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THE EFFECT OF CORPORATE GOVERNANCE ON CREDIT RISK MANAGEMENT

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DECLARATION

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma at Kwame Nkrumah University of Science and Technology, Kumasi or any other educational institution, except where due acknowledgement is made in the thesis.

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DEDICATION

I dedicate my thesis to my mother, sister and brother for their endless love, support and encouragement throughout my pursuit for education. I hope this achievement will fulfill the dream they envisioned for me.

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ABSTRACT

The study sought to examine the effect of corporate governance on credit risk management in listed banks in Ghana to provide evidence that would inform policy decisions. The study adopts a positivist approach, employing a correlational descriptive research design to explore this link. The population of interest comprises all nine listed banks in Ghana from 2010 to 2021. The research utilises secondary data from annual reports. Secondary data collected from the GSE was analysed using R software. The findings underscore the pivotal role that these governance factors play in shaping the banks' risk management strategies. A larger board size was associated with improved credit risk management, benefiting from enhanced monitoring and diverse expertise. The presence of non-executive board members positively influenced credit risk management by providing impartial evaluation, specialised skills, and external perspectives. Similarly, the inclusion of female board members contributed positively to credit risk management, capitalising on gender diversity's potential to enhance decision-making and risk assessment. These findings have theoretical implications. The study contributes to agency theory by affirming that a larger board size can mitigate agency problems and enhance risk oversight. Stewardship theory is supported by highlighting the collective responsibility of non-executive directors in safeguarding the bank's interests through effective credit risk management. Moreover, the study aligns with recommendations from regulatory frameworks and governance guidelines that emphasise the importance of diverse and balanced board compositions to enhance risk management practices. Recomemdation and directions for further studies are provided.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Corporate Governance (CG) refers to the way a regulated financial institution's board and senior management manage the business and affairs of the organisation, including setting strategy and objectives, determining risk appetite and tolerance, managing dayto-day operations, protecting depositor interests, meeting shareholder obligations, and coordinating corporate activities and goals (Bank of Ghana (BoG), 2019). There are two perspectives on CG: a national base and a firm-level foundation. Regulations that control equity investments in publicly traded companies, like listing requirements, are covered by country-level governance. CG at the business level addresses issues such as minority shareholder protection, disclosure policies and processes, board responsibilities and composition, and executive remuneration (Li, Kong, Atuahene, Bentum-Micah, & Agyapong, 2020).

A solid CG framework, according to banking administrators, is the answer to addressing stability and limiting risk in the financial industry (John, De-Masi, and Paci, 2016). Profit maximisation is the primary goal of every corporate entity, and they manage their operations by minimising risk to their sources of income, increasing market value, and gaining market share. In the banking industry, for instance, credit risk management is a critical component that has to be balanced while maximising shareholder profits (Shahid, Waris, Saqib, & Asif, 2019). Most loan defaults, however, worsen banks' liquidity positions during times of crisis. Since banks are financial institutions that depend largely on loan interest earnings, they are especially vulnerable to the economic disruption caused by a crisis (Sivaprasad and Mathew, 2021). Credit risk also known as

default risk is the danger that a business partner would not carry out its obligations per the terms outlined in the contract (Brown and Moles, 2014).

The amount of credit activity at a lending institution can be seen by how much of its total operating assets are made up of loans. In this time of market competition and economic changes, especially in countries like Ghana that are on the rise, it is hard for managers of financial institutions to run a business and make sure it keeps growing. Given how a healthy loan portfolio affects a lending institution's cash flow, ability to lend, income, and profit, managers of these businesses have no choice but to think about and use the right credit-risk management strategies to make money and stay in business (Boateng and Dean, 2020). The main goal of shareholders in the banking sector is for the company's value to go up. This encourages the management of these institutions to take on riskier business ventures that threaten the stability of the financial system (Ferrarini, 2017).

Good CG practices and risk management are required for early mitigation of risk due to the banking system's continuously expanding internal and external environments and the more complex risks associated with banking business activities. For regulatory authorities, good CG practices and risk management will make it easier to assess potential losses that banks may experience that could affect bank capital as well as serve the purpose of strategy formulation and banking regulation priority setting. Banks may boost their bottom lines using sound CG and risk management practises (Permatasari, 2020). One of the main focuses of CG in the banking sector is to meet shareholders' requirements and protect the interests of depositors; agency theory was thus founded based on CG.

1.2 Problem Statement

In economies such as Ghana where banks play a crucial role in the financial system, the banking sector is very significant (Felício, Rodrigues, Grove and Greiner, 2018). According to Mehmood, Hunjra and Chani. (2019), the macroeconomic growth of a country depends heavily on the consistency and solid performance of financial institutions such as banks. To maximise earnings and consequently, returns for shareholders, banks take on a larger amount of risk to satisfy a shareholder demand, which increases the likelihood that they may experience a financial crisis (Otero, Alaraj and Lado-Sestayo, 2019). Bank operations come with several risks, but credit risk according to Ghenimi, Chaibi, and Omri, (2017), is most closely tied to bank instability. When assessing the security of vital financial sectors, several international groups and governments may utilise credit risk as one indicator of financial stability (Moussa, 2019). For this reason, effective credit risk management is fundamental for the successful running of banks (Tekathen and Dechow, 2013).

According to De-Masi et al. (2016), banking administrators suggest a strong CG structure as a solution to addressing instability and risks associated with the financial system. The efficacy of risk management is increased in banking firms with solid CG, enhancing the financial strength of these entities (Djebali and Zaghdoudi, 2019). The question here is how does CG influence credit risk management? Research has tried to explain how CG and credit risk influence firm performance (El-Chaarani, Abraham and Skaf 2022; Buallay, Hamdan and Zureigat, 2017). Kafidipe, Uwalomwa, Dahunsi and Okeme, (2021) found a significant positive relationship between good CG and firm performance, Hamza (2017) and Akomeah, Agumeh and Siaw (2020) discovered a significant relationship between credit risk and performance of banks. To investigate the relationship between credit risk management and CG, studies such as Chinakpude

(2019), Permatasari (2020) and Moussa (2019) used internal CG indicators as a proxy for CG. This research fills a gap in the literature identified by Djebali and Zaghdoudi (2019) who argued that further research was needed to examine the impact of both internal and external CG measures on credit risk management. In order to accomplish this goal, the current research examines the influence of CG on credit risk management in listed banks in Ghana by using CG variables from both the internal and external environments of the banks.

Thus, the study's findings provide light on the impact of internal and external CG methods on credit risk management, adding to the existing body of knowledge. Policymakers concerned with enhancing CG and bank credit risk management should pay close attention to the findings of this empirical study. This would also aid shareholders of banks in making educated investment choices to safeguard their future investment profits, which will be a benefit to shareholders.

1.3 Objectives of the Study

The purpose of this research is to evaluate how CG influences credit risk management at listed banks in Ghana.

Specific Objectives

i. To evaluate the effect of board size on credit risk management in the banking sector.

ii. To evaluate the effect of non-executive board members on banks' credit risk management. iii. To evaluate the effect of female board membership on banks' credit risk management.

1.4 Research Questions

i. What is the effect of board size on credit risk management in the banking sector?

ii. What is the effect of non-executive board members on banks' credit risk management? iii. What is the effect of female board membership on banks' credit risk management?

1.5 Significance of the Study

The study's overarching goals are to assess the degree to which different banks' CG systems are similar and to determine the nature and extent of the link between CG and credit risk management in Ghana's banking sector. The results of this research add to what is known by showing how internal and external mechanisms of CG affect credit risk management. As a result, the results of the empirical study have important implications for management and are essential for policymakers who want to improve CG and manage credit risk in banks well. So, the findings show how important both internal and external CG variables are to the effective management of credit risk, which is important for the longevity of banks in Ghana. This is to help shareholders of banks make smart decisions about their investments to protect the money they will make in the future.

1.6 Summary of Methodology

Due to the need to gather and analyse secondary quantitative data and test hypotheses in this study, the positivism paradigm is applied (Buallay, 2020). The purpose of this study is to establish a causal association between three or more independent variables using a correlational descriptive research strategy. The study's sample was collected by purposeful sampling from the GSE. The sample population consists of GSE-listed financial institutions. Secondary data were gathered from annual reports of listed banks from 2010 to 2021 for this research. To measure credit risk, data on non-performing loans were extracted. Board size, non-executive members and females on the board make up the data that was collected on internal CG mechanisms. Banks' product market

share and debt financing were used to measure external CG mechanisms. Data were analysed using SPSS v25 and a panel regression model was used to explain the relationship between the dependent and independent variables.

1.7 Organisation of the Study

This research consists of five overall chapters. In the first chapter, "Introduction," the study's context is laid forth, along with its aims, research questions, and the importance of those issues. In the second chapter, the researcher reviews relevant literature on CG and credit risk management from a theoretical and practical standpoint. The methodology of the study is presented in greater depth in chapter three. Research design, data collection, and data analysis are all covered in this chapter. Chapter four presents the findings and conclusions of the inquiry. In chapter five, the study's findings and suggestions are summarised and addressed.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The chapter presents the literature review of the study. The chapter is divided into the following four (4) sections: Section 2.1 conceptual review which dealt with the main variables of the study. This was followed by section 2.2 which presents the theoretical

review which considered appropriate theoretical underpinning of the relationship among the variables. The subsequent component of the study is section 2.3 which dealt with the empirical studies within the area of interest. This chapter also elaborated on the conceptual framework depicting the relationship among the study variables in section 2.4 . Finally the summary of the chapter is presented.

2.1 Conceptual Review

Definitions, operationalisations, and examples of construct application are provided here. There are three primary variables in the model.

2.1.1 Corporate Governance (CG)

CG, according to the Bank of Ghana, is the process by which a Regulated Financial Institution's board and senior management oversee its operations, including setting its strategy and objectives, determining its risk appetite and tolerance, managing its dayto-day operations, protecting depositor interests and shareholders' obligations, and aligning corporate interests with those of other recognised stakeholders. CG provides the framework for specified goals as well as the resources for achieving goals and assessing the effectiveness of enterprises (Li et al., 2020). There are two viewpoints on CG: a foundation at the national level and one at the firm level. Country-level governance includes rules that regulate equity ownership in publicly traded corporations, such as listing requirements. Firm-level CG addresses issues such as minority shareholder protection, disclosure rules and procedures, board responsibilities and makeup, and remuneration structures (Li, et al., 2020).

Due to the complexity of the risks that banks must manage, CG requirements will be more stringently enforced. To improve bank efficiency, ensure compliance, and protect stakeholders' interests with laws and moral standards that are relevant to the banking

industry, good CG is required. According to the GCG idea, governance involves the state, society, and private persons (Fernandes and Fresly, 2017). In 2018, the Bank of Ghana enacted a CG legislation. Its primary goals are to (a) increase and maintain public trust in financial institutions subject to regulation, (b) enhance the corporate performance and accountability of such institutions in order to better serve the interests of their depositors and other stakeholders, and (c) guarantee that such institutions are in full compliance with all relevant laws and regulations.

Banking administrators propose a robust CG structure as a remedy to deal with instability and dangers related to the financial system, according to De-Masi et al. (2016). Banking companies with good CG have more effective risk management, which strengthens their financial standing (Djebali and Zaghdoudi, 2019). How CG affect credit risk management, is the question at hand. The impact of CG and credit risk on firm performance has been the subject of research (El-Chaarani, Abraham and Skaf, 2022; Buallay, Hamdan and Zureigat, 2017). According to research by Kafidipe, Uwalomwa, Dahunsi, and Okeme published in 2021, there is a strong correlation between effective CG and business performance. Credit risk and bank performance have been found to have a significant association (Hamza, 2017; Akomeah, Agumeh, and Siaw, 2020). Studies like Chinakpude (2019), Permatasari (2020), and Moussa (2019) employed internal CG indicators as a proxy for CG to examine the relationship between credit risk management and CG. Future research should examine the simultaneous impact of internal and external CG structures on credit risk management, according to Djebali and Zaghdoudi (2019).

2.1.2 Board size: One of the most important factors in CG's agenda for determining if a company's agents are effectively managing its operations is board size (Said et al., 2009). Agency theory suggests that a larger board, especially in times of crisis and

regulatory change, has a higher chance of lowering agency costs by pursuing more socially aware initiatives. However, there is a body of research that argues for a smaller board to better control management and boost firm success. Some authors, such as Lakhal (2005), argue that smaller boards are better equipped to keep an eye on management. Smaller boards, says Jensen (1993), tend to function better because they can establish consensus more rapidly.

Additionally, smaller boards provide greater levels of accountability and dedication from each board member as well as more effective communication and coordination between members (Dey, 2008). However, a more diverse board, in terms of age, experience, and gender, may provide an organisation with fresh insights into the value of corporate citizenship (Ahmed Haji, 2013). Previous research (Kilic et al., 2015; Razak and Mustapha, 2013; Sadou et al., 2017) has investigated the correlation between the number of directors on a board and the number of CSR disclosures made by the board. Board size has a strong beneficial influence on the depth of CSR disclosures, according to research by Barakat et al. (2015), Sadou et al. (2017), and Ahmed Haji(2013), whereas Razak and Mustapha (2013) and Kiliç et al. (2015) showed a positive but negligible relationship between board size and CSR reporting. When a big board with a range of experiences and viewpoints is in place, more risk management actions are implemented, according to research by Esa and Anum Mohd Ghazali (2012).

2.1.3 Board independence: The agency hypothesis suggests that a board with a greater number of independent directors may more effectively oversee management and protect investor interests. Terjesen et al. (2009), Ahmed et al. (2006), and Cheng and Courtenay (2006) all found that organisations with strong boards of directors had a greater likelihood of supporting and directing management to embrace a high degree of

openness. Forker (1992) made a similar point, arguing that increased numbers of independent directors enhance disclosure control and reduce the benefits of hiding information. Non-executive directors may also help the company's involvement in CSR activities since they are able to give greater weight to the firm's perceived social impact than executive directors (Abdullah et al., 2011; Johnson and Greening, 1999).

This may be shown by how much greater pressure can be placed on management to participate in CSR activities by directors from outside the company (Haniffa and Cooke, 2005). The literature demonstrates a spectrum of results that are in line with the aforementioned holistic perspectives. Several studies, including those by Allegrini and Greco (2013), Muttakin et al. (2015), and Sadou et al. (2017), have shown a significant positive correlation between board independence and CSR disclosure. However, Said et al. (2009) demonstrated that a more independent board does not lead to more comprehensive CSR disclosures. In addition, a number of empirical studies (Ahmed Haji, 2013; Kilic et al., 2015; Nurhayati et al., 2016) have shown that there is a minimal negative link between board independence and CSR reporting. Independent nonexecutive directors have little to no effect on CSR disclosure, according to research undertaken in the context of Palestine by Barakat et al. (2015). In spite of conflicting empirical findings in the prior literature, this analysis maintains that the addition of outsider directors would boost the firm's performance. As a consequence, business leaders will have greater incentive to push their organisations to adopt CRM strategies.

2.1.4 CEO duality: If one individual holds both the CEO and the chairman positions, this is called role dualism. When the CEO and the chairman are the same individual, there is a greater risk of abuse of power and poor decision-making. CEO duality, according to Haniffa and Cooke (2002), provides more decision-making authority, which may lead to hasty judgements that fail to take into account the needs and interests

of many parties. Because of this, fewer firms may take part in community events and disclose their involvement in charitable activities. According to agency theory, managers' involvement in corporate social responsibility (CSR) efforts is influenced by their self-interests. Therefore, the CEO has the freedom to choose the frequency of board meetings and the level of detail shared with directors. It's also easier for a CEO to preserve secrets if he or she is also the board chairman (Haniffa and Cooke, 2002; Li et al., 2008). Separating the roles of CEO and chairman has been shown to increase the quality of monitoring and, in turn, the value of voluntary disclosure (Li et al., 2008; Forker, 1992; Said et al., 2009).

In addition, there is a lack of consensus in the most up-to-date studies on the link between CEOs and CSR disclosure. Evidence from studies by Giannarakis (2014) and Muttakin et al. (2015), for example, shows that having a CEO who is also a board member has a large and negative effect on CSR disclosure. However, Razak and Mustapha (2013) find only a weak negative association between role duality and CSR reports. Furthermore, Khan et al. (2013) found that position duality had little effect on CSR reporting. This study posits, in accordance with agency theory, that work performance monitoring suffers when employees have multiple roles, which lowers credit risk.

2.1.5 Gender diversity: Board diversity has recently been identified as one of the most contemporary components of CG in explaining the depth of CSR disclosure. The presence of female directors in the company's boardroom is reflected by gender diversity as one of the proxies for board diversity. Female directors, according to Sheridan and Milgate (2005), provide their boards with unmatched knowledge, experience, and talents. However, given the boardroom culture, which forbids expressive behaviours, their feminine characteristics might be concealed. Therefore,

masculine behaviour prevails on boards of directors notwithstanding the presence of women. Female directors may be more susceptible to the arguments of certain stakeholders due to factors outside their professional expertise. Eagly et al. (2003) found that women are more likely to be impulsive, empathetic, cooperative, loving, interpersonally sensitive, and concerned about the welfare of others than males. Therefore, they are crucial to bolstering a business' moral reputation (Zhang et al., 2013). Women's representation on corporate boards has been shown to increase their social clout (Hillman et al., 2002). More women on boards of directors, according to Barako and Brown (2008), might lead to a wider variety of perspectives being discussed. According to agency theory, a board with greater diversity is often a better manager of management activities since diversity fosters board independence (Carter et al., 2003, 2010). Female board members, according to Hillman et al. (2007), put in much more time monitoring and policing management actions. According to research by Bear et al. (2010), boards with more women members tend to have a more positive outlook on CSR initiatives. Furthermore, the logic of emotion suggests that when it comes to socially responsible choices, women are more sensitive and emotional than males. As a result, companies with women on their boards give more to charity (Williams, 2003). Khan (2010) found a weakly positive correlation between the presence of women on the board and CSR reporting, but the vast majority of prior research (Ibrahim and Hanefah, 2016; Katmon et al., 2017; Harjoto et al., 2015) found a positive and significant relationship between CSR disclosure and the number of women on the board. In addition, Kiliç et al. (2015) of Turkey discovered a negative but nonsignificant link. While prosperous countries like Germany approved laws in 2015 mandating specific numbers of female board members, Palestine has yet to do so.

2.1.6 Credit Risk Management (CRM)

The concept of CRM has been put forth to systematically identify, assess, and rank actual and practicable clinical risks of medication errors as well as to develop, implement, and evaluate risk management plans to prevent adverse patient outcomes. A systematic process is needed to comprehensively identify all medical hazards in the banking business (ground-Schreudering, 2014). Risk management (RM) is the process of directing business activities to reduce exposure to possible uncertainties, as defined by Schmidt and Roth (1990). Risk management is a systematic approach to identifying and evaluating potential threats to an organisation or a person, as well as selecting and implementing appropriate countermeasures. The process consists of three phases: risk identification, risk estimation, and risk management (Redja, 1998). According to Bessis (2010), risk management is the use of a set of tools and models to assess and mitigate potential threats.

According to Fatemi and Glaum (2000), the goals of risk management include lowering the likelihood of financial loss due to fluctuations in currency exchange rates, stabilising revenue, protecting against fluctuations in gain, increasing output, and assuring the company's continued existence. Risk management (RM) is the practise of protecting a business from suffering an unacceptable loss that could cause its failure or significantly harm its competitive position. This is according to authors Perhac (1998) and Boubala (2010). To guarantee banks are in a healthy RM state with reduced consequences of vulnerability and possible disasters, management must employ reliable ways to route money to the best hazardous and rewarding operations. The management of a company has to assess the extent of prospective losses to choose the best course of action. They also need cautious risk analysis and prediction tools. Managers can fulfil these needs with the help of risk management (RM), which involves the following steps: identifying

key risks; collecting trustworthy and justifiable information; identifying operational risk mitigation strategies; selecting risks to decrease; selecting risks to increase; and selecting strategies to monitor the outcomes of the risk positions. Bessis (2010) provides more evidence that the purpose of RM is to quantify risks for monitoring and controlling them. Depending on the client's risk tolerance, it also involves unique product and price strategy development, competitive advantage creation, and other strategy formulation tasks. Furthermore, the management of the financial institution must take certain steps before a framework for RM can be put into operation. There are normally four parts to these: "standards and reports," "position limits or rules," "investment guidelines or strategies," and "incentive contracts and compensation." Managers are urged to manage risk in a manner that is compatible with organisational objectives via quantitative presentation, description of mitigation measures, setting of individual positions at acceptable levels, and exhortation tactics (Santomero, 1995).

After identifying the (causes of) errors, CRM provides a structured way for risk identification and management. Identifying potential risks is achievable in clinical risk management in a number of ways. Clinical incident data, accreditation requirements, freedom of information requests, and other techniques are a few of them. Risk management (RM) is commonly defined as the process of identifying and, to the extent practicable, eliminating dangers (Clements, 1995). The goals of CRM are to reduce the frequency of harmful actions and harm to patients, as well as the risk of a claim being filed and the associated costs. Malpractice is the main emphasis since it results in financial losses but also lowers a trust's reputation and its staff members' morale (Clements, 1995). CRM also comprises steadfastly caring for damaged patients and expeditious resolution of valid claims. An audit of clinical court cases and a proper study of risk control reporting systems both present crucial opportunities to improve

quality in a way that is safely geared toward the welfare of the affected individual (Clements, 1995). The priority must be quality improvement since only through this exposure can the risk of litigation be eventually eliminated. Risk is defined by Chance and Brooks (2011) as the likelihood that a variable's negative result will occur. It is possible to foresee this risk or not (Collier and AgyeiAmpomah, 2006). A particular industry, profession, product, or service may also carry particular dangers. Unsystematic risk has come to be used to describe this. Diversification is the main strategy for eliminating or reducing unsystematic risk, often known as unique risk (Allen, 2013). The systematic or undiversifiable risk, on the other hand, is the opposite sort of risk. This type of risk cannot be simply managed, as the name suggests. This type of risk is distinguished by the fact that it typically has an impact on the entire economy rather than just a small portion of it. Rates of inflation, interest, the value of one currency relative to another, and so on are all instances of macroeconomic rates (Holton, 2013). According to Marrison (2012), risk is the possibility of suffering a loss. The possibility of a profit for the banks is called into question here.

2.2 Theoretical Review

2.2.1 Agency Theory

Agency theory forms the theoretical basis for how CG affects credit risk management. CG is used to address the agency problems brought on by the division of ownership and control. So, to solve agency issues, CG structures are in place (Moussa, 2019). Agency Theory contends that rather than acting as an informed and logical shareholder as is expected in the management demonstrates, corporate management would operate in a way that is fully aware of its involvement as a "player" for shareholders (Permatasari, 2020). In order to make sure that bank activities are carried out in compliance with all relevant laws and regulations, the agency theory of CG has grown in importance. Or, to

put it another way, this notion holds that the expense of reducing the losses brought on by noncompliance should increase in proportion to the rise in permission costs. According to agency theory, CG and credit risk management are related.

Agency theory serves as the foundation for the current investigation. According to the agency theory, separating ownership and control structures can improve a company's financial performance. Furthermore, Berle and Means (1932) claimed that when shares are distributed among tiny shareholders, conflicts of interest between principal and agent occur and shareholders are unable to oversee and monitor managerial decisions. Directors (agents) are looking out for themselves in terms of compensation (bonuses, requirements, etc.) at the cost of shareholders (who want to see the company's bottom line increase). The managers' selfish actions had a negative impact on the company's bottom line and increased the likelihood of financial trouble. Significant attention has been paid to the connection between CG and financial hardship after the collapse of numerous high-profile firms in both developed and developing countries (Udin et al., 2017). Businesses often fail because of flaws in their operations, poor strategic decisions, or a rapidly changing economic climate.

2.2.2 The Stewardship Theory

Donaldson and Davis' seminar work gave rise to the stewardship philosophy in 1991. Managers are trustees whose interests are aligned with those of the shareholders, according to the stewardship idea, as opposed to the agency model. Thus, managers have an incentive to boost financial performance via decisions that benefit shareholders. However, according to the notion, there should be no tension between managers and owners, and the goal of governance should be to provide mechanisms for optimal collaboration between them. According to the stewardship model of CG, managers should work hard to increase profits for stockholders by taking good care of the

company's resources. Therefore, this perspective leads to the premise that management performance is not always impacted by self-interest but rather by structural governance barriers that impede effective action (Kokkinis, 2017).

This is supported by Torfing and Bentzen (2020), who argue that CG should offer managers enabling and empowering mechanisms, allowing managers to achieve higher shareholder returns. The stewardship approach advocates a small number of independent directors for corporations (Donaldson & Davis, 1991). The stewardship hypothesis asserts that insider-dominated boards of directors are more successful at accomplishing corporate goals due to better access to knowledge and technology. The theory further opined that better financial performance is likely to be related to internal CG policies that offer managers more autonomy and authority.

The theory is vital to the current study because it supports independent variable CG mechanisms, specifically CEO dualism. That is the theory that explains why the CEO and chairmanship position should not be separated.

2.2.3 The Stakeholder Theory

Stakeholder theory is an extension of agency theory. One criticism of agency theory is that it focuses too narrowly on shareholders. Stakeholder theory, developed by Freeman et al. in 1984, suggests that companies should prioritise the interests of more than just their shareholders when making decisions. However, CG is included in stakeholder theory, making it a more all-encompassing framework (Yusoff & Alhaji, 2014). This idea is predicated on the notion that managers need to act in a manner that is beneficial to the interests of all stakeholders, and that the board of directors ought to keep an eye on how well managers are doing their jobs.

Since modern businesses must consider the requirements of a variety of constituencies (Schmid, 2006), the theory's scope has broadened accordingly. Organisations and individuals who may influence or be impacted by an organisation's choices are collectively referred to as "stakeholders," as proposed by Freeman (1984). Stakeholder theory has evolved to include not just the firm's employees but also its customers, suppliers of raw materials, community members, and even its rivals (Freeman et al., 2004) in addition to the original set of stakeholders. Businesses, in accordance with stakeholder theory, should prioritise the wants and requirements of their stakeholders and try to find a happy medium between opposing interests. It is no longer acceptable for a company to choose profits before social responsibility. Consequently, stakeholder theory affords CG a great deal of leeway. Stakeholders include employees, customers, lenders, suppliers, competitors, enemies, investors, governments, banks, and the general public. Stakeholder theory was originally deeply embedded in the field of management. However, as more time passed, many revisions and viewpoints were brought within stakeholder theory, and it is now regarded as a significant theory under the CG system. Stakeholder theory's primary value lies in its ability to help entrepreneurs plan for and mitigate risk (Barney & Harrison, 2020).

There are many stakeholders in a company's success beyond its owners or shareholders, including its creditors, suppliers, employees, potential investors, government and regulatory bodies, local community, lenders, trade associations, and the general public. Stakeholder theory is elevated by this idea since it ensures that everyone's needs are met and their opinions are heard. According to this school of thought, it is preferable to treat all parties fairly (Harrison et al., 2015; Klepczarek, 2017). The stakeholder theory was criticised for the reason that the success of a company is not and should not be assessed just by the advantages that it provides to its stakeholders (Jensen, 2002). When looking

at the many theories of CG, the stakeholder theory stands out because of its claim to protect everyone's rights and interests.

2.3 Empirical Review

The effect of board size on credit risk management

Chong, Ong, and Tan (2018) investigate how board composition, political ties, and sustainability policies impact risk-taking and business performance. To analyse the link, this study employed secondary data and the regression approach. For the analysis, a sample of 290 firm-year data was used. The results demonstrate that having a larger board increases financial risk, but this risk may be decreased by having more independent directors in the boardroom. As a large board size can be detrimental to business performance, an ideal board size with an adequate number of independent directors is required. Political ties have a dual-edged sword effect that must be taken into account because politically connected enterprises also exhibit lesser risk-taking and performance. The findings, to some extent, might be generalised to developing economies even if the sample size is small due to the limited availability of data since most emerging markets do share comparable financial and economic dynamics.

It was investigated by Kakar, Ali, Bilal, Tahira, Tahir, Bahadar, Bukhari, Ullah, and Aziz (2021) how ownership structure, CG, risk management, and bank performance are all interconnected. Data was collected from 39 different banks around Pakistan from 2010 to 2015. CAR and VAR were used to evaluate risk management, whereas CEO duality, board size, audit committee membership, and board independence were used to evaluate CG. Their research shows that having a single audit committee member and a large board are both detrimental to risk management, but having a co-CEO and an independent board is very beneficial.

Djebali and Zaghdoudi (2019) investigated the impact of CG on credit risk and liquidity risk by observing 10 Tunisian banks from 1998 to 2015. They found that credit risk is directly related to bank governance mechanisms.

According to Permatasari (2020), the research intends to look at how Indonesian banks handle CG and risk. The researchers used a self-composite assessment score for strong CG to gauge how well the bank was following best practises. Banks' ability to handle risks is evaluated across four dimensions: the market, credit, liquidity, and operations. The study's results showed that improved CG in Indonesia reduced the threat to financial institutions. Banks with different governance ratings faced different levels of credit risk, liquidity risk, and operational risk but the same level of market risk. However, only the largest banks now give value to the risk of market risk in their annual reports, therefore this is an area for further research.

Using data from 267 African banks from 2006-2011, Kusi, Gyeke-Dako, Agbloyor, and Darku (2018) analysed the connections between CG frameworks and views on maximising stakeholder and shareholder value. This research examined this connection utilising the Prais-Winsten ordinary least squares and random effect regression models to ensure consistency and efficacy of the results. The results of this investigation show that the maximisation of value for shareholders and stakeholders is diminished by CG frameworks such as having two chief executive officers, having non-executive members on the board, and having very large boards. Research on the relationship between CG and the pursuit of maximum profit is warranted.

The research conducted by Raimo, NIcol, Polcini, and Vitolla (2022) aims to learn more about the connection between the characteristics of the board of directors and the reliability of the risk disclosures included in integrated reporting (IR). The research,

which is based on agency theory, examines the relationship between a CG board's size, gender diversity, independence, and meeting frequency in 2018 and the amount of risk disclosure it provides to a sample of 95 IR adopters from 24 countries. Data suggests that it is not immediately obvious to firms how IR might improve risk communication. One of the limitations of the empirical investigation was the short time period (just a year). A longitudinal investigation of risk disclosure via IR over an extended period of time, as well as a comparison with other reporting methods such as sustainability reports and websites, may be possible topics for future research.

The effect of non-executive board members on banks' credit risk management.

Guluma (2021) studied the impact of CG measures on the performance of listed Chinese firms using panel data from 11,683 samples from 2020 to 2018. CG was split into internal mechanisms measured by ownership concentration (OC), dual board leadership (DBL) independent boards (IB) and external mechanisms, which were measured by product market share (PMS) and debt financing (DF). The Generalised Moment method of estimation model showed that PMS and OC positively affect firm performance as measured by ROA and TQ, whereas DF has a negative relationship with firm performance. The relationship between DBL and TQ was found to be negative.

To identify if CG affects bank risk management, Permatasari (2020) studied 10 Indonesian banks using the banks' self-assessment of their CG practises as a measure of good CG composite grading, and bank risk management was measured as market risk, credit risk, liquidity risk, and operational risk. His results showed that implementation of good CG influences bank risk with differences in the various bank risk components in the various banks, except for market risk.

A study conducted by Abou-El-Sood, (2017) intends to emphasise the significance of policy discussions about governance's role in preventing excessive risk-taking during times of instability. The study used a sample of US bank holding companies (BHCs) from 2002 to 2014; CG metrics are regressed on measures of risk-taking. The findings indicate that when it comes to overall assets, loans, and off-balance-sheet items, BHCs with more concentrated shareholders, greater management ownership, smaller boards, and fewer outside directors make less hazardous investments. The capital sufficiency impact outweighs the pressure to take on riskier positions. The study's limitations and references for future studies were not highlighted.

The purpose of the research conducted by Jallali and Zoghlami (2022) is to ascertain the extent to which risk governance improves the effectiveness of CG and risk management. The study employs Baron and Kenny's (1986) method to evaluate risk governance's mediating function. In addition, the necessary panel regressions are performed using structural equation modelling. While the Bank Scope Database was the primary source used, some qualitative information was gathered by hand from the annual reports of individual banks that were made publicly accessible online. Results show that risk governance fully explains the link between CG and bank performance, but can only provide limited insight into the connection between risk management and bank performance. The study's limitations were only as relevant as the sample size was small. Therefore, it is crucial to look at the efficacy of risk governance measures in traditional banks in future studies.

The effect of female board membership on banks' credit risk management.

Aslam and Haron's (2021) study objective is to discover more about the way CG and other relevant aspects affect Islamic banks' willingness to take risks. Risk is measured

in terms of the three main categories credit risk, liquidity risk, and operational risk. This research makes use of a panel data set consisting of 129 Islamic banks (IBs) from 29 countries in the Middle East, South Asia, and Southeast Asia areas, and uses a two-step system generalised method of moment (2SYS-GMM) estimation technique. The research covers the years 2008-2017. The findings show a positive and statistically significant correlation between board size, Shariah board composition, and credit and liquidity risk. Bank risk is correlated adversely and strongly with board independence and CEO power, but positively with market risk.

A study conducted by Tadele, Roberts, and Whiting (2021) intends to investigate how MFI-level governance affects risk for microfinance institutions (MFIs) in Sub-Saharan Africa (SSA). The study makes use of information from 151 MFIs that were active between 2005 and 2014 in 21 SSA nations. The association between MFI-level governance procedures and risk is examined using the Feasible Generalised Least Squares (FGLS) regression model. The study offers further proof that board attributes affect MFI risk differently for for-profit (FP) and not-for-profit (NFP) institutions. Board independence helps NFP MFIs have lower credit risks. Furthermore, having more female directors lowers (increases) FP (NFP) financial risk, but having more female CEOs raises (decreases) FP (NFP) financial risk. Future studies could take into account extending on findings and adding to the present discussion on the commercialisation of MFIs by clarifying NFP and FP risk behaviour and governance.

2.4 Conceptual Framework

Agency theory and stakeholders' theory are the two pillars that support our theoretical model (see Figure 2.1). Drawing from the theories, this study examines how CG may improve credit risk management.

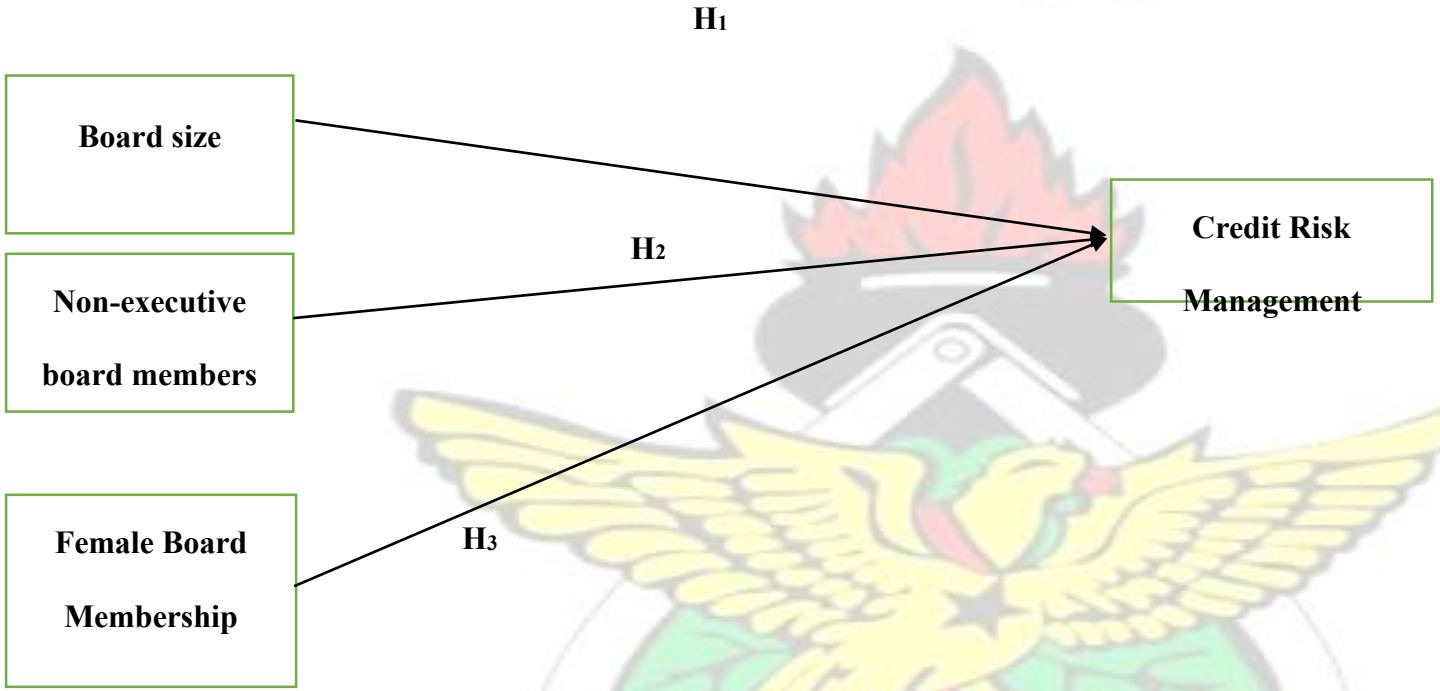

Figure 2. 1 Conceptual Framework

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter provides an overview of the methodological aspect of the study. The section includes the research design (3.1), population of the study (3.2), data analysis technique (3.3), Hausman test, Multicollineartiy test, Heteroscedasticity Test, specification of the model (3.4), variable description and measurement (3.5) and ethical consideration (3.6).

3.1 Research design

The research design describes the methodology that will be used to collect, measure, and analyse study data. It sets the parameters for data collection and analysis in a manner that optimises both efficiency and relevance to the study's aims (Kothari, 2004). To conduct the most productive study and collect the most data, it is necessary to develop such a strategy and evaluation. In other words, the objective of the study design is to get as much information as possible with as little investment of time, money, and resources as possible (Cohen, Manion, & Morrison, 2009).

Due to the need to gather and analyse secondary quantitative data and test hypotheses in this study, positivism will be applied (Buallay, 2020). To explain the causal link between two or more variables, the study employed a correlational descriptive research methodology to help in understanding the underlying reasons respondents issue CG and credit risk management in the banking space.

3.2 Population

The people or organisations that are the focus of the research are known as the population of interest (Majid et al., 2018). According to Lavrakas (2008), the population of interest consists of the persons, organisations, or things that the researcher will be

treating and generalising about. Given the topic at hand—banks in Ghana's financial markets—the study's population of interest will consist of all Ghanaian banks that are publicly traded. 3.4 Sample Size and Sampling Technique

The study population comprises all seven (7) listed banks accepting deposits from customers and granting loans to borrowers in Ghana over the period 2010-2021. This study will gather data from all the seven banks listed on GSE. The researcher will rely on secondary data that will be collected from the annual reports of the listed banks from 2010 to 2021 for the study. To measure credit risk, data on non-performing loans will be collected. Board size, duality of CEO, board independence, audit committee size, ownership concentration, and women on the board will make up the data that will be collected on internal CG mechanisms. Banks' product market share and debt financing will be used to measure external CG mechanisms**.**

For this study, considering the research objectives, time and resource limitations, secondary data are adopted for all analysis and estimations. Secondary data refers to already collected and compiled data. Secondary data may be based on already published data or compiled data in its original form (Church, 2002). The GSE provided the secondary data used in this analysis. The investigation relied heavily on supplementary data culled from the banks' annual reports during 10 years. The research includes information from 2010 to 2021.

3.3 Data Analysis Techniques

For analysis, data will be taken from the institution's annual reports and entered into the SPSS software (version 20). According to the bank's coefficient of variation, descriptive data for the surveyed banks will be graded. A correlation matrix as well as a multicollinearity analysis tool utilising Pearson's Pairwise Product Moment Correlation Coefficient (r) will be utilised to examine the relationship between the dependent and

independent variables. Additionally, a panel regression was performed to calculate the P-value, which will either reject the null hypothesis (Ho) or fail to reject it to assess the level of relevance between CG and credit risk management.

3.3.1 Hausman Test

The relative efficacy of random- and fixed-effect models was determined by means of a specification test. This test, which bears the Durbin-Wu-Hausman nomenclature, compares the consistency of one estimator to that of a different, ostensibly inferior estimator. The test allows for the evaluation of the correspondence between empirical data and research data. This technique is used in panel regression to explain the connection between the dependent and independent variable(s) by choosing between the efficiency of random and fixed effects (Guggenberger, 2008).. The random effects model is preferred above the alternative set effects model when the null hypothesis is true.

3.3.2 Multicollinearity Test

Multicollinearity occurs when there is a correlation between the autonomous variables. The VIF (VIance of the Inflation Factor) was used to look into the matter. How much the variance has been inflated is determined by calculating the Variance Inflation Factor, which is multicollinear in practise and serves as an inflatable factor in multicollinearity tests (Marcondes Filho, & Sant'Anna, 2016)..

3.3.3 Heteroscedasticity Test

Standard errors in fixed effect regression need to be evaluated carefully. Stata's robust standard errors mean we don't need to include robustness in our regression equation.

The heteroscedasticity and homoscedasticity of the data were examined to make this determination. If the variance of the error term is consistent throughout our sample, we may skip using robust standard errors in our regression. If this is not done, the regression

will be inaccurate. However, if our data is heteroscedastic, then robust standard errors are essential for avoiding bias in our findings. The BreuschPagan/Cook-Weisberg heteroscedasticity test was used to examine this hypothesis.

3.4 Specification of Empirical Model

To shed light on the risk and CG of ten (10) banks in Ghana between 2010 and 2021, this study uses the panel data technique. The panel data technique, according to Baltagi (2001), delivers more convincing and decisive results than the classic cross-sectional and time series techniques because it capitalises on their advantages while addressing their drawbacks. Similar to cross-sectional and time series methodologies, panel data shows the capacity to compensate for omitted variables and allows for both long- and short-term effects (Imbens and Wooldridge, 2009). The study utilises the modified empirical models of Akotey et al. (2013), Alhassan et al. (2015), and Olalekan et al. due to the panel nature of the data (2018). The simulation is shown below;

$$\text{CRM}_{it} = \beta_0 + \beta_1 \text{BS}_{it-1} + \beta_2 NONEXE_{it-1} + \beta_3 FBM_{it-1} + \varepsilon_{it2}, \ldots\ldots\ldots (1)$$

Where *credit risk, = CRM measured by non-performing*

Board size= BS

Non-executive board members = *NONEXE*

Female board membership =*FBM*

β_0 is the intercept estimates (value of Y when X = 0), i bank, t period indicator, β_1 to β_3 the regression coefficients and the stochastic error term.

3.5 Variable Definition and Measurement

Measurement of the various variables and expected direction of the relationship is captured below. The dependent variable was Credit Risk Management and the

independent variable was Corporated governance. The description of the measurement are detailed in the table blow

Table 3. 1 Measurement of Variables and Expected Sign

Variable	Measurement	Direction
Dependent		
Credit Risk Management	Non-performing loans (NPLs)	Positive
Board size	It is the total number of members on the board.	Positive
Female board membership	It is measured using a dummy variable, which takes a value of 1 if there is at least one woman on the board and equals 0 otherwise.	Positive
Non-executive board members	The proportion of non-executive directors on the board	Positive

3.6 Ethical Issues

Researchers need to show that they can be trusted and that the methods they use are reliable and credible (Kyngäs et al., 2020). Ethics, as defined by Ferrell et al. (2019), are the norms or standards of behaviour that influence moral judgements regarding our behaviour and interactions with others.

The information was compiled from the company websites and the publicly accessible financial filings from GSE. Following the selection of the data for the research according to business name and GSE code, it was stored in a file that required a password before being sorted according to the company name. No actual people were used in this experiment. As a direct consequence of this, participant protection processes and papers like as confidentiality guidelines and informed consent forms are not required. Strict security steps were taken to ensure the safety of these records.

Responses were kept in strict confidence and used only for this study.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

This section of the study examined the presentation and discussions of the results. The first section presents a description of the study variable including the descriptive statistics (4.1), correlational analysis (4.2), panel regression (4.3), and robustness test (4.4). The next section discusses the findings of the study by relating them to the empirical studies (4.5). The discussion is done under each of the objectives of the study to enhance comprehension. Furthermore, sections have been provided for the theoretical implications (4.6) and practical implications (4.7).

4.1 Descriptive Statistics

Table 4.1 presents the descriptive statistics of key variables in the study, shedding light on their central tendencies and dispersion. The variable "Credit Risk Management" (CRM) exhibits an average value of 0.725, with a minimum of 0.104 and a maximum of 1.957. This suggests variations in credit risk across the banks in Ghana. Board size (BS) has an average of 9.509, varying from a minimum of 5.000 to a maximum of 15.000, reflecting diversity in the composition of boards. Female board membership (FBM) indicates an average of 0.472, with a range from 0.000 to 1.000, underlining that gender diversity among board members varies. Non-executive board members (NEBM) average at 0.327, ranging from 0.200 to 0.600, which highlights the extent of independence within the boards.

Table 4. 1 Descriptive Statistics

Variable	Mean	Max	Min	Std. Dev	Observation
CRM	0.725	1.957	0.104	0.319	108
BS	9.509	15.000	5.000	1.847	108
FBM	0.472	1.000	0.000	0.502	108
NEBM	0.327	0.600	0.200	0.064	108
LEV	1.012	1.829	0.41	0.412	108
BZ	21.863	23.636	19.098	0.894	108
AUQ	0.917	1.000	0.000	0.278	108

Source: Author Computation (2023): *Where CRM is the Credit Risk Management, BS is the Board size, FBM is the Female board membership, NEBM is the Non-executive board members, LEV is the leverage, BZ is the bank size, and AUQ is the audit quality.*

Leverage (LEV) has an average value of 1.012, with a minimum of 0.410 and a maximum of 1.829, revealing differences in debt utilisation among banks. Bank size (BZ) shows an average of 21.863, ranging from 19.098 to 23.636, illustrating diversity in bank sizes. Audit quality (AUQ) has an average of 0.917, spanning from 0.000 to 1.000, indicating variations in the quality of audit practices.

4.2 Correlation Analysis

The direction and magnitude of relationships between sets of data are captured by the correlation coefficients. Credit Risk Management (CRM) shows a positive correlation with "Female board membership (FBM) at 0.40**, suggesting that banks with greater gender diversity in their board composition tend to have a more proactive approach to credit risk management. Similarly, a positive correlation of 0.35** is observed between CRM and Non-executive board members (NEBM), indicating that banks with a higher proportion of non-executive board members also tend to prioritise credit risk management. Conversely, Leverage (LEV) exhibits a negative correlation of -0.20 with CRM, implying that higher levels of leverage are associated with a less conservative stance towards credit risk management.

Table 4. 2 Correlation Analysis

S/N	Variable	1	2	3	4	5	6	7	VIF
1	CRM	1							
2	BS	0.25*	1				1.25		
3	FBM	0.40**		0.15	1			1.80	
4	NEBM		0.30*	0.10	0.35	1		1.30	
5	LEV	-0.20	-0.55	0.48	0.15	1		2.60	
6	BZ	0.35**		0.25*	0.30*	0.20	-0.10	1	1.90
7	AUQ	0.50**		0.45**		0.20	0.35**	-0.15	0.55**
	1	1.78							

Source: Author Computation (2023): *Where CRM is the Credit Risk Management, BS is the Board size, FBM is the Female board membership, NEBM is the Non-executive board members, LEV is the leverage, BZ is the bank size, and AUQ is the audit quality.*

In terms of the board structure variables, Board size (BS) displays a positive correlation of 0.25* with CRM, indicating that larger board sizes might be linked to more robust credit risk management practices. Additionally, Female board membership (FBM) and Non-executive board members (NEBM) exhibit positive correlations of 0.15 and 0.10, respectively, with CRM. These findings collectively suggest that board diversity and a higher proportion of non-executive members might play roles in enhancing credit risk management efforts. The correlation matrix also provides insights into the relationships among other variables. Notably, Audit quality (AUQ) demonstrates a positive correlation of 0.50** with CRM, indicating that banks with higher audit quality standards tend to emphasise credit risk management. This finding suggests that strong internal and external audit mechanisms may contribute to effective credit risk mitigation strategies. Overall, these correlations underline potential linkages between board composition, audit quality, leverage, and credit risk management practices within the context of Ghanaian banks. The Variance Inflation Factor (VIF) values suggest that multicollinearity concerns are not significant among the variables, signifying that the calculated correlations are relatively robust.

4.3 Panel Regression

Board size (BS) demonstrates a positive and statistically significant coefficient of 0.18, with a low p-value of 0.000. This suggests that larger board sizes are associated with more comprehensive credit risk management strategies. A similar pattern is observed for Female board members (FBM) and Non-executive board members (NEBM), both of which show strong and significant positive relationships with CRM. The coefficients of 0.20 and 0.12, respectively, are accompanied by very low p-values of 0.000 and 0.001, indicating that banks with greater gender diversity and higher proportions of non-executive board members tend to place a greater emphasis on credit risk management. Conversely, Leverage (LEV), Bank size (BZ), and Audit quality (AUQ) exhibit less pronounced relationships with CRM. The coefficient for LEV is positive (0.08), though not statistically significant at conventional levels (p-value = 0.112). Similarly, BZ and AUQ have positive coefficients of 0.05 and -0.10, respectively, but their associated p-values are not statistically significant (p-values = 0.098). This implies that leverage, bank size, and audit quality might have a limited impact on credit risk management within the sampled Ghanaian banks.

Table 4. 3 Fixed Effect Estimation

Variables	Dependent Variable = Credit Risk Management (CRM) Coefficient	Standard Error	T-Statistics	P-value
BS	0.18	0.04	4.50	0.000
FBM	0.20	0.03	6.67	0.000
NEBM	0.12	0.02	6.00	0.001
LEV	0.08	0.05	1.60	0.112
BZ	0.05	0.03	1.67	0.098
AUQ	-0.10	0.06	-1.67	0.098
R-squared	0.45			
Adjusted R-squared	0.41			
Durbin-Watson stat	0.80			0.80
Breusch-Pagan Test	0.34			0.34
Hausman Test	0.000			0.000

Source: Author Computation (2023): *Where CRM is the Credit Risk Management, BS is the Board size, FBM is the Female board membership, NEBM is the Non-executive board members, LEV is the leverage, BZ is the bank size, and AUQ is the audit quality.*

The goodness of fit measures, R-squared and adjusted R-squared, are reported as 0.45 and 0.41, respectively. These values indicate that the regression model captures a moderate portion of the variation in credit risk management, suggesting that the included variables collectively explain about 45% of the variability in CRM. Additionally, the Durbin-Watson statistic of 0.80 suggests no residual autocorrelation, while the Breusch-Pagan test result of 0.34 indicates no significant heteroscedasticity. The Hausman Test result of 0.000 suggests that the fixed effect model is preferred over the random effects model, implying that unobserved heterogeneity across banks has a substantial impact on credit risk management practices. These findings collectively underscore the significance of board composition, particularly the presence of female and non-executive board members, in shaping credit risk management strategies within

Ghanaian banks

4.4 Robustness Test

The first lag of the dependent variable shows a significant positive coefficient of 0.25 with a very low p-value of 0.000. This indicates a strong autoregressive relationship, suggesting that past credit risk management practices significantly influence the current ones. This finding aligns with the idea that a bank's previous risk management decisions play a pivotal role in shaping its subsequent risk management strategies. Also, the Board size (BS) exhibits a positive and highly significant coefficient of 0.18, with a very low p-value of 0.000. This result reaffirms the earlier findings that larger board size is associated with enhanced credit risk management practices in Ghanaian banks. Similarly, Non-executive board members (NEBM) demonstrate a positive and statistically significant coefficient of 0.12, with a low p-value of 0.000. This suggests that a higher proportion of non-executive board members contributes to more robust credit risk management strategies.

Table 4. 4 GMM Estimation

	Dependent Variable = Credit Risk Management (CRM)			
Variables	Coefficient	Standard Error	T-Statistics	P-value
CRM_{it-1}	0.25	0.06	4.17	0.000
BS	0.18	0.04	4.50	0.000
FBM	-0.05	0.03	-1.67	0.098
NEBM	0.12	0.02	6.00	0.000
LEV	0.08	0.05	1.60	0.112
BZ	0.20	0.03	6.67	0.000
AUQ	-0.10	0.06	-1.67	0.098
AR (1)	0.40			
A (2)	0.30			

Source: Author Computation (2023): *Where CRM is the Credit Risk Management, BS is the Board size, FBM is the Female board membership, NEBM is the Non-executive board members, LEV is the leverage, BZ is the bank size, and AUQ is the audit quality.*
In contrast, Female board membership (FBM) and Audit quality (AUQ) show

coefficients of -0.05 and -0.10, respectively. While these coefficients are negative, they are not statistically significant at conventional levels (p-values = 0.098), indicating that the presence of female board members and audit quality might not exert substantial influence on credit risk management in the banks. Leverage (LEV) and Bank size (BZ) both have positive coefficients of 0.08 and 0.20, respectively. While the coefficient for LEV is not statistically significant (p-value = 0.112), the coefficient for BZ is highly significant (p-value = 0.000). This suggests that bank size might have a more pronounced impact on credit risk management practices compared to leverage. Lastly, the lag terms, AR (1) and AR (2) have coefficients of 0.40 and 0.30, respectively. These coefficients represent the autocorrelation terms and indicate that credit risk management practices are influenced by their past values. This further supports the notion that historical risk management decisions play a crucial role in shaping current practices.

4.5 Discussion of the Findings

4.5.1 The Effect of Board Size on Credit Risk Management in the Banking Sector

It is clear that the board of directors plays a crucial role in establishing a bank's risk management strategies, as shown by the positive and statistically significant influence of Board size on CRM within the context of Ghanaian banks. According to agency theory, a bigger board is more likely to improve monitoring and oversight roles, reducing agency difficulties between shareholders and management. This explains why a larger board has a beneficial effect on customer relationship management. A larger board brings a diverse range of perspectives, expertise, and skills to the decisionmaking process, resulting in more comprehensive and robust risk assessment and management strategies (Ferrarini, 2017). The presence of a greater number of independent directors, each with a unique vantage point, facilitates thorough discussions and in-depth scrutiny

of potential risks and opportunities, thereby enhancing the bank's capacity to manage credit risk (Boateng and Dean, 2020).

This positive relationship between board size and CRM also resonates with stewardship theory, which posits that directors with fiduciary duties are motivated to act in the best interests of shareholders. A larger board fosters a sense of collective responsibility, where directors are more inclined to exercise vigilant oversight to safeguard the bank's interests and reputation (Ferrarini, 2017). This collective responsibility extends to the formulation and implementation of comprehensive credit risk management policies to protect the bank's financial health. Moreover, the findings are consistent with empirical studies that have explored similar relationships in various contexts. Research by Hunjra and Chani. (2019), suggests that larger boards tend to enhance CG mechanisms, which in turn positively affect firm performance and risk management practices. Similarly, Ghenimi et al. (2017) highlight that larger boards with greater independence can lead to more effective monitoring and oversight, translating into improved risk management strategies and outcomes.

4.5.2 The Effect of Non-Executive Board Members on Banks' Credit Risk Management

Independent and non-executive directors play a crucial role in shaping effective risk management strategies within financial institutions, as evidenced by the positive and statistically significant effect of Non-executive board members (NEBM) on Credit Risk Management (CRM) in the context of Ghanaian banks. This study emphasises the need to have independent board members with a wide range of backgrounds and perspectives, rather than just those with experience in banking. Decisions about risk management might benefit from the objective outside viewpoint provided by nonexecutive board members. Their independence from management and the bank's

major shareholders allows them to critically assess risk exposures without being influenced by internal biases or conflicts of interest. This impartiality promotes a more comprehensive and objective evaluation of potential credit risks, leading to more informed and effective risk management strategies. Non-executive directors can offer valuable insights and challenge assumptions, fostering a culture of robust risk assessment and mitigation (Ghenimi et al., 2017).

Furthermore, non-executive directors often have specialised skills and expertise that contribute to effective risk management. Their diverse backgrounds, spanning various industries and disciplines, enable them to provide a well-rounded assessment of potential credit risks and suggest innovative strategies to manage them. These directors may also possess knowledge of best practices in risk management from their experiences in other organisations, allowing them to contribute valuable insights to the board's discussions (Djebali and Zaghdoudi, 2019). The positive relationship between non-executive board members and CRM aligns with the recommendations of regulatory frameworks and CG guidelines. These frameworks emphasise the importance of having a balanced mix of executive and non-executive directors on boards to ensure effective oversight and risk management. Non-executive directors are expected to act as watchdogs, safeguarding the interests of shareholders and stakeholders by promoting transparent risk management practices (Djebali and Zaghdoudi, 2019).

4.5.3 The Effect of Female Board Membership on Banks' Credit Risk Management

The observed positive and statistically significant effect of Female Board Membership (FBM) on Credit Risk Management (CRM) within Ghanaian banks underscores the transformative impact of gender diversity on risk management practices. This research provides support for the hypothesis that a greater proportion of female directors

improves a bank's capacity to control credit risks. Gender diversity in board membership brings a variety of perspectives and experiences that can enhance the decision-making process. Female directors may offer distinct viewpoints and insights that contribute to a more holistic evaluation of credit risks. Diverse teams are known to be more effective in problem-solving and decision-making as they incorporate a wider range of perspectives (Smith and Smith, 2019). The presence of women on boards can lead to more comprehensive discussions and better risk assessment, which ultimately contributes to improved credit risk management.

Moreover, women directors often possess a unique skill set that complements the skillset of their male counterparts. Studies have shown that women tend to excel in areas such as communication, collaboration, and attention to detail. These skills are highly relevant to risk management, where clear communication, collaboration among stakeholders, and meticulous evaluation of risks are crucial (Djebali and Zaghdoudi, 2019). Female directors may bring a different lens to risk assessment, focusing on longterm sustainability and stakeholder interests. The positive relationship between female board membership and CRM aligns with the concept of the "diversity dividend." This theory suggests that diverse boards, including gender diversity, outperform homogenous boards due to the broader range of insights and viewpoints brought by diverse members. Gender-diverse boards are more likely to consider a wider array of potential risks, leading to more robust risk management practices (Felício et al., 2018). Furthermore, the positive effect of female board membership on CRM is in line with global trends and regulatory initiatives promoting gender diversity in corporate leadership. Regulatory bodies and CG guidelines in various countries are advocating for increased gender diversity on boards as a means to enhance decision-making and risk oversight. Organisations that embrace gender diversity are more likely to be seen

as socially responsible and capable of managing complex risks effectively (Boateng and Dean, 2020; Felício et al., 2018).

4.6 Theoretical Implication

The positive and statistically significant effect of board size on Credit Risk Management (CRM) in the context of Ghanaian banks underscores the critical role of board composition in shaping risk management strategies. The larger board size, as revealed by the findings, is associated with enhanced risk management practices. This result resonates with agency theory, which suggests that a larger board improves monitoring and oversight functions. A diverse board with varied expertise can lead to comprehensive risk assessments, fostering more effective risk management (Ferrarini, 2017). Moreover, stewardship theory supports this observation, as larger boards can exhibit collective responsibility, which influences the formulation and implementation of comprehensive credit risk management policies (Boateng & Dean, 2020). The presence of more independent directors facilitates thorough discussions and scrutiny of potential risks, aligning with agency and stewardship theories' emphasis on monitoring and fiduciary duties (Ghenimi et al., 2017).

The positive relationship between non-executive board members (NEBM) and CRM signifies the importance of independent directors in shaping effective risk management. Non-executive directors' external and impartial perspective contributes to more objective risk assessment. They bring specialised skills and diverse backgrounds that enhance risk management discussions and promote well-rounded risk assessment (Djebali & Zaghdoudi, 2019). This finding aligns with resource dependence theory, as non-executive directors act as external resources that address organisational vulnerabilities through informed risk management decisions (Ghenimi et al., 2017). Regulatory frameworks and CG guidelines advocate for non-executive directors'

presence, reflecting the importance of diverse perspectives in risk management oversight (Djebali & Zaghdoudi, 2019).

The positive significant effect of female board membership (FBM) on CRM highlights the transformative role of gender diversity in risk management practices. Female directors bring distinct viewpoints and skills, leading to more comprehensive risk assessments. Their unique skill set aligns with group decision-making theories, as diverse teams excel in problem-solving and decision-making due to a broader range of perspectives (Smith & Smith, 2019). This finding resonates with diversity theories, emphasising that gender-diverse boards enhance risk assessment by considering a wider array of potential risks (Felício et al., 2018). Furthermore, it aligns with the "diversity dividend" concept, where diverse boards outperform homogenous boards due to varied insights, ultimately leading to more robust risk management (Felício et al., 2018). Regulatory initiatives supporting gender diversity in leadership reinforce the significance of diverse boards in managing complex risks (Boateng & Dean, 2020).

4.7 Practical Implication

The practical implications stemming from the observed positive and statistically significant effects of board size, non-executive board members (NEBM), and female board membership (FBM) on Credit Risk Management (CRM) in the Ghanaian banking sector hold important implications for both banks and regulators. The finding that board size positively influences CRM suggests that banks should consider the composition of their boards as a crucial element of their risk management strategy. Banks can benefit from having a larger and more diverse board, including a significant number of independent directors. This diversity can help in thorough risk assessment and the development of comprehensive risk mitigation strategies. Practically, banks should prioritise nominating directors with diverse expertise, backgrounds, and skills to

enhance risk oversight and contribute to effective risk management. Furthermore, regulatory bodies and CG guidelines could emphasise the importance of board diversity, encouraging banks to prioritise diversity in their board composition to ensure effective risk management.

The positive link between NEBM and CRM underscores the value of non-executive directors in risk management decisions. Banks should actively seek to include nonexecutive directors with specialised skills and experiences relevant to risk management.

This approach can enhance the objectivity of risk assessments and decision-making processes. For practical implementation, banks should consider formal training and development programs for non-executive directors to enhance their understanding of risk management practices and the intricacies of the banking industry. Regulators and industry associations can promote such initiatives by providing guidelines or standards that encourage banks to include non-executive directors with expertise in risk management.

The positive impact of FBM on CRM emphasises the importance of gender diversity in shaping effective risk management strategies. Banks should actively work towards increasing gender diversity in their boardrooms, recognising that diverse perspectives contribute to more comprehensive risk assessments and strategic decisions. To practically implement this finding, banks can adopt inclusive recruitment practices that prioritise the inclusion of qualified women in board appointments. Regulatory authorities can play a role by encouraging and monitoring progress in gender diversity within the banking sector, fostering an environment where banks are motivated to ensure equal representation of women on boards.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.0 Introduction

This chapter includes a description of the overall study results. Section 5.1 presentss the summary of the findings. Section 5.2 concludes the study based on the findings. Section 5.3 presents recommendations based on the main findings and section 5.4 provides suggestions for further research.

5.1 Summary of the Findings

This research aimed to learn how publicly traded banks in Ghana handle credit risk thanks to CG. The study adopts a positivist approach, employing a correlational descriptive research design to explore this link. The population of interest comprises all nine listed banks in Ghana from 2010 to 2021. The research utilises secondary data from annual reports. Secondary data collected from the Ghana Stock Exchange(GSE) was analysed using R software. The research findings indicate several significant relationships between different aspects of CG and credit risk management in the context of Ghanaian banks. Firstly, a larger board size is positively associated with improved credit risk management.

A larger board brings diverse perspectives and expertise, enhancing risk assessment and management. Secondly, the presence of non-executive board members positively impacts credit risk management. These independent directors offer impartial evaluation, specialised skills, and knowledge of best practices, contributing to effective risk management. Lastly, female board membership is positively related to better credit risk management. Gender diversity brings varied viewpoints and skill sets, leading to more comprehensive risk assessment and sustainable decision-making. These findings

underscore the importance of board composition and diversity in shaping robust credit risk management strategies within the banking sector.

5.2 Conclusion

Insight into the complex interplay between CG measures and credit risk management in the Ghanaian banking industry from 2010 to 2021 has been provided by this research. The findings underscore the pivotal role that these governance factors play in shaping the banks' risk management strategies. A larger board size was associated with improved credit risk management, benefiting from enhanced monitoring and diverse expertise. The presence of non-executive board members positively influenced credit risk management by providing impartial evaluation, specialised skills, and external perspectives. Similarly, the inclusion of female board members contributed positively to credit risk management, capitalising on gender diversity's potential to enhance decision-making and risk assessment.

5.3 Recommendations

Based on the findings of this study, several recommendations are put forth to enhance credit risk management practices within the Ghanaian banking sector. Banks are advised to prioritise the enhancement of their board compositions as a means to bolster credit risk management. Emphasis should be placed on appointing directors with diverse expertise and skills. A larger board size can facilitate a more comprehensive range of perspectives, thereby improving the quality of risk assessment discussions. Additionally, the inclusion of non-executive directors who possess specialised knowledge in risk management and related fields can significantly contribute to effective risk evaluation and the formulation of robust mitigation strategies.

The positive correlation observed between female board membership and credit risk management underscores the importance of gender diversity within bank boards. It is recommended that banks actively work to increase the representation of women on their boards. To achieve this, banks should implement proactive recruitment strategies that identify and attract qualified female candidates. Gender diversity can bring unique viewpoints to risk discussions and contribute to better-rounded and sustainable credit risk management strategies.

To harness the full potential of board members in contributing to credit risk management, banks should invest in continuous training and development initiatives. This is especially relevant for non-executive directors, who can benefit from ongoing education in risk management practices, regulatory updates, and emerging industry trends. Equipped with up-to-date knowledge, directors can more effectively engage in risk assessment and constructively challenge management assumptions. The critical role of non-executive directors in providing impartial oversight for effective risk management cannot be understated. Banks should ensure that non-executive directors maintain their independence from both management and major shareholders. Robust policies should be in place to address potential conflicts of interest and guarantee that non-executive directors can objectively evaluate credit risks without any undue influence.

5.4 Suggestions for Future Research

Future research endeavours in the realm of credit risk management and CG in the banking sector could delve deeper into the nuances of the identified relationships. Exploring how the dynamics of board size, non-executive board members, and female board membership interact with specific risk management strategies and outcomes could yield valuable insights. Furthermore, investigating the impact of cultural and

contextual factors on these relationships, both within Ghana and across different national contexts, could provide a more comprehensive understanding of the generalisability and adaptability of these findings. Longitudinal studies that track the evolution of governance structures and risk management practices over time may also offer insights into the sustainability of these relationships. Additionally, research could explore the role of technological advancements and digital transformation in shaping governance mechanisms and their influence on credit risk management. These directions could contribute to a more nuanced understanding of the interplay between governance and risk management in the banking sector and provide actionable insights for banks and regulators alike.

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