of Earnings Management and Board Characteristics on Company Efficiency. Sustainability, Volume 13.

Jensen, D. R., and Ramirez, D. E. (2013). Variance Inflation in Regression. *Advances in Decision Sciences*, 1-5.

Kajola, S.O., Sanyaolu, W., Tonade, A.A. and Adeyemi, A., 2020. Corporate board attributes and earnings management in Nigerian banking sector. *Journal of Sustainable Development-Africa*, *22*(4), pp.45-59.

Kapoor, N. and Goel, S., 2017. Board characteristics, firm profitability and earnings management: evidence from India. *Australian Accounting Review*, *27*(2), pp.180-194.

Kivunja, C. and Kuyini, A.B., 2017. Understanding and applying research paradigms in educational contexts. *International Journal of higher education*, *6*(5), pp.26-41.

Kliestik, T., Belas, J., Valaskova, K., Nica, E. and Durana, P., 2021. Earnings management in V4 countries: The evidence of earnings smoothing and inflating. *Economic Research-Ekonomska Istraživanja*, *34*(1), pp.1452-1470.

Le, Q. L. and Nguyen, H. A., 2023. The impact of board characteristics and ownership structure on earnings management: Evidence from a frontier market. Cogent Business and Management, 10(1).

Lei, J., Lin, S., Khan, M.R., Xie, S., Sadiq, M., Ali, R., Bashir, M.F., Shahzad, L., Eldin, S.M. and Amin, A.H., 2022. Research Trends of Board Characteristics and Firms' Environmental Performance: Research Directions and Agenda. *Sustainability*, *14*(21), p.14296.

Li, M. and Yang, J., 2019. Effects of CEO duality and tenure on innovation. *Journal of Strategy and Management*.

Liem, M.C., 2016. Corporate governance in Banking Industry: An explanatory study. *Corporate Governance, 7*(6).

Lima, B.F. and Sanvicente, A.Z., 2013. Quality of corporate governance and cost of equity in Brazil. *Journal of Applied Corporate Finance*, *25*(1), pp.72-80.

McLeod, J., Star, S. and Shilbury, D., 2021. Board composition in national sport federations: a cross-country comparative analysis of diversity and board size. *Managing Sport and Leisure*, pp.1-18.

Musleh Alsartawi, A., 2019. Board independence, frequency of meetings and performance. *Journal of Islamic Marketing*, *10*(1), pp.290-303.

Naciti, V., 2019. Corporate governance and board of directors: The effect of a board composition on firm sustainability performance. *Journal of Cleaner Production*, *237*, p.117727.

Nalarreason, K.M., Sutrisno, T. and Mardiati, E., 2019. Impact of leverage and firm size on earnings management in Indonesia. *International Journal of Multicultural and Multireligious Understanding*, *6*(1), pp.19-24.

Nuanpradit, S., 2019. Real earnings management in Thailand: CEO duality and serviced early years. *Asia-Pacific Journal of Business Administration*, *11*(1), pp.88-108.

Nursimloo, S., Ramdhony, D. and Mooneeapen, O., 2020. Influence of board characteristics on TBL reporting. *Corporate Governance: The International Journal of Business in Society*, *20*(5), pp.765-780.

OECD (1999). *Guidelines and instructions for OECD symposium. International Symposium Measuring Reporting Intellectual Capital:* Experience, Issues, and Prospects, OECD, Amsterdam, Paris, June.

OECD (2015), OECD Guidelines on Corporate Governance of State-Owned Enterprises, 2015 Edition, OECD Publishing, Paris.

Orazalin, N., 2020. Board gender diversity, corporate governance, and earnings management: Evidence from an emerging market. *Gender in Management: An International Journal*.

Osemene, O. F., Adeyele, J. S. and Adinnu, P., 2018. The Impact of The Ownership Structure and Board Characteristics on Earnings Management in Nigeria’s Listed Deposit Money Banks. Economic Horizons, 20(3), pp. pp: 209 - 220.

Potharla, S. and Amirishetty, B., 2021. Non-linear relationship of board size and board independence with firm performance–evidence from India. *Journal of Indian Business Research*, *13*(4), pp.503-532.

Pulic, A., 1998, January. Measuring the performance of intellectual potential in knowledge economy. In *2nd McMaster Word Congress on Measuring and Managing Intellectual Capital by the Austrian Team for Intellectual Potential* (pp. 1-20).

Rajeevan, S. and Ajward, R., 2020. Board characteristics and earnings management in Sri Lanka. *Journal of Asian Business and Economic Studies*, *27*(1), pp.2-18.

Rowley, J., 2002. Using case studies in research. *Management Research News*, *25*(1), 16 – 27.

Ruwanti, G., Chandrarin, G. and Assih, P., 2019. Corporate social responsibility and earnings management: The role of corporate governance. *Humanities and Social Sciences Reviews*, *7*(5), pp.1338-1347.

Salem Dezfuli, B., Salehi, A., Jorjorzadeh, A., and Nasiri, S. (2019). The Effect of economic uncertainty on accrual based earnings management and real earnings management. *Journal of Management Accounting and Auditing Knowledge*, 8(30), 95-116.

Santos-Jaén, J.M., León-Gómez, A. and Serrano-Madrid, J., 2021. The effect of corporate social responsibility on earnings management: Bibliometric review. *International Journal of Financial Studies*, *9*(4), p.68.

Saona, P., Muro, L. and Alvarado, M., 2020. How do the ownership structure and board of directors' features impact earnings management? The Spanish case. *Journal of International Financial Management and Accounting*, *31*(1), pp.98-133.

Saunders, M. Lewis, P., and Thornhill, A., 2007. Research methods for business students.4th edn. Harlow: Pearson Education.

Shahwan, T.M. and Fathalla, M.M., 2020. The mediating role of intellectual capital in corporate governance and the corporate performance relationship. *International Journal of Ethics and Systems, 36*(4), pp. 531-561

Shahwan, T.M., 2015. The effects of corporate governance on financial performance and financial distress: evidence from Egypt. *Corporate Governance*.

Shahwan, Y. and Almubaydeen, T.H., 2020. Effects of board size, board composition and dividend policy on real earnings management in the Jordanian listed industrial firms. *International Journal of Financial Research*, *11*(4), pp.195-202.

Shin, D.H. and Sung, T.K., 2002. Comparisons of error characteristics between TOA and TDOA positioning. *IEEE Transactions on Aerospace and Electronic Systems*, *38*(1), pp.307-311.

Vitolla, F., Raimo, N. and Rubino, M., 2020. Board characteristics and integrated reporting quality: An agency theory perspective. *Corporate Social Responsibility and Environmental Management*, *27*(2), pp.1152-1163.

Wang, M., Beal, D.J., Chan, D., Newman, D.A., Vancouver, J.B. and Vandenberg, R.J., 2017. Longitudinal research: A panel discussion on conceptual issues, research design, and statistical techniques. *Work, Aging and Retirement*, *3*(1), pp.1-24.

Yahaya, O. A., 2022. Do CEOs influence earnings management?. South African Journal of Accounting Research, 36(2), pp. pp: 1-13.

Yilmaz, K., 2013. Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. *European Journal of Education*, *48*(2), pp.311-325.

Yung, K. and Root, A., 2019. Policy uncertainty and earnings management: International evidence. *Journal of Business Research*, *100*, pp.255-267.

Zorn, A., Esteves, M., Baur, I. and Lips, M., 2018. Financial ratios as indicators of economic sustainability: a quantitative analysis for Swiss dairy farms. *Sustainability*, *10*(8), pp. 1-20.