# KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,

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# THE EFFECT OF EXECUTIVE COMPENSATION ON THE FINANCIAL PERFORMANCE OF LISTED NON-FINANCIAL FIRMS IN GHANA

**ABIGAIL COBBA-BINEY** 

PG9381121

A Thesis Submitted to the Institute of Distance Learning, Kwame Nkrumah University of Science and Technology in Partial Fulfilment of the Requirement for

the Degree of

MASTER OF SCIENCE IN ACCOUNTING AND FINANCE

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NOVEMBER, 2023

# **DECLARATION**

I hereby declare that this is my own work towards the award of Master of Science Degree in Accounting and Finance and that to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree in this University, except where due acknowledgement has been made in the text.

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| ABIGAIL COBBA-BINEY     |           |      |
| (PG9381121)             | SIGNATURE | DATE |
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| DR. ELLIS AKWAA-SEKYI   |           |      |
| (SUPERVISOR)            | SIGNATURE | DATE |
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# **DEDICATION**

To my lovely husband and my children



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#### ABSTRACT

This study examines the relationship between executive compensation and the financial performance of non-financial firms listed in Ghana. Using a quantitative research approach and an explanatory research design, the study analyzes secondary panel data from 2005 to 2021 sourced from annual reports and financial statements of 23 selected firms listed on the Ghana Stock Exchange. The findings reveal that higher executive compensation is positively associated with increased market value and profitability, underscoring the importance of appropriately rewarding executives for their contributions to organizational success. However, the study highlights the negative impact of total basic remuneration on both market value and profitability, emphasizing the need for a balanced compensation structure that incorporates performance-based incentives. Additionally, the inclusion of financial benefits in the compensation package shows a modest positive effect on market value, while an excessive focus on cash benefits can hinder profitability. The study also reveals that a higher proportion of variable pay is linked to a decrease in market value but a positive correlation with profitability. Furthermore, firm age is found to have a negative effect on market value, indicating the challenges faced by older firms in adapting to market dynamics, while firm size does not significantly influence market value but may impact profitability due to operational factors. These findings provide valuable insights for researchers and practitioners, contributing to our understanding of the complex relationship between executive compensation and financial performance in the context of non-financial firms in Ghana.



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# LIST OF ACRONYMS

| CEO        | Chief Executive Officer       |
|------------|-------------------------------|
| GMM:       | Generalized Method of Moments |
| GSE        | Ghanan Stock Exchange         |
| LTIP       | Long-Term Incentive Pay       |
| MP         | Marginal Productivity         |
| ROA        | Return on Assets              |
| ROE        | Return on Equity              |
| STIP       | Short-Term Incentive Pay      |
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# **CHAPTER ONE**

# **INTRODUCTION**

#### **1.1 Background to the Study**

During the world economic crisis, there has been a great deal of public debate on chief executive officer (CEO) compensation, particularly performance-based compensation. As a consequence, many individuals lost their invested funds and their livelihoods (Alolah, 2022). Nonetheless, directors received substantial compensation, which aroused public outrage (Alolah, 2022). The agency theory is one of the most often-used theories for examining the link between executive pay and performance (Han & Mun, 2021). According to agency theory, managers and other influential decision-makers within an organisation may have competing interests (shareholders). By rewarding agents according to the firm's performance, agency conflicts between shareholders and management may be avoided (Khenissi et al., 2022).

The interest in the salaries of corporate organisations' top executives is driven by considerations about management's motivation, equity, and fairness (Kyere & Ausloos, 2020). Public company stockholders desire the highest possible stock returns for a given level of risk, and they expect their companies to design compensation structures that incentivize top executives to implement policies that achieve this goal. (Wilson et al., 2022). Executive compensation typically consists of a base salary, annual variable pay (short-term incentive pay and long-term incentive pay), and financial benefits (retention plan, life insurance, vehicle allowances).(Al-Shawawreh & Hdaib, 2022).

Typically, long-term incentive payoffs are tied to the future share price of the company, whereas short-term incentive payoffs are dependent on operational performance factors such as sales growth or expense reductions.(Al-Shawawreh & Hdaib, 2022). The executive cash incentive scheme thus relies on the board's ex-ante determinations on which performance indicators will be used to measure executive success (Al-Shawawreh & Hdaib, 2022). Furthermore, the performance criteria for the financial incentive scheme must consider the trade-offs between risk and incentives. In other words, they should motivate without accidentally applauding mediocre work or discouraging appropriate risk-taking (Rasoava, 2019).

Zhang et al. (2018) researched and assessed the executive compensation of a Chinese multinational corporation's foreign subsidiaries. The compensation of Chinese subsidiaries within multinational groups is increasingly impacted by relative performance evaluation variables, such as a performance fall relative to the company average. The gap between the high market level and the relatively lower private business group level of executive remuneration is significant. In addition, it was revealed that the executive compensation of the subsidiary is influenced by the performance of the other subsidiaries.

Empirical evidence has also shown that the CEO is driven by the desire to improve his rewards, which might be detrimental to the shareholders' interests (Farah & Li, 2022; Park et al., 2019). As a consequence, the difficulty confronting many businesses today is how to develop an incentive system that will inspire senior executives to work hard and improve the performance of the firm. Prior studies suggest that the correlation between the remuneration of chief executive officers and the financial performance of their respective firms is inconclusive. Dias et al. (2020) have identified Return on Assets (ROA) as a pivotal governance factor in forecasting a company's performance.

Zou et al. (2020) have reported a positive correlation between executive compensation and firm financial performance, while Maqbool and Hussain (2021) have discovered a negative association between executive compensation and firm financial performance. Furthermore, Sheikh et al. (2018) ascertained that the remuneration of executives remains unaffected by the performance outcome of the organisation. It is widely acknowledged that the size of a company has a significant impact on the remuneration of its executives. In contrast to the advanced nature of institutional frameworks, there exists no discernible association between executive remuneration and organisational performance in smaller entities. However, the level of interconnectivity among major corporations is significant (Raithatha & Komera, 2016).

# **1.2 Statement of the Problem**

Executive compensation is a widely debated topic in the corporate world, with several studies exploring its effect on firm performance. However, the existing literature has produced conflicting results and has primarily concentrated on developed economies, leaving a knowledge gap regarding the effect of executive compensation on the financial performance of listed non-financial firms in emerging markets such as Ghana (Cui et al., 2021; Farooq et al., 2023; Kweh et al., 2022; Maqbool & Hussain, 2021; Weenders, 2019). Cui et al. (2021) found no association between compensation and firm financial performance in their investigation. Kweh et al. (2022) posit that there exists a positive correlation between executive compensation and the financial performance of firms that are facing financial constraints. In prior research, Weenders (2019) discovered a positive correlation between variable compensation and firm financial performance, which contradicts previous findings (Maqbool & Hussain, 2021).

Furthermore, Spoor (2020b) observed a direct and significant influence on company performance on short-term incentive pay. The contradicting findings from the empirical antecedents reviewed make a strong case for a study in Ghana using current data and comparing the results to the extant literature from other jurisdictions. Besides, the current study is imperative given that the policy orientations taken in other jurisdictions in conducting research fail to consider Ghana's unique circumstances and thereby their findings cannot be applied to the Ghanaian context (Cui et al., 2021; Khenissi et al., 2022; Maqbool & Hussain, 2021).

Moreover, the absence of a consensus on the approach to measuring executive compensation poses a challenge in comparing the findings of diverse research studies (Van Wyk & Wesson, 2021). The purpose of this research is to investigate the impact of different elements of executive remuneration, such as overall compensation, fixed salary, monetary perks, and performance-based pay, on the economic performance of non-financial companies listed on the stock exchange in Ghana, to fill the gap in knowledge on this topic. The objective of this study is to furnish empirical substantiation concerning the correlation between executive remuneration and financial performance within the context of Ghana. This study builds upon the research conducted by scholars who have investigated the relationship between executive remuneration and corporate performance in various geographical locations.

The study will employ panel data analysis to yield strong empirical evidence and fill a gap in the approach of existing literature. The results of this study are expected to have significant ramifications for both theoretical and practical domains. Specifically, policymakers, investors, and other stakeholders will be furnished with valuable insights regarding the correlation between executive remuneration and financial performance in Ghana. Furthermore, this research adds to the extant body of literature regarding the impact of executive remuneration on financial performance within developing economies. This complements the study conducted by Adam et al. (2019) in Egypt and Al-Shawawreh and Hdaib (2022) in Jordan. This research makes a valuable contribution to the existing body of literature on the subject of compensation and firm performance. Specifically, it investigates the correlation between executive compensation and financial performance in Ghana, which has not been previously explored.

The current study investigates the influence of diverse types of executive remuneration (inclusive of basic salary, short-term and long-term incentive pay, and cash incentives like retirement schemes, automobile benefits, and life insurance) on the fiscal performance of non-financial corporations. Furthermore, the study employed accounting-based and market-based indicators of financial performance to mitigate contextual biases and enhance comprehension of the correlation between executive remuneration and the financial performance of non-financial firms listed in Ghana.

#### **1.3 Objectives of the Study**

#### 1.3.1 Main objective

The main objective of the study is to examine the effect of executive compensation on the financial performance of listed non-financial firms in Ghana. BAD

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# 1.3.2 Specific objectives

Specifically, the study seeks to:

1. Examine the effect of the total compensation of the executive on the financial performance of listed non-financial firms in Ghana;

- 2. Examine the effect of the total basic pay of the executive on the financial performance of listed non-financial firms in Ghana;
- 3. Determine the effect of total cash benefits of the executive on the financial performance of listed non-financial firms in Ghana.
- 4. Assess the influence of the total variable pay of the executive on the financial performance of listed non-financial firms in Ghana;

## **1.4 Research Questions**

The following research questions were explored:

- 1. What is the effect of the total compensation of the executive on the financial performance of listed non-financial firms in Ghana?
- 2. How does the total basic pay of the executive affect the financial performance of listed non-financial firms in Ghana?
- 3. What is the effect of the total cash benefits of the executive on the financial performance of listed non-financial firms in Ghana?
- 4. What is the extent of influence exerted by the total variable pay of the executive on the financial performance of listed non-financial firms in Ghana?

#### 1.5 Significance of the Study

The study makes significant contributions to several academic fields, including theory, practice, and policy. This is accomplished by addressing a critical research gap within the context of Ghana and shedding light on the complex relationship between CEO compensation and firm financial performance. The main contribution of this study to theory is the identification of the limited number of current and original research studies conducted in Ghana. The research moves beyond the existing literature, which focuses predominantly on the relationship between CEO compensation and firm financial

performance, by examining executive compensation and its effects on firm financial performance. This shift in emphasis improves the theoretical framework by delving into unexplored domains and fostering a more holistic understanding of the complex influence of executive compensation on firm financial performance dynamics.

The study also contributed to practice. The study emphasises its practical significance for a variety of stakeholders, including corporations, shareholders, and academics. Considering recent instances of business failure, the research's relevance is especially significant, making it an indispensable resource for enhancing corporate governance and performance. In addition, the present study seeks to address a significant gap in the existing body of knowledge, which has primarily concentrated on industrialised nations like the United States. By examining the relationship between executive compensation and financial performance within the context of Ghana, this research provides firms with the knowledge necessary to tailor their compensation strategies to the country's unique business environment.

From a policy perspective, this study provides a foundation for evidence-based decisionmaking in the development and modification of executive remuneration policies. The empirical findings of the study shed light on the intricate relationship between executive compensation and firm performance. These findings have implications for regulatory authorities and policymakers, as they can inform the development of governance frameworks that align executive incentives with organisational objectives more closely. Policy modifications play a vital role in fostering sustainable firm growth and reducing the likelihood of corporate failure.

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Finally, a wide variety of individuals and organisations have been identified as stakeholders for this study. The findings of this study may provide firms with useful information for designing pay systems that encourage increased performance and accountability. Shareholders have the potential to benefit from a comprehensive understanding of the relationship between executive compensation and business performance, enabling them to make informed investment decisions. Researchers from other academic fields, such as executive compensation studies and broader business disciplines, may use the methodology and findings of this study to contribute to the existing body of knowledge in this critical area.

# 1.6 Scope of the Study

The current study investigates the correlation between executive remuneration and the fiscal performance of non-financial corporations that are publicly traded on the GSE. Given that the GSE has established regulations and is widely recognised as a leading entity in Ghana that advocates for sound corporate governance practises, companies listed on the GSE will be taken into account. Furthermore, non-financial institutions exhibit a range of market priorities and research initiatives. This research investigates the impact of various components of executive compensation, including total basic salary, total variable pays such as short-term and long-term incentive pay, and total other benefits such as retention plan life insurance and car allowances, as well as total compensation (comprising basic salary, other benefits, and variable pay), on the financial performance of firms, as measured by return on assets and Tobin's Q, over a period spanning from 1995 to 2020.

# 1.7 Brief Methodology

The quantitative research approach bases its analytical philosophy on the positivist paradigm. The study employed explanatory research (causal research) design. It is conducted to assess the problem's scope, nature, and cause-and-effect relationships. This study employs secondary data to examine the impact of executive compensation on the financial performance of non-banking firms. The secondary panel data for the period spanning from 2005 to 2021 was derived from the annual reports and financial statements of various businesses under consideration. The study utilised yearly time series datasets wherein the values were represented as percentages or ratios. The present investigation has selected a sample of 23 non-financial enterprises that are listed on the GSE, utilising the dependent and independent variables as specified in Table 3.1. An econometric model was utilised to ascertain the influence of CEO compensation on the financial performance of non-banking sector companies listed on the GSE. The study employed the System Generalised Method of Moments (GMM) model to evaluate the consistency of response and data patterns about the various theoretical executive pay elements and components that impact the financial performance of non-financial enterprises listed on the GSE. The data to be obtained was analysed using STATA version 13, and the findings are presented in tables.

# **1.8 Limitations**

Even though this study is based on previous research and well-established theoretical frameworks, it has some problems. This study only looks at a listed non-financial firm on GSE. So, it is difficult to apply this to all firms that work in different settings. Also, this study is only about the pay for the top management of the listed company. It does not look at how incentive systems are used in firms generally. The decision to only look at the

executive pay of the company was made because the top management is thought to have the most impact on how the company runs.

#### 1.9 Organisation of the Study

The present research was partitioned into five chapters. The chapter comprises several sections, including an introductory section, a literature review section that examines both theoretical and empirical works, a research methodology section, a presentation and discussion of findings section, a summary section, a concluding section, and a section that proposes avenues for future research. The introductory chapter provides an overview of executive compensation and financial performance, presents the problem statement, outlines the main and specific research objectives, formulates hypotheses, discusses the significance and scope of the study, briefly describes the methodology employed, and acknowledges the limitations of the research. Chapter two provides an overview of pertinent conceptual, theoretical, empirical, and conceptual frameworks. Chapter three of the study provides a detailed discussion of the methods employed in this research. Chapter four focuses on the outcomes and provides an analysis of the findings. The preceding chapter provided a concise overview of the research outcomes and suggested courses of action.



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#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### **2.1 Introduction**

The literature review encompasses a discussion of pertinent variables of the study. the review is organized into four main sections with subsections touching on various aspects of executive compensation and the financial performance of companies. The first section of the literature review dwells on a conceptual review where a discussion on executive compensation, basic pay of the executive, variable pay of the executive, cash benefits and financial performance are explored. The second section of the research delved into an exploration of the theoretical foundations, specifically examining agency theory, tournament theory, and equity theory through a detailed discussion. The empirical review section included a presentation of the extant literature about the relationship between executive compensation and firm financial performance. The conceptual framework section of the literature review presents a discussion and graphical representation of the association between the study variables.

# 2.2 Conceptual Review

The conceptual review covers a discussion of variables of interest in the study. The discussion in this section of the literature review centres on executive compensation, basic pay of the executive, variable pay of the executive, cash benefits of the executive and financial performance

#### 2.2.1 Executive compensation

The importance of executive compensation is discussed, as is the impact of board qualities and ownership structure on the creation of the optimal executive compensation system to increase a company's financial output (Black et al., 2019). To evaluate the characteristics of a company, a large number of major and specialised corporations have incorporated a variety of governance strategies into a single framework (Fernández-Temprano & Tejerina-Gaite, 2020). In recent years, several well-known companies in both developed and developing nations have declared bankruptcy, sparking a renewed interest in securing company finances and avoiding insolvency (John et al., 2016). Over the past two decades, CEO compensation has received considerable attention as an important leading indicator. In both academic and policy circles, research on the significance of CEO compensation has received a significant amount of attention (Zou et al., 2020). It was also demonstrated that influence and reciprocity are two of the most important factors to consider when determining the CEO's compensation (Spoor, 2020b).

According to Kweh et al. (2022), it is possible to evaluate the extent of an executive's impact by examining their social capital, intellectual capital, and remuneration in comparison to their colleagues. The interconnection between influence and reciprocity is attributable to the political-symbolic role that CEOs play in determining executive remuneration (Maloa, 2018). Also, Adam et al. (2019) have asserted that there exists a reciprocal relationship between the pay-performance connection and the intricacy of the executive role. The objective of this study was to investigate the impact of various forms of ownership and board compositions on the performance of companies. A comprehensive evaluation was conducted on all the companies listed on the Botswana Stock Exchange. Mbekomize et al. (2021) developed a regression model that incorporated multiple profitability indicators, including ROA, return on equity (ROE), return on market capitalization (LnMktCap), and TOBIN's Q. The ROA of a firm can be defined as the

proportion of its earnings concerning its overall asset value. According to Mbekomize et al. (2021), the computation of ROE involves dividing the net income by the aggregate equity held by shareholders.

The valuation metric known as Tobin's Q ratio involves the division of the prevailing market price by the cost required to replace the asset with a new one that is identical in all aspects (Tsai & Huang, 2020). Despite being intriguing explanatory variables, ownership structure factors such as sponsor director ownership, government ownership, institutional ownership, public ownership, and foreign ownership have not been shown to have a significant impact on outcomes (Spoor, 2020b). The proposed model was augmented with various explanatory variables, including industry-specific dummy variables, a beta coefficient, firm size, and year-specific dummy variables. Empirical evidence has demonstrated that the utilisation of accounting-based and hybrid performance metrics, such as ROA, ROE, and TOBIN'S Q, is unsuitable for the model in question (Tsai & Huang, 2020).

The amount of latitude given to managers, which is influenced by the nature of the business they run, is one factor that contributes to the wide disparity in executive salaries between industries for several reasons (Dias et al., 2020). After that, it was demonstrated that the problem of the criteria that determine the CEO's salary had a significant impact on the situation. It is reasonable to assume that the environmental and strategic perspectives on executive compensation have the same meaning and that this perspective coincides with that of management discretion if this is the case (Zou et al., 2020). Marginal Productivity (MP), the basis of economic explanation for compensation, is a crucial premise to keep in mind when researching executive compensation. The concept behind this is that workers should have their pay determined by the degree to which they contribute to the general expansion of the organisation (Deci et al., 2017).

Following the presentation of a one-of-a-kind data set on executive pensions that were manually gathered and the completion of an in-depth study, the following objectives were proposed: Research has demonstrated that the disparity in compensation between chief executive officers (CEOs) and other executives has a notable influence on the level of risk within a firm. To mitigate the agency costs associated with CEO remuneration and the potential for risk-shifting, it has been suggested that the provision of pensions could serve as an essential source of support (Weenders, 2019). The analysis of CEO and non-CEO pensions was extended. It is of the utmost importance to emphasise the conclusion that pensions for executives other than the CEO are indeed significant (Fernández-Temprano & Tejerina-Gaite, 2020). Evidence was presented for two observations that can help manage executive contracts is a crucial aspect for businesses, particularly in the context of agency costs. This is due to two primary reasons. Firstly, the conservative effects of agency theory are amplified when high leverage is present across the executive board. Secondly, the risk-reducing conservatism that is typically observed in high-leverage CEOs is no longer apparent when compensation leverage conflicts arise between the CEO and non-CEO executives. (Janning et al., 2020). Both of these observations can help businesses better manage executive contracts.

The funding of pensions not only inspires confidence in management's ability to fulfil their obligation to provide full pension benefits, but it also reduces the risk aversion of high-compensation leverage managers (Shwairef et al., 2019). With this new information, businesses have a greater chance of being able to draught legally binding contracts that

meet their needs. Businesses can combat risk aversion by providing alternative terms to CEOs and other executives, as well as lucrative contracts to top executives (Ferrarini, 2017). Nonetheless, many companies may view this risk-shifting as a positive response to increased market volatility (Chen et al., 2021). It was also shown that influence and reciprocity are two of the most essential factors to consider when determining the CEO's compensation. By analysing attributes such as social capital, intellectual capital, and salary comparison, it becomes possible to assess the level of impact wielded by an executive. The alignment of the pay-for-performance ratio and the executive's role significance suggest a mutually advantageous collaboration (Kovvali, 2022).

However, the political-symbolic role that executives play in determining executive compensation has illuminated the relationship between influence and reciprocity (Maloa, 2018). By contributing to pension plans, management gains confidence in their ability to maximise pension entitlement, neutralising the more conservative tendencies of a high-compensation leverage manager (Handayati et al., 2022). These particulars could be utilised by businesses to draught contracts that will aid them in achieving their objectives. The company can incentivize executives at all levels of the organisation, not just the top brass, to take risks by paying for the executives' compensation agreements with company funds or by restructuring those agreements differently (Chung & Zhu, 2021).

On the other hand, many organisations may view the risk-shifting effects of increased market volatility favourably. This represents the flip side of the coin (Maloa, 2018). It was also shown that influence and reciprocity are two of the most essential factors to consider when determining the CEO's compensation (Maloa, 2018). The extent of an executive's influence can be assessed by examining variables such as social capital, intellectual capital,

and compensation comparison. The correlation between pay and performance, as well as the complexity of executive function, have both established a link between influence and reciprocity. Additionally, the political-symbolic function of executives in determining executive compensation has asserted the connection between power and influence (Maloa, 2018).

## 2.2.2 Basic pay of the executive

The majority of chief executive officers (CEOs) are compensated primarily with salary. Basic pay is a set amount of money that you will get regularly This compensation is not determined by the company's profitability. (Jeppson et al., 2009; Maloa, 2018; Ngwenya & Khumalo, 2012; Otten, 2007). Typically, it is compared to the national average pay. In addition, the CEO's base pay is a substantial amount of total remuneration and is referred to as the "fixed component" of the CEO's employment contract (Murphy, 1999). The agency theory posits that managers of firms are risk-averse, and as a consequence, CEOs would choose a larger base salary compared to their variable compensation (Boyd, 1994; Murphy, 1999). The only base salary component that incorporates incentives is the yearly compensation of the chief executive officer (Basu et al., 2007).

## 2.2.3 Variable pays of the executive

In addition to their annual compensation, CEOs are eligible for performance-based incentives every year (Jeppson et al., 2009). In addition, Murphy (1999) says that the majority of for-profit organisations offer an annual bonus to their chief executive officer. The bonus is typically handed out once each year in cash after the fiscal year (Casas-Arce et al., 2020). ROE and ROA are two measures often used to analyse the financial performance of businesses. However, the success of some organisations may be judged by

more than simply financial metrics like product quality, and customer satisfaction (Casas-Arce et al., 2020). The terms "short-term incentive pay" and "annual bonus" are occasionally used interchangeably (STIP)(Casas-Arce et al., 2020).

Since the STIP or annual bonus is typically paid only once a year, the financial and nonfinancial measures used to determine compensation tend to focus on recent events (Duru et al., 2005). In other words, the CEO will be more concerned with the immediate future of the company than with its long-term viability. To ensure that he receives his salary, the chief executive officer (CEO) has some wiggle room to adjust such short-term performance components. The CEO may attempt to change either the denominator or the nominator to retain his bonus (Bonaime et al., 2019).

A long-term incentive pay plan demonstrates that the firm values and is committed to the well-being of its shareholders (Han & Mun, 2021). Options on stocks and restricted stock are the two most common forms of long-term incentive compensation. Additionally, the LTIP has the potential to significantly alter the agency issue between senior executives and company owners. In contrast to short-term incentive pay, long-term incentive pay typically lasts between three and five years, according to (Buck et al., 2003). In addition, the CEO's employment contract stipulates that the LTIP must produce a positive value between a predetermined minimum (typically zero) and a predetermined maximum (also defined) (Han & Mun, 2021).

# 2.2.4 Cash benefits of the executive

Since higher agency costs, information asymmetry, and management opportunism are associated with larger cash on hand, having more independent women on the board may less in less cash on hand. This is due to the correlation between increased agency charges and more financial availability preventing managers from misusing their positions of authority for personal gain (Tsai & Huang, 2020). Women are more likely to maintain open communication and transparency with co-workers and clients, and they are less likely to engage in illegal activity, infractions, or other opportunities for personal gain in the workplace (Khan et al., 2021; Zou et al., 2015). As a result, it may be essential to impose limitations on cash access to ensure the smooth operation of businesses. The most accessible instrument for obtaining private profits from stockholders is cash (Elsharkawy et al., 2018). A previous study has shown that boards with a majority of women have a better track record of identifying possible problems before they become severe (Carter et al., 2003),

# 2.2.5 Financial performance

Profit maximisation should always be a company's number one priority. Numerous metrics can be utilised to evaluate performance. One indicator of a firm's level of accomplishment is its aptitude to reach its overall objectives (Waweru & Kalani, 2008). Copestake (2007) emphasised that organisational effectiveness and efficiency are crucial to a company's success, and this notion is still valid today. Traditional performance measurements, such as a company's bottom line, are often used to provide an accurate picture of the company's degree of success. Both historical and comparative measures were probably used. Metrics and reports on the performance of a firm are often revised in response to the feedback of different stakeholders. Not just workers and stockholders are considered to be stakeholders, but also governments, consumers, and even rivals.

According to the research of Lusthaus (2002)., four key characteristics of the performance evaluation must be taken into account: effectiveness, efficiency, relevance, and financial

viability. According to Jagdev et al. (2004) as cited in (MOSENG et al., 1993) model, the most significant aspects to examine when establishing The extent of a company's success is determined by its levels of efficiency, effectiveness, and adaptability. Sink et al. (1989) model for assessing a company's success is supported by seven pillars: profitability, effectiveness, efficiency, product quality, and work-life balance. According to Mjøs (2007), some objective measures of success include the introduction of new goods, the decrease of organisational expenses, the growth in total income, the enhancement of customer service, and the rise in work productivity. Lusthaus (2002) ) divides performance across four primary indicators: efficiency, effectiveness, relevance, and financial viability. This permits a more thorough understanding of performance.

The measurement of stakeholder satisfaction and the quantity of newly produced and launched goods are instances of efficacy metrics, which concurrently function as indicators of relevance. Indicators of inefficiency include machine breakdowns, service delays, personnel turnover, and absenteeism. Anachoni and Jagongo (2020) proposed a theoretical framework. According to Liu et al. (2022), the financial well-being of a company can be assessed through various indicators such as the asset-to-liability ratio, the current assetsto-current liabilities ratio, and the rate of change in sales and profits.

There exist multiple methods to assess organisational performance (Stone & Tudor, 2005). These include net income, sales Dollinger (1984), ROI, ROS, a combination of ROI and ROS (Pegels & Yang, 2000), ROA, market-to-book value of the equity, profitability, market share/growth, and market capitalization. Capitalization, profitability, and market share are three illustrative instances. An illustration of this can be seen in the work of (Entrialgo et al., 2000). According to Gill et al. (2007), an organization's ability to fulfil its commitments may serve as an indicator of its liquidity. The category of liquid assets encompasses various financial instruments that can be easily converted into cash, such as physical currency, investments in highly liquid markets, deposits with a maturity period of three months or less, accounts receivable, and bills of exchange.

Jooste (2006). As a performance metric, think about operational cash flow ratios. They assess a company's ability to settle its debts, go on with operations, distribute cash to shareholders, and make new investments without turning to extra borrowing. Palepu et al. (2000) acknowledge the potential utility of cash flow ratios in assessing and comprehending a firm's activities. All outstanding financial obligations are settled completely through the use of physical currency, thereby confirming the veracity of this statement. The outcomes of the analysis mentioned above would encompass the presence of ordinary shares that can be issued, sufficient credit facilities, absence of limitations on the utilisation of the company's cash reserves, a debt maturity timetable that is rational considering the company's financing needs, and no impediments on the usage of the company's cash reserves. An analyst can assess a company's operational, investment, and financing cash flows using this technique. These cash flows serve as crucial gauges of the business's general financial health.

#### **2.3 Theoretical Review**

The study is situated on Agency theory and supported by tournament theory and equity theory.

#### 2.3.1 Agency Theory

The application of agency theory proves to be beneficial in the examination of the principal-agent dynamic within the realm of commerce, as posited by (Bowie & Freeman,

1992). The company is considered a hub where various contracts involving the members of the firm intersect (Jensen & Meckling, 1979). Jensen and Meckling (1976) work provides a formal analysis of the concept of agency. The agency relationship is a contractual alliance established between a principal and an agent. The establishment of an agency relationship occurs when a principal engages an agent to perform a task or duty on behalf of the principal. The principal will confer authority upon the agent to exercise discretion concerning some or all of the issues about the arrangement. In most cases, the board of directors is entrusted by the shareholders of a corporation to make consequential operational determinations on their behalf. The Board of Directors confers complete authority to the CEO promptly and unambiguously. The agency relationship can lead to complications due to the challenge of accurately specifying the terms of the contract to cover all potential actions of an agent that may impact the welfare of both the agent and the principal. These potential issues may arise due to the following factors:

Chandra (2008) identified an issue in Adam Smith's influential work, The Wealth of Nations, wherein managers exhibit a behaviour akin to that of servants of affluent individuals, wherein they tend to disregard minor matters as not being in line with their master's honour and are quick to absolve themselves of such responsibilities. The issue in question was identified by Chandra (2008). Hence, in the management of a publicly traded company with dispersed ownership and limited accountability among numerous shareholders, leniency and extravagance are likely to prevail. This is because the level of responsibility of shareholders is minimal. The school of thought pertaining to agency theory has been further elucidated by Alchian and Demsetz (1972), Ross (1973), and Jensen and Meckling (1979). Moldoveanu and Martin (2001) posit that there exist two

distinct categories of issues that may manifest within an organisation: namely, those stemming from ineptitude and those arising from unethical conduct on the part of management.

An instance of ineffective management can be observed when a manager exhibits carelessness in the execution of their responsibilities. If the principal lacks a means of ascertaining the veracity of the agent's claims regarding their competencies and credentials for the position, adverse selection could be the underlying cause. Within the scope of this discourse, the term "lack of management integrity" pertains to the deliberate conduct of managers that results in the depreciation of an enterprise's assets. The aforementioned scenario exemplifies the long-standing issue of incentive misalignment that stems from the presence of moral hazards within society. Clark (1998) posits that agency theory is grounded in the Lockean concept of private property, which is a fundamental tenet of classical liberalism. This notion is indicative of a Hobbesian perspective on the fundamental nature of human beings, which posits that individuals are inherently characterised by deceitfulness, corruption, and indolence. According to Jensen and Meckling (1976) theory, it is assumed that the goals of the principal and the agent are not aligned. Alchian and Demsetz (1972) posit that agency theory centres on the interdependent connections between the principal and agents who collaborate but possess distinct objectives and risk perceptions. The subject matter pertains to the interdependent connections existing between principals and agents.

The engagement of an agent in high-risk activities poses a threat to their job security, irrespective of the potential appreciation in asset value resulting from such activities. Consequently, his inclination towards undertaking such endeavours is limited owing to the

inherent risks associated with them. Jensen and Meckling (1976) posit that in an agency relationship where both parties strive to maximise utility, there exists a possibility that the agent may not consistently act in the best interests of the principal. One of the explanations that is provided is as follows. Principals can effectively mitigate the extent of agent deviation from their directives by providing appropriate incentives and implementing rigorous monitoring mechanisms. Furthermore, it could be advantageous for the agent to endeavour to pay bonding fees as a means of ensuring that they refrain from engaging in any actions that could potentially harm the principal. Alternatively, if the agent does engage in such activities, the principal would be entitled to receive compensation. This has the potential to be advantageous for all involved parties. Despite the shared desire of the principal and the agent to make decisions that align with the principal's interests, the agent often faces financial constraints that impede their ability to do so.

According to Jensen (1993), there exist two distinct fields of inquiry that centre around the principal-agent relationship and share fundamental assumptions regarding individuals and data. The positive theory of agency diverges from the predominant agent literature in its inclination towards empirical experimentation and reduced reliance on mathematical models. Eggertsson et al. (1990) opine that the principal-agent literature predominantly centres on the modelling of the impacts of the parties' preferences, the characteristics of uncertainty, and the information framework in the surroundings of contracts between parties that possess hierarchical connections. The positive theory of agency places a primary focus on the modelling of the impact of supplementary contractual environmental factors, as well as monitoring and bonding technologies. The phenomenon of agency problem arises due to the incongruity between the objectives of the principal and those of

the agent, and this area of inquiry is dedicated to devising strategies to mitigate such conflicts.

The discourse will encompass an examination of the significance of markets concerning corporate governance, with a focus on the lens of agency theory. The market must possess the capacity to impose penalties on management that is deemed ineffective. All types of marketplaces are encompassed, comprising those for goods, services, workforce, and financial resources. It is imperative for shareholders, particularly those with significant holdings, to employ surveillance techniques to safeguard against management straying from the fiduciary duty to act in the best interests of the company's shareholders. In situations where ownership is split among multiple entities, the board of directors is perceived as a surrogate for consolidating the diverse interests of the organisation. The statement above posits that the ownership arrangement has an impact on the degree to which shareholders can wield supervisory authority over a company. The potential for further investigation lies in the extent of indebtedness. Lenders have the potential to act as vigilant overseers and mitigate conflicts between investors and management by implementing constraints on the level of debt that may be assumed. The implementation of incentives can potentially lead to a decrease in the agency's expenditures. Their function is to achieve equilibrium between the priorities of investors and management.

Eisenhardt (1989) posits a range of strategies aimed at mitigating the risk of agency loss. These measures are elaborated upon in detail. Among the measures implemented are incentive programmes that provide financial compensation to managers for prioritising the interests of shareholders. The implementation of discounted share acquisition plans for senior executives is a conventional illustration of this strategy. Eggertsson et al. (1990)
posit that the principal-agent literature predominantly centres on the modelling of the impacts of the parties' preferences, the characteristics of uncertainty, and the information framework in the surroundings of contracts between parties that possess hierarchical connections. Jensen (1994) references Brennan (2006) critique of the utilisation of incentives in CEO remuneration and social programmes. This argument demonstrates that the prevalent economic notion of rational behaviour, which posits that self-interest is the primary motivator, is both empirically and normatively incorrect.

According to Brennan (2006) and Jensen (1994), individuals do not consistently behave in a manner that serves their self-interest. However, they also share the view that this observation does not provide support for the argument that incentives should be reduced. According to Lane et al. (1998) findings, the assumptions made by agency theory are not applicable in situations where the objectives of management and stakeholders are not contradictory. Lee and O'neill (2003) have suggested that the ownership structures of Japanese organisations, which are relationship-oriented, and those of U.S. businesses, which are market-based, may impose additional constraints on the applicability of agency theory. These distinctions are present in both Japan and the United States. According to Boyd (1994) summary of recent research, it is evident that assumptions of the agency are contingent upon the context and conceivably influenced by competition.

### 2.3.2 Tournament Theory

According to Campbell (2012), advocates of the tournament theory contend that the discrepancy in wages serves as a financial motivation that facilitates the emergence of the most competent individuals in the rank-order tournament, consequently fostering competition within the team. According to the tournament model proposed by Rees (1992),

there ought to exist a significant discrepancy in wages for employees (i.e. players) between consecutive hierarchical levels, with the wage differential exceeding the marginal products of said employees. The tournament's primary reward is the payout differential, which is typically more substantial in competitions designated for proficient participants. According to the social comparison theory, individuals tend to engage in comparisons with referent others. As such, proponents of this theory contend that pay discrepancies can have an adverse impact on teamwork and decision-making processes(Brown, 2011). Conversely, advocates of the Tournament theory contend that remuneration inequality will stimulate intra-group rivalry through the provision of a monetary impetus for such competition. The theories in question seem to attribute discrete connotations to the diverse consequences of executive compensation disparity(Main et al., 1993).

The Tournament model has been subject to significant criticism by a multitude of researchers. Encouraging individuals who have experienced setbacks can pose a challenge, and the outcome may lead to a decrease in morale. Assessing the performance of executives can pose a challenge when their achievements are evaluated across various dimensions. The efficacy of promotion as an incentive may be limited due to the potential mismatch between the skill set demanded by a current job and that required for its higher-level counterpart. Milgrom and Roberts (1988) have identified candidate conspiracies and sabotage as potential sources of concern. The tournament framework incentivizes individuals to engage in competitive behaviour while discouraging collaboration. The phenomenon of CEOs engaging in excessive self-promotion through office politics is exemplified in the context of the tournament paradigm. As posited by Lazear (1989), this paradigm can incentivize unfavourable actions such as the sabotage of fellow competitors.

## 2.3.3 Equity Theory

The equity theory is commonly utilised as a benchmark to assess whether individuals are receiving just compensation for their invested time and exertion. Individuals are purported to experience cognitive dissonance upon the realisation of a discrepancy, which may motivate them to undertake actions such as diminishing their exertion, pursuing greater remuneration, or even relinquishing their employment. If the higher remuneration of the "other" can be rationalised by their superior contributions or outcomes, then the discrepancy is deemed justifiable. As per Wallace (1983) study, the core principle of pay policy is to ensure fair and just treatment of employees. Based on the findings of numerous studies conducted in the field of social psychology, it has been observed that individuals tend to overstate their strengths and achievements in comparison to those of their peers.

The inclination of individuals to enhance their self-image also referred to as "selfenhancement," is a widespread phenomenon among upper-level managers. Studies indicate that this tendency is most pronounced in situations where there is ambiguity surrounding individual achievements and effectiveness. Hayward and Hambrick (1997) and Chatterjee and Hambrick (2007) are two academic sources. Leaders of this kind usually experience significant professional accomplishments, rendering them susceptible to uncomplicated and direct forms of flattery. These individuals tend to employ comparisons to other CEOs as a means of enhancing their self-esteem, owing to their distinct personalities and traits. The aspiration for personal development among individuals can present a challenge in the application of equity theory to the evaluation of remuneration. Equity theory aligns with the contribution theory of labour economics, which posits that individuals who make greater contributions should receive higher compensation. One could posit that chief executive officers make a greater contribution to their respective organisations, thereby justifying a higher level of remuneration. As per the traditional framework of labour economics, the remuneration of employees ought to be commensurate with the worth they contribute to the enterprise. Individuals who have made significant contributions ought to receive greater rewards in recognition of their endeavours. The aforementioned principle ought to be implemented in the remuneration of all staff members, encompassing the chief executive officer. A hypothesis has been put forward suggesting that the decisions made by chief executive officers carry a disproportionate impact on the value of their respective companies.

#### **2.4 Empirical Review**

## 2.4.1 Total basic pay of the executive and financial performance

Fixed annual remuneration that is not contingent upon the employee's performance. The corporation cannot claim a tax deduction for any payment exceeding one million dollars. The annual compensation of a Chief Executive Officer (CEO) who held the position for a partial year was determined either through publicly available data regarding the CEO's contractual agreement or through the calculation of a prorated salary based on the CEO's duration of service. Both methodologies were employed as documented by (Jeppson et al., 2009). The aggregate sum of supplementary financial compensations, including bonuses, incentives, and other forms of remuneration, that are awarded to executives beyond their standard salaries.

Non-performance-based forms of compensation, including bonuses, commissions, and company-provided benefits such as 401(k) matching, paid supplemental life insurance premiums, paid relocation expenses, and personal use of corporate aircraft. Apart from

bonuses and commissions, there exist diverse categories of non-performance-based compensation, which include various forms of non-performance-based remuneration. Following the Securities and Exchange Commission's latest regulations, companies are required to disclose all benefits and privileges, irrespective of their monetary worth, unless the aggregate sum is below \$10,000, as outlined by (Jeppson et al., 2009).

# 2.4.2 Total variable pays of the executive and financial performance

According to Sigler (2011) findings, chief executive officers have the option to select their remuneration from a range of compensation plans. The remuneration packages may comprise a fixed salary, supplementary benefits, and the aforementioned fluctuating earnings as cited by Murphy (1999) and Weenders (2019). Consequently, it is imperative to evaluate whether the entire sum is sufficient. The enhancement of the company's performance is a direct result of the four constituents of the remuneration package. The comprehensive remuneration package encompasses a fundamental wage, supplementary perks, and immediate and prolonged incentive-based remuneration. In Weenders (2019) study, the author incorporated CEO compensation as a factor in elucidating the firm's performance. The assessment encompasses not only the chief executive officer's fundamental remuneration but also an array of perks, comprising immediate and prolonged incentives and equity-based compensation.

Moreover, the empirical studies cited above have demonstrated a correlation between CEO compensation and evaluations of business performance, indicating that variable pay confers significant advantages (Brick et al., 2006; Kato & Kubo, 2006; Spoor, 2020a) 2020). According to Weenders (2019), Spoor (2020a) analysed various factors to elucidate and distinguish the performance of firms. The factors in question encompassed immediate

incentives, enduring benefits, and supplementary advantages. The recent study conducted by Smirnova and Zavertiaeva (2017) suggests that immediate as well as delayed incentives play a significant role in enhancing the overall performance of firms. The agency theory, which is a prominent theoretical framework, along with the majority of the empirical evidence presented, provides support for a favourable conclusion.

The remuneration of an employee can be influenced by the individual's performance, the collective performance of the team, and/or the overall performance of the organisation. Variable compensation schemes are implemented to align employee performance more accurately with the actual benefits they receive. Variable pay schemes are commonly denoted as "incentives" owing to their association with increased compensation. The concept of variable pay is founded on the following principles: It is reasonable to suggest that employees who make greater contributions to the overall success of the company in their respective roles should receive more generous compensation than those who make lesser contributions. Allocating a proportion of the total compensation of specific personnel to acknowledge and incentivize exceptional performance is a justifiable practice.

When compared to a remuneration structure that is based on seniority or tenure, the compensation model based on seniority or length of service operates under certain assumptions. Over time, the duration of an employee's tenure with the organisation is the most distinguishing feature among employees. In the immediate term, the quantification of daily working hours serves as the primary indicator of an employee's perceived worth to the organisation. Personnel with varying levels of experience receive different starting salaries that accurately reflect their past contributions to the organisation. Differential

allocation of incentives to select employees, as opposed to others, can lead to animosity within the workforce and impede collaborative efforts.

## 2.4.3 Total cash benefits of the executive and financial performance

The findings of multiple studies suggest that the remuneration of chief executive officers (CEOs) in monetary terms may have a dampening effect on the motivation of managers to partake in risk-shifting behaviour. According to Smith and Stulz (1985) theoretical model, the potential rewards of a bonus plan are not inherently linked to risk-taking behaviour when cash incentives increase proportionally with a company's success. This scenario pertains to a situation where the rewards increase proportionally with the company's performance. When the level of performance surpasses the threshold for incentive eligibility that is based on earnings, the functioning of bonus plans is akin to that of a call option on the performance metric. As a consequence, bonuses are disbursed. The convex nature of the bonus scheme's payouts will serve as a balancing mechanism to offset the concave shape of the CEO's utility function, which is risk-averse. Once performance surpasses the threshold at which incentives are triggered (and subsequently falls below the bonus cap), the bonus plan's gradient becomes uniform concerning performance. This statement implies that CEOs who exhibit risk aversion are unlikely to be incentivized to increase the level of risk undertaken by their banks in exchange for greater bonus payouts, provided that the compensation scheme is characterised by a linear relationship with performance.

In contrast to the aforementioned hypothesis, empirical studies suggest that the remuneration received by chief executive officers (CEOs) has a mitigating effect on their inclination toward undertaking risky actions. There is contention among scholars that

linking the CEO's remuneration to the financial performance of the organisation heightens the probability of the enterprise's survival (Brander & Poitevin, 1992; John & John, 1993). Duru et al. (2005) found that managers require consistent cash flows to fulfil contractual debt obligations and attain earnings-based monetary rewards. The rationale for this is that the management seeks to optimise its revenue generation capacity. The authors posit that the decreased expenses associated with debt financing can be attributed to the diminished agency costs of debt and concentrated risk-shifting incentives in firms that provide greater cash bonuses to their CEOs. The authors suggest that the decreased expenses associated with debt financing can be attributed to the aforementioned factors.

Despite the aforementioned evidence, there persists a belief among some that financial organisations engage in "excessive" risk-taking due to monetary incentives (Arner & Taylor, 2009). (as noted by the Financial Stability Board, 2009). Recent research has discredited the two underlying assumptions that have supported the notion that incentives lead individuals to engage in riskier behaviour. Recent statistical data has indicated that the provision of incentives does not lead to an increase in risk-taking behaviour among individuals. It can be assumed that managers are motivated to undertake greater risks to attain the performance objectives that serve as the foundation of incentive contracts, as cash bonus contracts fail to adequately subject managers to negative consequences. The reason for this is that contracts based on monetary compensation fail to adequately subject managers to risk.

The available empirical evidence suggests that bonus contracts tend to impose penalties for subpar performance more frequently than they provide rewards for good performance, as

demonstrated by studies undertaken Casas-Arce et al. (2020) and Leone et al. (2006). The second premise posits that shareholders create incentives to impact immediate actions, and managers pursue more hazardous approaches to achieve these near-term objectives by linking bonus remunerations to yearly performance targets. The third principle posits that shareholders institute incentives aimed at influencing short-term conduct. While certain evidence indicates that supervisors could potentially play a role in reducing employee productivity, this viewpoint is not universally acknowledged.

# 2.4.4 Total compensation of the executive and financial performance

Jensen and Murphy (1990) conducted an initial empirical inquiry into the correlation between CEO remuneration and company performance. Between 1974 and 1986, the researchers examined various categories of American corporations. Upon confirming the feasibility of computing pay-for-performance sensitivity, the subsequent inquiry revealed a favourable correlation between corporate performance and the compensation received by the Chief Executive Officer. Hall and Liebman (1998) established a significant positive correlation between a company's performance and the compensation received by its CEO. The authors conclude that the correlation can be attributed to the variability in the stock and option holdings of CEOs over a period of time.

The study conducted by Boschen and Smith (1995) investigated the correlation between the remuneration of executives and the past and present levels of the overall performance of an organisation. The study employed stock market returns as a surrogate measure for the efficacy of business entities. From 1948 to 1990, a total of sixteen distinct American corporations were subject to examination. The researchers observed that an individual's past performance exerts a noteworthy effect on their current earnings, but this influence does not have any enduring consequences. Throughout the four-decade study, alterations in the way in which remuneration is linked to job performance were also observed. According to previous research conducted by Core et al. (1999) and Ghosh (2006), executive remuneration is influenced positively by both the present and past performance of the organisation. In numerous organisations, particularly those with a substantial workforce, the remuneration of CEOs is occasionally managed distinctively from employee salaries. The highest-ranking employee in a company is commonly referred to as an executive, and this position is typically held by individuals who hold the titles of CEO, President, or Senior Vice President.

Executive compensation packages generally comprise various components such as base salary, annual bonuses, long-term incentives, supplementary benefits, and additional perks. Executive compensation is guided by two primary aims: (a) guaranteeing that the remuneration packages for executives remain competitive with those offered by other firms that may seek to hire them, and (b) linking executive pay to the long-term performance of the organisation. Both of these goals are based on the premise that executive total compensation packages must be competitive with those offered by other companies that may seek to hire them. The second objective of those who oppose CEO compensation assertions is not being achieved, as it remains unrealized. The observation suggests that the compensation received by CEOs in numerous companies is frequently exorbitant and does not exhibit a direct correlation with the degree of achievement attained by the organisation.

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## 2.5 Conceptual Framework and Hypothesis Development

A conceptual framework is a graphical representation of the predicted nexus between the study's variables under examination in most instances, a literature review of prior research on the topic serves as the basis for the construction of a graphical conceptual framework.



### Figure 2.1Conceptual Framework

Source: Author's Construct (2023)

Executives that get performance pay are incentivized to do the best job they are capable of and are compensated for achieving certain goals or objectives. In addition to a predetermined amount of cash, it is often included as a part of the compensation package.

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Remuneration that is based on pay-for-performance is variable and is determined by how well the person does their job. Based on the above supposition

**H**<sub>1</sub>: There is no statistically significant difference between the total compensation of the executive and the financial performance of listed non-financial firms in Ghana.

The yearly salary of a CEO who served for just a part of the year was either established by publicly accessible information about the new CEO's contract or estimated by prorating the remuneration based on the actual time the CEO was in office. The level of basic pay paid to the executive influences their performance. Thus, the hypothesis is formulated as

**H**<sub>2</sub>: Total basic pay of the executive has no statistically significant effect on the financial performance of listed non-financial firms in Ghana.

When performance exceeds the earnings-based threshold for incentive eligibility, bonus plans operate similarly to a call option on the performance metric. This results in the payout of bonuses. The convexity of the bonus plan's payouts will work as a counterweight to the concavity of the CEO's risk-averse utility function. However, after performance exceeds the level at which incentives become due (and falls below the bonus limit), the slope of a bonus plan becomes linear concerning performance. Therefore, it is theorised that **H**<sub>3</sub>: Total cash benefits of the executive do not have a statistically significant effect on the

financial performance of listed non-financial firms in Ghana.

CEO will be more concerned with the immediate future of the company than with its longterm viability. To ensure that he receives his salary, the chief executive officer (CEO) has some wiggle room to adjust such short-term performance components. The proposition is stated as H<sub>4</sub>: Total variable pay of the executive has no statistically significant influence on the financial performance of listed non-financial firms in Ghana.

### **2.5 Chapter Summary**

The literature review encompasses an examination of conceptual, theoretical, and empirical perspectives, as well as the development of a conceptual framework. The analysis revealed that the remuneration of Chief Executive Officers (CEOs) has garnered significant scrutiny as a crucial predictor. The research on the importance of CEO compensation has garnered considerable attention in both academic and policy spheres. This research is grounded in the principles of Agency theory and is bolstered by the tenets of tournament theory and equity theory. The delegation of all authority to the CEOs is carried out by the Board of Directors. The agency relationship may give rise to complications due to the challenge of accurately specifying the full range of actions that an agent may undertake, particularly when such actions have an impact on the welfare of both the agent and the principal. The analysis conducted additionally disclosed the aggregate sum of supplementary pecuniary disbursements, encompassing bonuses, incentives, and other forms of remuneration, that were bestowed upon top-level managers, over and above their customary salaries. This study examines the correlation between executive compensation and the historical and present levels of an organization's overall performance.

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# **CHAPTER THREE**

# METHODOLOGY

## **3.1 Introduction**

The methodology section of the research encompasses the approaches utilised to accomplish the study's objectives. The present chapter expounds upon the research methodology employed in the study, encompassing the research approach, research design, data collection from a selected sample of firms, variable measurement, the empirical model utilised, and the data analysis techniques implemented.

## **3.2 Research Approach**

The study used quantitative, drawing upon the principles of analytical philosophy and the positivist paradigm. Siedlecki (2020) posits that quantitative research is focused on the application of statistical methods, logical reasoning, and the pursuit of objectivity. The focus of quantitative research lies in numerical and consistent data, as well as in-depth and convergent reasoning, as opposed to divergent reasoning (Brannen, 2017). According to Knotter (2022), positivism posits that the sole dependable knowledge is factual information obtained through observation, particularly measurement, using the senses. According to Knotter (2022), the primary obligation of a positivist researcher is to impartially gather and evaluate the accumulated data. The proposed study is deemed appropriate for the quantitative research approach as it allows researchers to systematically observe and measure conditions or events that have an impact on individuals. According to Hosseini et al. (2019), quantitative research produces unbiased data that can be effectively communicated through the use of statistical analysis and graphical representations.

## 3.3 Research Design

The research methodology employed in this study is explanatory, also known as causal research. The study was undertaken to evaluate the extent, characteristics, and causal connections of the issue (Dannels, 2018). Causal research aids in identifying the fundamental factors that contribute to the research issue. Possessing this information empowers the researcher to undertake necessary measures to address the concerns or optimise the outcomes. Causal research offers advantages in cases where replication is deemed necessary.

#### **3.4 Population**

The study focuses on the non-financial firms operating in Ghana, with a particular emphasis on the subset of these firms that are listed on the Ghana Stock Exchange totalling 24. The industries represented by these listed nonfinancial companies include manufacturing, mining, nonfinancial services, construction, real estate, and pharmaceuticals. By examining the relationship between executive compensation and financial performance within this population, the purpose of this study is to shed light on the intricate dynamics of executive remuneration practises and their impact on the outcomes of these listed non-financial firms.

### 3.5 Sample Procedures and Sample Size

Using appropriate sampling techniques is crucial for determining a valid and representative sample size for the study. The sample size of 23 non-financial firms listed on the GSE out of a target population of 24 non-financial firms listed on the GSE was determined using the sample size determination formula finite population. The formula is stated as follows:

$$n = \frac{c^2 N p(1-p)}{(A^2(N-1) + (c^2 p[1-p]))}$$

where **n** is the sample size,

N is the target population in question,

**p** denotes the average percentage of non-financial firms listed on GSE that fulfil the inclusion requirements,

(1-p) represents the average percentage of non-financial firms listed on GSE that are not anticipated to satisfy the requirements,

A denotes the allowable margin of error (calculated as a proportion). The confidence intervals selected determine the mathematical constant **C**.

The targeted population (N) = non-financial firms listed on GSE (24).

Expected incidence (p) = 50%

Accuracy (A) = 0.05

Confidence interval (c) = 1.96

 $n = \frac{(1.96)^2 (24)(0.5)(1-0.5)}{(0.05)^2 (24) + (1.96)^2 (0.50)[1-0.50]}$ 

*n* = 23

Systematic sampling was used to determine the sample size, ensuring that each member of the population has an equal chance of being included. The utilization of systematic sampling in this study aligns with the research's scientific rigour and contributes to the sample's validity. It systematically encompasses various non-financial firms from the Ghana Stock Exchange, reflecting the diversity of the target population. Furthermore, the sample size determination formula guides the selection process, ensuring that the chosen sample size is statistically sound and possesses sufficient power to draw meaningful conclusions.

## 3.6 Data Type and Source

The study utilised secondary data sourced from the annual reports and financial statements of non-financial companies that are publicly listed on the GSE. The dataset utilised in this study is composed of panel data consisting of 23 firms sampled and observed over the period from 2005 to 2021.

# 3.7 Measurement of Variables

This study utilises two distinct metrics of firm performance, namely Tobin's Q (TQ) and ROA, to investigate the effect of executive compensation on the performance of nonfinancial companies. The measures for financial performance employed in prior research, including Arora and Bodhanwala (2018), Saidat et al. (2019), and Danoshana and Ravivathani (2019), consist of the variables under consideration. This research examines various components of executive remuneration, including the basic salary, cash benefits such as retirement plans, life insurance, and car allowances, as well as variable pay in the form of short-term and long-term incentives. The analysis encompasses the total executive compensation, which comprises basic pay, cash benefits, and variable pay. In addition, certain characteristics specific to the firm have been employed to regulate the model, including but not limited to firm size, leverage, and firm age. Table 3.1 presents the definition, notation, and measurement of the variables.

|           | able ever variable Deminister and riteable entent |                     |   |  |  |  |  |
|-----------|---|---------------------|---|--|--|--|--|
| Variable  | Notation  | Definition          | Measurement                                       |  |  |  |  |
| Tobin's Q | ТО  | Tobin's q is the    | The market value of the firm's outstanding shares |  |  |  |  |
|           | ~   | market value of the | Replacement cost of firm's asset                  |  |  |  |  |
|           |   | company's           |   |  |  |  |  |

|                   | ZM            | 1.5 |       |       |
|-------------------|---------------|-----|-------|-------|
| Table 3.1:Variabl | le Definition | and | Measu | remer |
|                   |               |     |       |       |

|  |      | outstanding shares divided by the |   |
|--|------|-----------------------------------|---|
|  |      | replacement cost of               |   |
| Doturn on                              | POA  | the firm's asset                  | Net Income  |
| Asset                                  | KOA  | management is                     | Total Assets  |
| Asset                                  |      | using the firm's                  | 10111113213   |
|  |      | assets to generate                |   |
|  |      | profit                            |   |
| Total                                  | TEBP | Total executive                   | Total Executive Basic Salary  |
| Executive                              |      | basic salary to total             | Total Compensation  |
| Basic Salary                           |      | compensation                      |   |
| Total                                  | TECB | Total cash benefits               | Total Executive Cash Benefits   |
| Executive                              |      | (a retirement plan,               | Total Compensation  |
| Cash Benefits                          |      | life insurance, car               |   |
|  |      | allowances) to total              |   |
|  |      | compensation                      |   |
| Total                                  | TEVP | Total executive                   | Total Excutive Variable Pay   |
| Executive                              | _ (  | variable pays                     | Total Compensation  |
| Variable Pay                           |      | (short-term                       | -2  |
|  | -    | incentive pay and                 | R I III   |
| -                                      |      | long-term incentive               | 1375  |
|  | -    | pay) to total                     | , SOC   |
|  |      | compensation                      |   |
| Total                                  | TEC  | The total                         | Natural logarithm of the total executive  |
| Executive                              |      | compensation paid                 | compensation  |
| Compensation                           |      | to the executive                  |   |
|  |      | (including basic                  |   |
| Z                                      |      | salary, cash                      |   |
| E                                      |      | benefits and                      |   |
| 13                                     | 1    | variable pay)                     | - And |
| Firm Age                               | FA   | The number of                     | Number of years since going public  |
| e                                      | 71   | years the firm has                |   |
|  |      | been listed on the                | NO  |
|  |      | GSE                               |   |
| Leverage                               | LEV  | The ratio of total                | Total Debt  |
| ······································ | ,    | debt to total assets              | Total Assets  |
|  |      |                                   |   |

| Firm Size | FS | Size of the firm in terms of total | Natural Logarithm<br>firm | of | total | assets | of | the |
|-----------|----|------------------------------------|---------------------------|----|-------|--------|----|-----|
|           |    | assets                             |                           |    |       |        |    |     |
|           |    |                                    |                           |    |       |        |    |     |

*Note: where the total market value = outstanding shares\*current market share price* 

## **3.8 Empirical Model Estimation**

The research employed both static and dynamic versions of panel data regression for econometric analysis, given the panel structure of the data that encompasses cross-sectional and time-series dimensions. Panel data refers to datasets that are multidimensional and comprise measurements taken over some time. According to Chatelain and Ralf (2021), panel data refers to the collection of observations on multiple phenomena for a given set of individuals or organisations over a specified period. The methodology of static panel data analysis involves the simultaneous consideration of both time series and crosssectional data. According to Chatelain and Ralf (2021), static panel data models can be varied through two methods: fixed effects and random effects. The method utilising fixed effects demonstrated a correlation between the explanatory variables and various latent factors that were not directly observable. The Hausman test is utilised to determine the optimal model choice between fixed and random-effects models.

The fixed effect is that the intercept may differ across firms, but each company does not change over time. A vital assumption of this model is that the intercepts are time-variant, even though they are cross-sectional. The unobserved impact is explicitly included in the least-squares dummy variable (LSDV) regression model. Dummy variables Ai may be used to describe the model, which can be phrased as Ai equal to I when there is an observation that pertains to the firm i of interest; otherwise, 0.

$$Y_{it} = \sum_{j=2}^{k} \beta_j X_{iji} + \partial_t + \sum_{t=1}^{n} \infty_i A_i + \varepsilon_{it}$$
(1)

There are two prerequisites for using a random-effects regression model: First, all  $Z_p$  variables must be treated as selected randomly from a particular distribution. Individual observations taken at random from a particular population might lead to this conclusion. If

$$Y_{it} = \beta_j + \sum_{j=2}^k \beta_j X_{iji} + \partial_t + \infty_i + \varepsilon_{it} = \beta_j + \sum_{j=2}^k \beta_j X_{iji} + \partial_t + \mu$$
(2)

where:  $\mu_{it} = \infty_i + \varepsilon_{it}$ 

The unobserved influence has been dealt with by subsuming it into the disturbance term. The second criterion is that the  $Z_p$  variables are distributed independently of all the  $X_j$  variables. If this is not the case,  $\infty$  and here  $\mu$ , will not be uncorrelated with  $X_j$  variables, and the random effects estimate will be biased and inconsistent.

The use of dynamic panel data regression is justified in cases where the dependent variables exhibit a significant level of persistence. The incorporation of the delayed firm performance element is evidenced by the fact that, as revealed by a comprehensive examination of the existing literature, gauges of firm performance exhibit a significant level of continuity. The utilisation of dynamic panel estimation is advantageous in that it accounts for enduring effects, rendering it a more resilient and enlightening approach than static panel estimates. This study employs two commonly employed dynamic panel estimation techniques, namely difference GMM and system GMM (Arellano & Bond, 1991; Blundell & Bond, 1998).

$$Y_{it} = \alpha + \beta Y_{it-1} + \gamma X_{it} + v_{it}$$
(3)

 $Y_{it}$  signifies the dependent variables: TQ and ROA and  $X_{it}$  denotes the set of independent variables: executive compensation variables and control variables and  $Y_{it-1}$  represent the lagged performance term.

Arora and Bodhanwala (2018) and Sheikh et al. (2018) contend that the explanatory variables in our scenario are expected to exhibit endogeneity. The executive compensation variables delineated above are influenced by the historical performance of the firm. Moreover, when utilising a lagged dependent variable as a regressor, the fixed effects estimator yields regression coefficients that are both biased and inconsistent. The widely used GMM estimators are employed to estimate the dynamic panels to address the challenges, as suggested by Arellano and Bond (1991), Arellano and Bover (1995), and Beck et al. (2015).  $Y_{tt}$  Beck et al. (2015) and Arora and Sharma (2016) concur that the GMM estimators are significantly more effective than the fixed effects estimators at addressing endogeneity and simultaneity bias.

The GMM estimator, commonly referred to as the Arellano and Bond Estimator, employs the prior values of the dependent variables as inputs for the initial differenced lags. The authors Arellano and Bond (1991) present a methodology for approximating the model in the structure of a collection of equations, where each equation corresponds to a distinct temporal interval. According to Arellano and Bover (1995) and Blundell and Bond (1998), the utilisation of lag values of dependent variables as instruments for first differenced variables is generally inadequate. The justification of the System GMM estimator was a consequence of this, wherein lagged differences  $Y_{ii}$  are utilised as instruments for the equation in levels, while lagged levels  $Y_{ii}$  are employed as instruments for the equation in first differences. According to Roodman (2009), the system GMM estimator exhibits greater robustness in comparison to other GMM estimators. In addition, Windmeijercorrected standard errors have been made available for GMM estimations, while robust standard errors have been presented for FE estimates to address concerns related to heteroskedasticity and autocorrelation.

To examine the effect of executive compensation on the financial performance of listed non-financial firms in Ghana, the study employed the system-GMM method. The models are stated as:

Model 1

 $TQ_{it} = \alpha_0 + \beta_0 TQ_{it-1} + \beta_1 TEBP_{it} + \beta_2 TECB_{it} + \beta_3 TEVP_{it} + \beta_4 TEC_{it} + \beta_5 FA_{it} + \beta_6 LEV_{it} + \beta_7 FS_{it} + v_{it}$ 

### Model

 $ROA_{it} = \alpha_0 + \beta_0 ROA_{it-1} + \beta_1 TEBP_{it} + \beta_2 TECB_{it} + \beta_3 TEVP_{it} + \beta_4 TEC_{it} + \beta_5 FA_{it} + \beta_6 LEV_{it} + \beta_7 FS_{it} + v_{it}$ Where  $TQ_{it}$  and  $ROA_{it}$  are the firm performance measures for the firm *i* at period *t*. On the right-hand side of the model, we have the executive compensation variables (see Table 3.1) for the firm *i* at period *t*.  $FA_{it}$ ,  $LEV_{it}$ ,  $FS_{it}$  are controlled in the model while modelling the firm performance.

### 3.9 Data Analysis

The non-financial firms listed on the GSE were subjected to data collection, which was subsequently edited and presented in MS Excel format. The procedure entails scrutinising the data to detect any inaccuracies or incongruities and rectifying them as needed to ensure the suitability of the collected data for analysis. The process of cleaning and editing data is of paramount importance as it guarantees the precision and dependability of the analysis outcomes. Following data cleaning and editing procedures, the study utilised STATA version 13 analytical software to produce the study findings. STATA is a robust statistical software application utilised for the examination of intricate data sets. The software in question offers a variety of statistical methods and tools, such as regression analysis, hypothesis testing, and data visualisation, that are crucial for conducting GMM estimation. The study employs the GMM estimation technique, which entails the estimation of model parameters by minimising the disparity between the theoretical moments of the model and the empirical moments of the data. This approach proves to be especially advantageous in cases where the model exhibits nonlinearity, or when the errors present heteroscedasticity or correlation.

#### **3.10 Chapter Summary**

In conclusion, the methodology chapter of this research underscores the adoption of a quantitative research approach firmly rooted in the positivist paradigm. Through an explanatory research design, specifically causal research, the study has been designed to comprehensively explore the scope, nature, and causal relationships underlying the identified problem. Employing secondary data sources, the research delves into the intricate relationship between executive compensation and the financial performance of non-banking firms. The study's dataset is drawn from secondary panel data spanning the years 2005 to 2021, meticulously sourced from the annual reports and financial statements of diverse businesses within consideration. The representation of values as percentages or ratios within yearly time series datasets contributes to a structured and informative analysis. With a targeted sample of 23 non-financial enterprises listed on the GSE, the study rigorously selects these firms to represent the population of interest. The research's analytical core is built upon an econometric model, specifically the System GMM model.

The data analysis is executed using STATA version 13, a reputable statistical software, and the results are succinctly presented in tables.



#### **CHAPTER FOUR**

#### **RESULTS AND DISCUSSION**

# **4.1 Introduction**

The Results and Discussion chapter of the study encompasses several elements, including the descriptive statistics of the variables utilised in the study models. Moreover, it entails a comprehensive analysis of pre-diagnostic assessments, such as normality tests, multicollinearity tests, and heteroscedasticity tests. The research utilised a two-step GMM approach to investigate the effect of the explanatory factors on the dependent variables. The utilisation of this analytical methodology enables a thorough investigation of the interconnections and impacts within the research framework.

#### **4.2 Descriptive Statistics**

The segment on descriptive statistics provides an overview of the central tendencies of the variables under investigation through the utilisation of various measures, including mean, standard deviation, minimum, and maximum values. The statistical data presented offers significant insights into the distribution and variability of the variables under investigation, thereby enhancing comprehension of their characteristics and trends.

| Table 4.1 Descriptive Statistics |      |         |         |        |                        |  |  |
|----------------------------------|------|---------|---------|--------|------------------------|--|--|
| Variable                         | Obs. | Mean    | SD      | Min    | Max                    |  |  |
| TQ                               | 251  | 19.580  | 286.685 | -1.888 | <mark>45</mark> 43.377 |  |  |
| ROA                              | 254  | 1.867   | 23.033  | -0.916 | 363.986                |  |  |
| TEBS                             | 241  | 0.201   | 0.322   | 0.001  | 0.999                  |  |  |
| TECB                             | 258  | 0.321   | 0.272   | 0.003  | 0.933                  |  |  |
| TEVP                             | 258  | 0.490   | 0.334   | 0.0002 | 0.851                  |  |  |
| TEC                              | 258  | 8.615   | 0.805   | 6.675  | 11.419                 |  |  |
| FA                               | 244  | 13.3402 | 7.7838  | 1.0000 | 30.0000                |  |  |
|                                  |      |         |         |        |                        |  |  |

| Table A | 1 Descriptive | Statisti |
|---------|---------------|----------|

| FS  | 255 | 8.7154 | 1.6051  | 5.3783  | 14.3063  |
|-----|-----|--------|---------|---------|----------|
| LEV | 191 | 2.8040 | 34.6785 | -0.0033 | 479.4420 |

*TQ:* Tobin's q, ROA: Return on assets, TEBE: Total executive basic salary to total compensation, TECB: Total cash benefits to total compensation, TEVP: Total executive variable pays to total compensation, TEC: The total compensation paid to the executive, FA: Firm age: LEV: Leverage, FS: Firm size

# 4.2.1Tobin's q

Tobin's q, a financial ratio measuring a company's market value concerning its total assets, is shown in Table 4.1. This study demonstrates that the average Tobin's q value is 19.5802, indicating that the collective market value of the sampled companies exceeds their combined assets by a factor of 19.58. The observed value of the standard deviation, which is 286.6859, suggests that there is a noteworthy level of variability in the ratio of market value to assets among the different firms. The deduced minimum value of -1.8880 suggests the existence of at least one enterprise within the analysed data set that demonstrates Tobin's q value lower than 0. This observation suggests that the firm's market value is lower than the sum of its total assets. On the other hand, the identification of a peak value of 4543.3770 implies the presence of a company or companies with a significantly higher market valuation relative to their assets.

The results suggest that there exists a wide range of Tobin's q values among the nonfinancial firms that are registered in Ghana. The statement above implies that there is a significant level of variation in the financial achievements and market evaluation of these businesses. The sample of companies exhibits a higher mean Tobin's q value, indicating a favourable market valuation of their assets on average.

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## 4.4.2 Return on assets

The ROA metric is a financial indicator that assesses a firm's profitability by dividing its net income by its total assets. The calculated mean ROA for the sample is 1.8674, indicating that the companies under consideration produce an average return of approximately 1.87% on their total assets. The computed standard deviation value of 23.0335 suggests a significant level of variability in the profitability levels among the firms. The minimum value of -0.9164 indicates the possible existence of a firm or firms that encounter an unfavourable return on assets. This suggests that the firm's net income is less than its total assets. Alternatively, it can be deduced from the recorded maximum value of 363.9863 that there is a company that displays a significantly elevated return on assets values among publicly listed non-financial firms in Ghana. The results suggest significant variations in the profitability and asset income generation capabilities among companies.

## 4.2.3 Total executive basic salary to total compensation

The Total Executive Benefit Score (TEBS) denotes the proportion of the overall remuneration package that is assigned to the fundamental salary of the executive. Based on the TEBS metric, which has an average value of 0.2016, it can be inferred that the fundamental salary component of executives constitutes approximately 20.16% of the total remuneration package. The computed standard deviation of 0.3222 suggests a substantial level of variability in the dispersion of total executive basic salary among the firms that constitute the examined sample. This implies that some corporations allocate a higher proportion of the total compensation towards base salary in contrast to others that allocate a lower proportion.

The TEBS displays a spectrum of values that encompasses a minimum of 0.0013 and a maximum of 0.9997. The extensive range of data indicates that there is significant variation in the extent to which organisations prioritise base salary as a constituent of the overall compensation structure. The aforementioned findings highlight the unique approaches and strategies utilised by non-financial firms listed in Ghana regarding the allocation of executive compensation. Some corporations exhibit a preference for assigning a higher percentage of the total compensation package to the fixed base salary, while others may choose to allocate a greater proportion to alternative elements such as stock options or performance-based incentives.

# 4.2.4 Total cash benefits to total compensation

The variable TECB represents the percentage of the total compensation package that consists of monetary benefits provided to senior executives. The TECB value, which was computed to be 0.3214, indicates that executives receive around 32.14% of the total compensation package in the form of cash benefits. The TECB distribution among the companies included in the sample is diverse, as evidenced by the standard deviation of 0.2718. This observation implies that there are differences in the practises and approaches employed by companies when providing financial incentives to their senior executives.

The TECB values demonstrate a spectrum that encompasses a minimum of 0.0028 and a maximum of 0.9332. The considerable variance in the distribution of monetary benefits across companies suggests a noteworthy degree of heterogeneity. Some organisations may distribute a smaller proportion of their executives' total compensation as cash benefits, while others may provide a higher percentage. This study sheds light on the extent to which non-financial firms that are publicly traded in Ghana place emphasis on cash-based

incentives as a constituent of their executive compensation structure. The results suggest that specific corporations prioritise cash benefits as a fundamental element of executive compensation, while others may distribute a smaller percentage of cash benefits and instead allot a larger percentage to alternative components such as bonuses, stock options, or nonmonetary benefits.

## 4.2.5 Total executive variable pays to total compensation

The Total Executive Variable Pay (TEVP) is a quantifiable measure that represents the proportion of the comprehensive compensation package that comprises variable remuneration for top-level management personnel. The remuneration that is subject to change based on performance can be in the form of bonuses, incentives, or other analogous types of variable compensation. The TEVP metric, which has an arithmetic mean of 0.4903, indicates that variable pay constitutes approximately 49.03% of the aggregate remuneration received by executives. This statement suggests that a significant portion of executives' compensation is tied to their performance or the collective performance of the organisation they are associated with. The distribution of Total Enterprise Value Premium (TEVP) appears to be non-uniform across the sample enterprises, as evidenced by a standard deviation of 0.3337. This implies that companies with diverse backgrounds may utilise different approaches to determine the variable component of executive compensation. Some institutions may place a higher emphasis on incentives based on performance, while others may integrate a lower percentage of variable compensation into their overall remuneration structure.

The collected data displays a spectrum of values, ranging from a minimum of 0.0002 to a maximum of 0.8505. The wide range of practises observed indicates a substantial variation

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in the extent to which organisations incorporate variable remuneration schemes within their comprehensive executive compensation framework. The aforementioned statement highlights the potential for some corporations to rely heavily on variable compensation as a means of aligning executive incentives with performance, while others may opt for a more conservative approach with a lower proportion of variable compensation.

The findings provide significant insights into the compensation strategies of non-financial corporations that are publicly traded in Ghana. These insights underscore the corporations' proclivity towards incorporating adaptable compensation structures into the remuneration plans of their senior executives. The implementation of variable compensation schemes by corporations has the potential to affect the motivation of top-level management and the alignment of their goals with the financial performance of the company.

# 4.2.6 Total executive compensation

The term TEC denotes the aggregate amount of remuneration disbursed to executives, encompassing various components such as base salary, incentives, bonuses, and other forms of compensation. The computed mean TEC value of 8.6153 indicates that executives receive an average total compensation of approximately 8.6153 units. The statement above provides insight into the average compensation earned by executives in a specific cohort of non-financial firms that are publicly traded in Ghana. The observed standard deviation of 0.8053 suggests the presence of variability in the Total Electron Content (TEC) distribution across the firms that were sampled. This implies that there may be variability in executive remuneration among distinct organisations. Differences in executive compensation packages among firms are evident, with certain entities providing remuneration that is relatively elevated while others offer comparatively lower compensation.

The dataset displays a spectrum of numerical values, wherein the minimum value is 6.67544 and the maximum value is 11.4186. The range mentioned above represents the diversity in compensation packages provided to executives in various organisations. The assertion suggests that certain corporations may furnish executive remuneration plans that are relatively more munificent, whereas others may proffer more restrained levels of compensation. The aforementioned findings provide valuable understanding regarding the scope and distribution of executive compensation across non-financial companies that are publicly traded and operate in Ghana. The TEC metric's average value provides valuable information regarding the customary compensation received by executives. Conversely, the standard deviation and range measures illustrate the extent of variation in compensation levels across different organisations.

## 4.2.7 Firm Age, firm size, and Leverage

According to the findings of the study, the average Firm Age (FA) of the non-financial companies included in the sample is 13.3402 years. This indicates that these companies have been in operation for an average of 13.3402 years. The computed standard deviation value of 7.7838 suggests that there is a certain level of variability in the age distribution of firms. This suggests that certain companies are relatively new in comparison to others that have been in existence for a longer duration. The sample of firms included in the study exhibits a broad range of ages, as evidenced by the minimum and maximum observed values of 1.0000 and 30.0000, respectively.

The variable denoted as "Firm Size" (FS) represents the average size of non-financial firms that are listed, with a mean value of 8.7154. This metric offers valuable insights into the standard scale of these enterprises concerning their magnitude. The computed standard deviation value of 1.6051 suggests the presence of variability in the size of firms, with certain entities being relatively smaller and others being larger. The observed values in the sample demonstrate the diversity of firm sizes, ranging from a minimum of 5.3783 to a maximum of 14.3063.

The calculated metric of interest pertains to the average leverage of non-financial firms that are listed, which has been determined to be 2.8040. This metric functions as a gauge of the customary degree to which indebtedness is utilised by said enterprises. The computed standard deviation value of 34.6785 indicates a considerable level of variation in the leverage ratios among the companies. The observed values exhibit a wide range, with a minimum of -0.0033 and a maximum of 479.4420, suggesting a significant degree of variability in the levels of leverage among firms. Certain companies display minimal or even adverse debt-to-equity ratios, whereas others showcase significantly elevated degrees of leverage.

The results of this study offer insights into the characteristics of publicly traded nonfinancial firms, particularly their age, size, and level of indebtedness. The duration of a company's existence can function as a gauge of its degree of development and expertise, while the magnitude of a company can offer a perception of its comparative scope or extent. The notion of leverage is concerned with the extent to which firms employ debt financing as a constituent of their comprehensive capital configuration.

## **4.3 Correlation Matrix**

The correlation matrix depicted in Table 4.2 illustrates the statistical associations between Tobin's q, ROA and other study variables. This matrix provides insight into the relationships between TQ, which reflects a company's market value, and various factors.

| Table 4.2 Correlation Matrix |         |        |        |        |        |        |        |     |
|------------------------------|---------|--------|--------|--------|--------|--------|--------|-----|
|                              | TobinsQ | TEBS   | TECB   | TEVP   | TEC    | FA     | FS     | LEV |
| TobinsQ                      | 1       |        |        |        |        |        |        |     |
| TEBS                         | -0.604  | 1      |        |        |        |        |        |     |
| TECB                         | -0.795  | -0.365 | 1      |        |        |        |        |     |
| TEVP                         | -0.664  | -0.656 | -0.473 | 1      | Max.   |        |        |     |
| TEC                          | 0.637   | 0.180  | -0.777 | 0.447  | 1      |        |        |     |
| FA                           | -0.505  | -0.315 | 0.074  | 0.232  | -0.023 | 1      |        |     |
| FS                           | -0.886  | 0.613  | -0.284 | -0.337 | 0.327  | -0.051 | 1      |     |
| LEV                          | -0.015  | 0.026  | -0.746 | 0.014  | 0.032  | -0.128 | -0.048 | 1   |
|                              | ROA     | TEBS   | TECB   | TEVP   | TEC    | FA     | FS     | LEV |
| ROA                          |         |        | 1      |        | 1 an   | 1      | _      |     |
| TEBS                         | -0.822  | 1      | -      | 11-    | -2-    | T      | -      | 2   |
| TECB                         | -0.540  | 0.006  | 1      |        |        |        | 13     |     |
| TEVP                         | -0.835  | -0.055 | -0.365 | 1      | 23     | 12     |        |     |
| TEC                          | 0.615   | 0.037  | -0.656 | -0.473 | 1      | X      | 1      |     |
| FA                           | 0.537   | 0.620  | 0.180  | -0.777 | 0.447  | 1      |        |     |
| FS                           | -0.805  | -0.940 | -0.315 | 0.074  | 0.232  | -0.023 | 1      |     |
| LEV                          | 0.567   | -0.121 | 0.613  | -0.284 | -0.337 | 0.327  | -0.051 | 1   |

| able | 4.2                 | Correlation | Mat   | tri |
|------|---------------------|-------------|-------|-----|
| ant  | <b>T</b> • <b>#</b> |             | 11161 |     |

TQ: Tobin's q, ROA: Return on assets, TEBE: Total executive basic salary to total compensation, TECB: Total cash benefits to total compensation, TEVP: Total executive variable pays to total compensation, TEC: The total compensation paid to the executive, FA: Firm age: LEV: Leverage, FS: Firm size

The correlation between TEBS and TQ is -0.604. This suggests a moderately negative association. TQ tends to decrease when TEBS, the proportion of basic salary in executive compensation, increases. This indicates that firms with lower market values are more likely to allocate a larger proportion of basic salary to executive compensation. In addition, there is a -0.795 correlation between TQ and TECB. This suggests a significant negative relationship. TQ tends to decrease as TECB, the proportion of financial benefits in executive compensation, increases. This emphasises the statistical correlation between a greater proportion of financial benefits and a decrease in market values.

Furthermore, ROA and TEBS have a correlation of -0.822, which is a significant negative correlation. This suggests that the ROA tends to diminish as the proportion of TEBS increases. This suggests that companies with a greater proportion of basic remuneration in executive compensation may have a lesser return on assets. Besides, the correlation between ROA and the ratio of TECB is -0.540. This indicates a weakly negative correlation. ROA tends to decrease as the percentage of TECB rises. This suggests that companies with a higher proportion of financial benefits in executive compensation may have a lesser return on assets. ROA and TEVP correlate -0.835. This indicates a significant negative correlation. ROA tends to decrease as the proportion of variable TEVP rises. This suggests that companies with a greater proportion of variable TEVP rises. This suggests that companies with a greater proportion of variable Pay in executive compensation may have a lesser return on assets. Finally, the correlation between ROA and TEC is 0.615, indicating a moderately positive relationship. This suggests that the ROA tends to increase as TEC rises. This suggests that firms with higher executive compensation may experience an increase in return on assets.

#### 4.4 Normality Test

The study utilised the Shapiro-Francia W' test to perform a test of normality. The Shapiro-Francia W' test is a statistical technique employed to assess the normality of a specified distribution. The methodology under consideration assesses the level of adherence of the data to a normal distribution by analysing the deviations from the anticipated normality.

| Table 4.3 Normality Test: Shapiro-Francia W' test |     |           |           |   |                |  |
|---|-----|-----------|-----------|---|----------------|--|
| Variable  | Obs | <b>W'</b> | <b>V'</b> | Ζ | <b>P-Value</b> |  |

| TQ   | 251 | 0.830 | 72.941 | 2.999 | 0.070 |
|------|-----|-------|--------|-------|-------|
| ROA  | 254 | 0.852 | 22.378 | 1.392 | 0.260 |
| TEBS | 241 | 0.939 | 11.637 | 1.136 | 0.387 |
| TECB | 258 | 0.709 | 58.982 | 1.571 | 0.083 |
| TEVP | 258 | 0.689 | 62.924 | 2.707 | 0.098 |
| TEC  | 258 | 0.927 | 14.753 | 1.658 | 0.283 |
| FA   | 244 | 0.913 | 16.733 | 1.901 | 0.739 |
| FS   | 255 | 0.971 | 5.915  | 0.734 | 0.381 |
| LEV  | 191 | 0.886 | 17.835 | 0.938 | 0.284 |

*TQ:* Tobin's q, ROA: Return on assets, TEBE: Total executive basic salary to total compensation, TECB: Total cash benefits to total compensation, TEVP: Total executive variable pays to total compensation, TEC: The total compensation paid to the executive, FA: Firm age: LEV: Leverage, FS: Firm size

In this study, the Shapiro-Francia W' test was chosen as the normality test due to the large sample size, with more than 50 observations for each variable. This test is appropriate for larger sample sizes and is robust against non-normal deviations. The Shapiro-Francia W' test hypothesis is that the data follow a normal distribution. The test evaluates the goodness-of-fit by calculating the W' statistic, which quantifies the correlation between observed data and the expected normal distribution. A greater value of W' indicates a more precise approximation to the normal distribution.

The Shapiro-Francia W' test results for each variable in the study indicate the degree of normal distribution conformity. The W' statistics range between 0.689 and 0.971, indicating reasonably decent to excellent normal distribution fits. The corresponding z-values indicate the magnitude of the deviation from the expected mean, with values below 3 indicating relatively minor deviations. However, p-values play an essential role in determining the statistical significance of deviations from normality. The p-values for the majority of variables in this study (ranging from 0.083 to 0.739) are greater than the

standard significance level of 0.05, indicating that the deviations from normality are not statistically significant.

The normality of the study's variables is assessed using the Shapiro-Francia W' test, which indicates that the distribution fits range from fair to good. Based on the z-values and nonsignificant p-values, it can be inferred that the variables exhibit normal distributions. This observation implies that any deviations from normality are minimal and do not hold statistical significance at the designated level of significance.

## **4.5 Multicollinearity Test**

To diagnose multicollinearity among the regression model's predictor variables, the Multicollinearity Test using the Variance Inflation Factor (VIF) is used.

| Table 4.4 Multicollinearity Test: Variance Inflation Factor |      |       |  |  |  |  |  |
|---|------|-------|--|--|--|--|--|
| Variable  | VIF  | 1/VIF |  |  |  |  |  |
| TEBS  | 2.27 | 0.440 |  |  |  |  |  |
| TECB  | 1.52 | 0.674 |  |  |  |  |  |
| TEVP  | 1.22 | 0.819 |  |  |  |  |  |
| TEC   | 1.12 | 0.894 |  |  |  |  |  |
| FA  | 1.02 | 0.923 |  |  |  |  |  |
| FS  | 1.08 | 0.927 |  |  |  |  |  |
| LEV   | 1.04 | 0.929 |  |  |  |  |  |
| Mean VIF  | 1.32 | 15    |  |  |  |  |  |
|   |      |       |  |  |  |  |  |

TO: Tobin's q, ROA: Return on assets, TEBE: Total executive basic salary to total compensation, TECB: Total cash benefits to total compensation, TEVP: Total executive variable pays to total compensation, TEC: The total compensation paid to the executive, FA: Firm age: LEV: Leverage, FS: Firm size.

The outcomes of the Multicollinearity Test utilising the VIF for the variables TEBS, TECB, TEVP, TEC, FA, FS, and LEV are displayed in Table 4.4. The Variance Inflation Factor (VIF) values exhibit a range of 1.02 to 2.27, which suggests the presence of multicollinearity at relatively low levels. VIF values that are less than 5 are deemed
acceptable, indicating that the issue of multicollinearity does not pose a significant challenge in the analysis. The 1/VIF values, which indicate the amount of variance in each predictor variable that is not accounted for by other variables, exhibit a range of 0.440 to 0.929. These values provide additional evidence of the lack of significant multicollinearity.

The calculated mean VIF of 1.32 is indicative of low multicollinearity, as it falls below the commonly accepted threshold of 5. This observation suggests that the predictor variables under investigation exhibit a considerable degree of independence from one another, thereby facilitating a more precise and reliable assessment of their respective impacts on the dependent variable. The present analysis leads to the inference that the issue of multicollinearity does not pose a significant concern. The modest VIF values indicate a satisfactory degree of autonomy among the predictor variables, augmenting the reliability of the regression analysis and streamlining the understanding of the outcomes.

### 4.6 Heteroscedasticity Test

The study employed the Breusch-Pagan / Cook-Weisberg test for heteroscedasticity to investigate whether there is evidence of heteroskedasticity in the data.

| Table 4.5 Heteroscedasticity Test                         |
|---|
| Breusch-Pagan / Cook-Weisberg test for heteroskedasticity |
| Variables: fitted values of TobinsQ                       |
| chi2(1) = 0.25  |
| Prob > chi2 = 0.6152                                      |
| Variables: fitted values of ROA                           |
| chi2(1) = 0.96  |
| Prob > chi2 = 0.269                                       |

Table 4.5 displays the outcomes of the Breusch-Pagan / Cook-Weisberg examination for heteroskedasticity concerning TobinsQ and ROA, encompassing two variables. The chi-

square statistic for the variable TobinsQ is 0.25, and it has 1 degree of freedom. The obtained p-value of 0.6152 suggests a lack of statistical significance in detecting heteroskedasticity within the examined data about this particular variable. This implies that the TQ variable satisfies the assumption of homoskedasticity, which assumes that the variance remains constant across all levels of the variable.

Likewise, concerning the variable ROA, the chi-square statistic yields a value of 0.96 when considering 1 degree of freedom. The p-value associated with the variable in question is 0.269, suggesting a lack of statistically significant evidence to support the presence of heteroskedasticity. Thus, it can be concluded that the hypothesis of homoscedasticity holds for the variable of Return on Assets (ROA). The Breusch-Pagan / Cook-Weisberg test results indicate the absence of statistically significant heteroskedasticity in the fitted values of Tobin's Q and ROA. This suggests that the hypothesis of homoscedasticity is justifiable for these variables, thereby enabling accurate inferences to be drawn from the regression outcomes.

### 4.7 Regression Analysis

This research investigates the impact of executive remuneration on the financial performance of non-financial companies that are publicly traded in Ghana, using the twostep GMM estimation technique. A regression analysis was conducted to investigate the correlation between said factors and to ascertain any possible effects. The research utilised the GMM estimation method to address possible endogeneity concerns and achieve reliable coefficient estimations. This approach facilitates the management of latent variability and endogeneity concerns that may emerge in the examination of executive remuneration and fiscal efficacy. Table 4.6 exhibits the results of two separate regression models, namely Model 1 which concerns Tobin's q as the response variable, and Model 2 which pertains to ROA as the dependent variable. The aforementioned models were utilised to investigate the correlation between executive compensation and the associated financial performance metrics.

Upon examination of the diagnostic tests, it was determined that the AR(1) and AR(2) autocorrelation tests did not provide sufficient evidence to reject the null hypothesis of no autocorrelation for both Model 1 and Model 2. This suggests that the models adeptly capture the temporal correlation inherent in the data. The Sargan and Hansen overidentification restrictions tests are commonly employed to assess the soundness of the instruments utilised in the models. Both models demonstrate the statistical significance of the p-values linked to the tests, indicating the validity of the instruments and the absence of endogeneity concerns. The lack of statistical significance in the Hansen tests for exogeneity of instrument subsets, commonly denoted as "Dif," has been noted in both models. This statement implies that the instruments utilised in the models are exogenous and do not result in any type of bias.

The results of the diagnostic tests and calculated coefficients offer adequate support to suggest that the models are suitable for analysing the correlation between executive remuneration and financial performance metrics. Based on the results of the diagnostic tests, it appears that the models effectively capture the essential dynamics and mitigate any potential issues of endogeneity. The coefficients that are deemed statistically significant shed light on the effect of CEO compensation on the financial performance of non-financial public companies in Ghana.

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|   | Model 1           | Model 2              |
|---|-------------------|----------------------|
| Constant  | 24.743***         | 5.221***             |
|   | (0.000)           | (0.000)              |
| TQ(-1)  | -0.059***         |                      |
| 21 012-112-1 12-112-1                           | (0.000)           |                      |
| ROA(-1)   |                   | -0.016***            |
|   |                   | (0.000)              |
| TEBS  | -6.208***         | -15.738***           |
|   | (0.000)           | (0.000)              |
| TECB  | 3.497*            | -38.149***           |
|   | (0.079)           | (0.000)              |
| TEVP  | 591 <sup>**</sup> | 21.574***            |
|   | (0.036)           | (0.000)              |
| TEC   | 19.633***         | 6.689 <sup>***</sup> |
|   | (0.000)           | (0.000)              |
| FA  | -8.420***         | 0.0007               |
| - Andrew Street                                 | (0.000)           | (0.852)              |
| FS  | -0.001            | -0.046***            |
|   | (0.989)           | (0.000)              |
| LEV   | 0.649***          | 0.089***             |
|   | (0.000)           | (0.000)              |
| Time Effects                                    | Yes               | Yes                  |
| AR(1)   | (0.155)           | (0.510)              |
| AR(2)   | (0.992)           | (0.237)              |
| Sargan OIR                                      | (0.288)           | (0.897)              |
| Hansen OIR                                      | (0.826)           | (0.963)              |
| DHT for instruments in levels H excluding group | (0.527)           | (0.483)              |
| Dif(null, H=exogeneous)                         | (0.842)           | (0.862)              |
| (b) IV (years, eq(diff) H excluding group       | (0.516)           | (0.583)              |
| Dif(null, H=exogeneous)                         | (0.915)           | (0.975)              |
| Fisher  | 422.01***         | 539.09***            |
| Instruments                                     | 16                | 16                   |
| Firms   | 19                | 19                   |
| Observations                                    | 179               | 219                  |

**Table 4.6 Table Executive Compensation and Financial Performance** 

\*\*\*\*\*\*\* significance levels of 10% 5%, and 1% respectively: Difference in Hansen Test for Exogeneity of Instruments Subsets. Dif: Difference. OIR: Over-identifying Restrictions Test. The significance values are twofold. (1) The significance of estimated coefficients and the Wald statistics. (2) The failure to reject the null hypotheses of (a) no autocorrelation in the AR(1) & AR(2) tests and; (b) the validity of the instruments in the Sargan and Hansen OIR tests. *TQ: Tobin's q, ROA: Return on assets, TEBE: Total executive basic* salary to total compensation, *TECB: Total cash benefits to total compensation, TEVP: Total executive* variable pays to total compensation, *TEC: The total compensation paid to the executive, FA: Firm age: LEV:* Leverage, FS: Firm size.

In both models, the Time Effects variable is included, indicating that time-specific factors

are accounted for in the models. The Fisher statistic is highly significant for both models

(p < 0.001), indicating that the overall models have a strong fit.

## 4.7.1 Effect of the total compensation of the executive on the financial performance of listed non-financial firms in Ghana

The results derived from Model 1 and Model 2 indicate a positive relationship between the remuneration of CEO and the prosperity of their respective companies, as evaluated by Tobin's q and ROA metrics. The results of Model 1 indicate a significant statistical correlation between aggregate executive compensation and Tobin's q. Based on the available data, it can be concluded that there exists a significant and positive correlation between the remuneration of the CEO and Tobin's q. The statistical analysis indicates a significant positive correlation between the two variables, as evidenced by the coefficient of 19.633 (p 0.001). This suggests that an increase of one unit in the former variable is associated with an expected increase of 19.633 units in the latter variable. Tobin's q is a quantitative approach utilised to juxtapose the present market valuation of a firm with its corresponding replacement expenditure. Based on empirical evidence, there exists a positive correlation between executive compensation and Tobin's q. This indicates that an increase in executive pay is associated with a higher valuation of the company in the market. The extant literature (Hall & Liebman, 1998; Jensen & Murphy, 1990) highlights a favourable correlation between the remuneration of the Chief Executive Officer (CEO) and the prosperity of the enterprise, which aligns with the current findings.

Based on the results obtained from Model 2, it can be deduced that there exists a positive correlation between the remuneration received by CEOs and the ROA. The obtained coefficient of 6.689 (p 0.001) provides substantial evidence to support the aforementioned inference, indicating a positive correlation between the total compensation paid to executives and the ROA. Specifically, the results suggest that a one-unit increase in the total compensation paid to executives is associated with a 6.689 unit increase in the ROA.

The ROA metric is utilised to evaluate the overall profitability of an organization's asset portfolio. Based on the existing data, it can be inferred that there is a notable positive correlation between the ratio of executive compensation and ROA. The presented data indicate a positive correlation between enhanced remuneration and improved financial outcomes for the enterprise. Prior studies Boschen and Smith (1995), Core et al. (1999) and Ghosh (2006) have demonstrated a favourable correlation between the compensation of chief executive officers and the prosperity of their respective companies. The current findings align with this prevailing pattern.

The extant literature posits that executive compensation plays a crucial role in attracting and retaining exceptional talent, as well as aligning their objectives with the company's long-term performance (Black et al., 2019). Organisations that prioritise the attraction and retention of highly skilled personnel offer remuneration packages that are commensurate with the compensation provided by other firms, thereby aligning with prevailing industry benchmarks for executive pay. The correlation between a firm's financial performance and the remuneration of its CEO indicates that corporations highly esteem their upper management and are inclined to provide them with substantial compensation as a form of recognition for their achievements.

The important observation is the direct association between the remuneration of CEOs and Tobin's q and ROI. It is imperative to bear in mind that these findings do not establish a causal relationship. Various factors can impact the success of a company, including the competencies and expertise of its leadership, as well as fluctuations in the market and advancements in technology. It is plausible that variations may exist among sectors and organisations, thus rendering the impact of CEO remuneration on corporate performance to manifest dissimilarly across diverse contexts. The results of Model 1 and Model 2, in conjunction with pertinent literature, suggest a positive correlation between elevated levels of CEO compensation and increased levels of corporate achievement, as evaluated by Tobin's q and ROA.

# 4.7.2 Effect of the total basic pay of the executive on the financial performance of listed non-financial firms in Ghana

According to Model 1's findings, there is a statistically significant negative association between executives' total remuneration and their average base income. This is supported by evidence from a -6.208 (p 0.001) coefficient on Tobin's q. Tobin's q seems to be negatively correlated with the proportion of a manager's income that is spent on a base wage. Model 2 indicates a negative correlation between the share of total remuneration that is made up of basic salary for executives and ROA. The -38.149 coefficient (p0.001) provides statistical proof of this. According to the findings, the return on assets tends to go down as the ratio of cash perks to total executive remuneration rises.

Using Tobin's q as a measure, Model 1 findings show that the ratio of total executive basic pay to total compensation is negatively correlated with Tobin's q. Executives' basic pay as a percentage of total remuneration seems to correlate negatively with the financial success of publicly traded non-financial enterprises in Ghana, as measured by Tobin's q. The finding is consistent with the literature. The compensation of CEOs has been shown to have a direct correlation with firm success in research conducted by Jensen and Murphy (1990) on American companies. The compensation of chief executive officers (CEOs) is positively correlated with the financial success of their companies, as shown by research conducted by Hall and Liebman (1998). According to the findings of these studies, higher levels of executive salary are correlated with higher levels of organisational effectiveness.

Concerning Model 2, which concerns the metric of ROA, it is evident that the variable representing the proportion of overall executive basic salary to total compensation demonstrates a noteworthy and unfavourable influence on ROA. There is an inverse relationship between the proportion of overall cash benefits to overall compensation for executives and the return on assets (ROA). This discovery offers validation for the tenets of agency theory, tournament theory, and equity theory. Following the principles of agency theory, it is conceivable that executives may display a bias towards their interests at the expense of those of the organisation. In situations where cash benefits are relatively excessive for the entirety of compensation, executives may tend to prioritise short-term gains and personal benefits, potentially leading to a deterioration in overall organisational performance.

The results have noteworthy implications for commercial enterprises. It is advisable for corporations to meticulously devise executive compensation plans that align with the organization's long-term performance goals. Overemphasising the base salary or monetary benefits may not lead to favourable outcomes for the financial performance of the organisation. In summary, the results indicate a negative association between the combined fundamental compensation of executives and their comprehensive remuneration, along with Tobin's q and ROA. The results align with previous academic literature and emphasise the importance of corporations developing compensation strategies for top-level

management that incentivize long-term performance and align the goals of executives with those of the organisation.

# 4.7.3 Effect of total cash benefits of the executive on the financial performance of listed non-financial firms in Ghana.

The ratio of "Total cash benefits to total compensation" is positively correlated with Tobin's q, according to Tobin's q model. The coefficient is 3.497 (p = 0.079), which is just slightly significant. The findings indicate a probable positive association between the share of overall CEO remuneration that comes in the form of cash perks and the level of Tobin's q. It's vital to keep in mind that the effect is statistically weak.

A substantial negative impact on ROA is shown by the coefficient of -38.149 (p 0.001) for the variable total cash benefits to total compensation in Model 2 (ROA). The findings show that an increase in the proportion of monetary benefits related to total compensation is correlated with a decrease in the ROA.

The results are consistent with what has already been written about pay for top executives. According to Jeppson et al. (2009), CEO compensation is often set in advance and has no clear link to the company's success. Bonuses, incentives, and other non-performance-based pay are given to executives in addition to their basic wages, as proposed by Jeppson et al. (2009). According to Boyd (1994) and Murphy (1999), CEOs have a preference for a greater base income rather than variable remuneration because of their risk aversion.

Model 1 suggests that total cash benefits may have a positive relationship with pay. Tobin's q provides merely a hint of statistical importance. A larger proportion of cash benefits may have a negative influence on a company's performance, as seen by Model 2's significant negative effect of total cash benefits as contrasted to total pay on ROA. These results

highlight the need for executive remuneration systems that better link executives' ambitions with the long-term performance objectives of the business. The claim implies that putting an undue emphasis on monetary benefits may not be the best strategy for maximising the ROI.

# 4.7.4 Influence of the total variable pay of the executive on the financial performance of listed non-financial firms in Ghana

According to Model 1, Tobin's q is negatively affected by the variable representing the proportion of total executive salary to total compensation, as measured by Tobin's q. The statistical significance of the variable is indicated by a p-value of 0.036, while its effect size is represented by a coefficient of -0.591. The assertion posits that a negative correlation exists between Tobin's q and the proportion of variable compensation in the remuneration package of CEOs. To provide greater precision, an increase in the latter is correlated with a decrease in the former. The results of Model 2 indicate that the variable "Total executive variable pays to total compensation" has a statistically significant and positive impact on the ROA. The variable in question exhibits a coefficient of 21.574, and its p-value is below the threshold of 0.001, indicating statistical significance. The results indicate a positive correlation between augmenting the ratio of variable remuneration to overall remuneration and an increase in ROA.

The results align with the concept of variable remuneration in the executive compensation domain. The notion of total executive variable compensation refers to the percentage of variable compensation, encompassing performance-based bonuses and incentives, to the overall remuneration scheme. The analysis of the average total executive variable pays, which amounts to 0.4903, suggests that a significant portion of executives' compensation

is contingent upon their personal or organisational performance. This is evidenced by the fact that variable pay accounts for approximately 49.03% of their overall remuneration.

The presence of a standard deviation of 0.3337 suggests that there is variability among companies in the distribution of overall executive variable compensation, indicating heterogeneity. Different organisations may utilise diverse approaches in determining the variable component of executive pay, with some entities placing greater emphasis on performance-based rewards, while others may assign a comparatively smaller percentage of variable compensation.

These findings offer valuable understanding regarding the remuneration tactics employed by publicly traded non-financial firms in Ghana, along with their inclination towards integrating flexible compensation structures into executive compensation plans. The implementation of variable compensation is aimed at aligning the incentives of top-level managers with their performance outcomes in companies. Within the context of profitdriven entities, it is a common practise to incorporate incentive structures that are contingent upon performance, such as annual bonuses. This is supported by the research conducted by Jeppson et al. (2009) and Murphy (1999).

The phenomenon whereby short-term incentive pay or annual bonuses tend to prioritise recent events and potentially affect the CEO's focus on immediate rather than long-term outcomes has been noted in the literature (Bonaime et al., 2019; Duru et al., 2005). Incorporating stock options and restricted stock in long-term incentive pay schemes is a common practise that demonstrates a commitment to enhancing shareholder value and can effectively address the agency problem that arises between senior executives and company owners (Buck et al., 2003; Han & Mun, 2021).

The findings offer noteworthy insights into the association between executive variable remunerations and financial performance metrics, such as Tobin's q and ROA. The proposition put forth by the authors suggests that augmenting the percentage of variable compensation in the overall remuneration bundle could potentially have an adverse influence on Tobin's q, while concurrently yielding a beneficial effect on ROA. The aforementioned statement emphasises the importance of carefully crafting compensation plans for top-level management that align with the company's long-term goals and the desires of its shareholders.

# 4.7.5 Firm age, firm size, leverage and financial performance of listed non-financial firms in Ghana

Based on the findings of Model 1, it can be deduced that the duration of a company's existence has a statistically noteworthy negative effect on Tobin's q. The findings of the statistical analysis demonstrate a noteworthy inverse correlation between the age of firms and Tobin's q, as evidenced by the coefficient of -8.420 (p < 0.001). Tobin's q is a quantitative measure that assesses the market value of a company relative to its replacement cost. Hence, an inverse correlation between the age of a firm and Tobin's q suggests that firms with a longer tenure may exhibit a lower market value relative to their replacement cost. The current results align with the existing literature, which suggests that companies with a long operational history may face challenges in adapting to changing market conditions and technological developments, potentially impacting their financial performance (Boschen & Smith, 1995; Ghosh, 2006).

The findings of Model 1 indicate that the statistical significance of the correlation between Tobin's q and firm size is not established. Based on the statistical analysis, it can be concluded that the coefficient of -0.001 (p = 0.989) does not offer substantial evidence to support the hypothesis that the magnitude of the enterprise has a noteworthy impact on Tobin's q. As per the existing literature, the market value of a company is not significantly impacted by its size concerning its replacement cost. The relationship between Tobin's q and a firm's size has yet to be directly investigated in the extant literature. Thus, additional investigation or scholarly literature is required to explore this correlation.

The results of Model 2 indicate an inverse correlation between the parameter of firm size (FS) and the financial performance metric of return on assets. The statistical analysis revealed a significant inverse correlation between the size of a business and its return on assets. The hypothesis is supported by a statistically significant coefficient of -0.046 at the 0.001 level. The present discovery aligns with prior research that has established an inverse association between the magnitude of a firm and its level of profitability (Boschen & Smith, 1995). The endeavours of larger firms to enhance profitability may be impeded by amplified bureaucratic procedures, elevated operating expenses, and difficulties in responding to market fluctuations.

Based on the results, it can be inferred that both Model 1 and Model 2 demonstrate a noteworthy and favourable impact of leverage on Tobin's q and ROA. The results of the study indicate a statistically significant positive correlation between leverage and Tobin's q, as evidenced by a coefficient of 0.649 at a significance level of p < 0.001. Based on the statistical analysis with a coefficient of 0.089 and a p-value of 0.001, it can be inferred that there exists a positive correlation between leverage and ROA. The statement implies that financial results are enhanced by the utilisation of leverage. The research mentioned above

provides support for the assertion that increased levels of leverage could be associated with improved corporate performance (Tsai & Huang, 2020).



### **CHAPTER FIVE**

#### SUMMARY, CONCLUSION, AND RECOMMENDATIONS

### **5.1 Introduction**

The present chapter presents a concise overview of the primary results and achievements of the research's aims and conjectures. The salient discoveries are accentuated to underscore their significance. Furthermore, the study presents policy implications based on the findings and conclusions, along with suggestions for future research directions.

### **5.2 Summary of Findings**

This study aims to examine the impact of executive compensation on the financial performance of non-financial companies that are publicly traded on the GSE. The present research undertakes a rigorous analysis of the correlation between discrete components of executive compensation, such as the overall base salary, the aggregate cash benefits, the total variable compensation, and the comprehensive total compensation granted to executives, and their influence on the financial outcomes of firms that are publicly traded on the GSE. The present study utilises a quantitative approach and aligns with the positivist paradigm as its fundamental philosophical basis for examination. This research employs explanatory methodology, specifically causal analysis, to examine the causal relationship between executive compensation and financial performance. This study utilises secondary panel data that incorporates both cross-sectional and time series data. The data was acquired by scrutinising the yearly reports and financial statements of the chosen corporations, covering the period from 2005 to 2021. The study employs annual time series datasets that are expressed in the form of ratios or percentages. The analysed sample consists of 23 publicly traded non-financial companies.

## 5.2.1 Effect of the total compensation of the executive on the financial performance of listed non-financial firms in Ghana

The study's results provide strong support for a causal relationship between CEO pay and market value and profitability for their respective companies. The results indicate a positive correlation between higher CEO pay and higher market value as measured by Tobin's q. This indicates that investors have faith in the company and are optimistic about its prospects. This highlights the necessity of rewarding managers fairly for their role in encouraging growth and creating value for their organisations. In addition, the data shows that there is a favourable link between CEO compensation and financial performance. Increases in overall executive salary are correlated with better profitability results as measured by ROA. Executive skills, strategic acumen, and leadership are all crucial to an organization's bottom line, so it's no surprise that companies that pay their CEOs more also have higher asset profitability.

## 5.2.2 Effect of the total basic pay of the executive on the financial performance of listed non-financial firms in Ghana

The findings of the research indicate a negative relationship between the overall basic salary and both the market value and return on assets. The findings of the analysis indicate that a rise in the percentage of fundamental salary components in the comprehensive remuneration bundle is linked to a decline in market valuation. The statement posits that an increase in the proportion of an executive's remuneration that is allocated to their base salary may have an adverse effect on the market's perception of the firm's worth. Hence, it is imperative for organisations to meticulously deliberate on the structure of executive remuneration schemes and achieve a suitable equilibrium between fixed salary and other outcome-based motivators. Additionally, the research indicates that the proportion of

overall executive base salary to complete remuneration exhibits an adverse impact on profitability, quantified by the return on assets. The findings suggest that an increase in the ratio of basic salary to total compensation results in a decrease in profitability. The current finding implies that an overemphasis on the fundamental salary, to the detriment of other performance-related constituents, may impede the capacity of executives to propel profitability and produce greater returns on the organization's assets.

## 5.2.3 Effect of total cash benefits of the executive on the financial performance of listed non-financial firms in Ghana

Based on the data shown here, it seems that including financial perks as part of an employee's total pay package has a somewhat positive impact on the firm's market value. This impact, however, is not statistically significant, which should be noted. This finding suggests that there may be a connection between firms' market values and the percentage of financial advantages received by their leaders, suggesting that businesses whose executives get a larger part of financial benefits may show somewhat higher market values. It is imperative to acknowledge that additional investigation may be required to ascertain the strength and reliability of this correlation.

The research reveals that there is a noteworthy adverse effect of cash benefits on overall compensation concerning profitability, as assessed by the return on assets (ROA). The findings suggest that an elevated percentage of monetary benefits as part of the comprehensive remuneration scheme is linked to a reduction in profitability. The proposition is that an increase in the proportion of cash benefits in the compensation package of executives may impede the capacity of the company to generate profits from its assets.

## 5.2.4 Influence of the total variable pay of the executive on the financial performance of listed non-financial firms in Ghana

The findings of this study emphasise the effect of variable pay within executive compensation packages on market value and profitability. The findings demonstrate that there exists an adverse effect of the aggregate variable remuneration of executives on the overall compensation package concerning market value. This suggests that an increased percentage of variable pay is linked to a reduction in market value. The aforementioned proposition posits that organisations in which executives receive a greater proportion of their remuneration in variable pay may encounter a reduction in their perceived market value. This statement highlights the significance of taking into account the structure of remuneration schemes and their potential effects on investor trust and market assessment. The research reveals a notable association between the proportion of overall executive variable remuneration concerning total compensation and profitability, as assessed by the return on assets. The results suggest that an augmented percentage of variable remuneration in the comprehensive compensation scheme is linked to a rise in profitability. The statement posits that executives who are remunerated with a greater proportion of variable pay are more motivated to enhance performance and yield superior returns on the organization's assets. This highlights the potential advantages of integrating adaptable and outcome-driven components into executive remuneration frameworks.

## 5,2.5 Firm age, firm size, leverage and financial performance of listed non-financial firms in Ghana

The study suggests that firm age has a negative effect on market value (Tobin's q), suggesting that elder firms may have a reduced market value relative to their replacement cost. This may be attributable to difficulties in adapting to shifting market conditions and

technological developments. The study also reveals that firm scale has little effect on market value. In addition, the results demonstrate a negative relationship between firm size and return on assets, indicating that larger firms may have difficulty achieving greater profitability due to factors such as increased bureaucracy, higher operational expenses, and difficulties in responding to market fluctuations.

### **5.3 Conclusion**

The research findings provide significant contributions to the understanding of the correlation between executive remuneration and the financial outcomes of non-financial companies that are publicly traded in Ghana. The study's findings suggest a positive correlation between elevated levels of executive compensation and heightened market value and profitability. This underscores the importance of providing executives with appropriate compensation for their contributions towards promoting organisational achievement. The research underscores the adverse influence of complete fundamental compensation on market valuation and profitability, underscoring the necessity of an equitable remuneration framework that encompasses incentives based on performance. The incorporation of monetary incentives in the remuneration package yields a slightly favourable impact on the market valuation; however, an excessive focus on pecuniary benefits may impede the attainment of profitability. There exists a negative relationship between the market value and the proportion of variable pay, while a positive association is observed between profitability and variable pay. The results of the study demonstrate that the age of a firm has a detrimental impact on its market value, implying that older firms may encounter challenges in adjusting to market fluctuations. Conversely, the size of a firm does not appear to have a noteworthy influence on its market value, although operational considerations may impede larger firms from attaining greater profitability.

#### **5.2 Recommendations**

Drawing from the findings of this study, several suggestions can be put forth about the compensation of executives in listed non-financial firms operating in Ghana:

The study recommends that a balanced compensation structure should be considered, as it has been found that total basic salary can have a negative effect on market value and profitability. To enhance their financial performance, it is recommended that organisations aim to establish a well-balanced compensation framework that integrates incentives based on performance. This approach has the potential to enhance the congruence between executive incentives and the strategic objectives of the organisation, thereby establishing a more robust association between executive remuneration and performance results.

The incorporation of monetary incentives within the remuneration plan exhibits a marginal favourable impact on the market valuation. Organisations must conduct a thorough evaluation of the magnitude and categories of monetary incentives to achieve optimal equilibrium. An overemphasis on monetary benefits can impede the attainment of profitability. Hence, it is imperative to formulate remuneration schemes that encompass a blend of base salary, contingent compensation, and additional incentives based on job performance.

To cultivate a culture that prioritises performance, it is recommended to incorporate flexible and results-oriented elements into executive compensation structures. This is

supported by the strong association between variable pay and profitability. Through the implementation of compensation structures that incentivize executives based on their performance and contributions to the success of the organisation, firms can effectively motivate executives to improve their performance and generate greater returns on the organization's assets.

This study sheds light on the challenges that older firms encounter in adapting to evolving market conditions and technological advancements, as evidenced by the negative impact of firm age on market value. Organisations must take a proactive approach to address the challenges they face. This can be achieved by promoting innovation, agility, and strategic adaptation, which are essential for ensuring the long-term viability and competitiveness of established firms.

The mitigation of operational challenges for larger firms is a pertinent issue. Although firm size does not have a significant impact on market value, larger firms may face obstacles in achieving higher profitability. These challenges may arise from factors such as increased bureaucracy, higher operational expenses, and difficulties in responding to market fluctuations. To surmount these obstacles, it is recommended that organisations prioritise the optimisation of their operations, enhancement of their efficiency, and adoption of efficacious strategies to navigate the fluctuations of the market.

It is recommended that organisations engage in ongoing monitoring and evaluation of executive compensation. This is due to the intricate and ever-changing nature of the relationship between executive remuneration and financial performance. By regularly assessing the efficacy of their executive compensation packages, organisations can ensure optimal outcomes. This entails analyzing the influence of remuneration frameworks on market valuation, profitability, and other key performance indicators. Organisations can ensure that executive compensation is aligned with desired outcomes by being proactive and adaptive in making necessary adjustments.

#### **5.5 Suggestions for Future Research**

Based on the findings of this study, several suggestions for future research in the field of executive remuneration and financial performance in listed non-financial firms in Ghana can be made:

- Examine the effects of performance-based incentives on a particular group or individual. Subsequent investigations may further explore the precise categories of performance-based incentives that are incorporated into executive remuneration schemes. The evaluation of various incentive frameworks, such as stock options, performance-based bonuses, or extended incentive plans, can yield significant findings regarding their influence on market valuation and profitability.
- 2. The investigation of corporate governance mechanisms is crucial as they have a significant impact on executive remuneration and financial performance. These mechanisms include board composition, board independence, and executive oversight. Subsequent research endeavours may delve into the correlation among governance mechanisms, executive remuneration policies, and organisational outcomes to gain a more comprehensive comprehension of how governance influences financial performance.
- 3. It is important to take into account industry-specific factors when examining the relationship between executive remuneration and financial performance. This is because the impact of executive remuneration on financial performance may differ

depending on the unique characteristics and dynamics of each industry. Potential avenues for further investigation may involve a targeted analysis of distinct sectors within Ghana, to discern variances in executive remuneration practises and their correlation with financial outcomes. Such sectors may encompass manufacturing, services, or banking, among others.

4. The current study has concentrated on market value and profitability as financial performance metrics. However future research could delve into the correlation between executive compensation and non-financial performance metrics, such as sustainability, innovation, or customer satisfaction. Comprehending the impact of executive compensation on non-financial dimensions of performance can furnish a more all-encompassing comprehension of the association between executive remuneration and overall organisational achievement.



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