KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,

KUMASI, GHANA

BOARD GENDER DIVERSITY AND THE PERFORMANCE AND RISK OF BANKS IN GHANA

BY

CLAUDIA NANA KONADU BOAMPONG

A Thesis submitted to the Department of Accounting and Finance, College of Humanities and Social Sciences, in Partial Fulfilment of the Requirements for the degree of

MASTER OF SCIENCE IN ACCOUNTING AND FINANCE

NOVEMBER, 2023

DECLARATION

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

Claudia Nana Konadu Boampong ………………. …………………

(PG9378821) Signature Date

(**Student's name&ID**)

Certified by:

Prof. Michael Adusei …………………….. …………………

(Supervisor's Name) Signature Date

Certified by:

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

(Head of Department) Signature Date

DEDICATION

I wholeheartedly dedicate this thesis to Almighty God, whose grace and guidance have been my constant source of strength throughout this academic journey and to my beloved parents, Felix Boampong (late) and Elizabeth Berko, your love, sacrifices, and unwavering support have shaped the person I am today. To my adorable boys, Richmond and Herbert, I dedicate this work to you, with all my love. You are my motivation and inspiration. Your understanding, patience, and unconditional love have sustained me during the challenging moments of this thesis. To my sisters, Mina and Justine, thank you for always cheering me on and being my pillars of support. Your presence in my life brings joy and strength to my journey.

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to Prof. Michael Adusei for his invaluable guidance, unwavering support, and expert supervision throughout the course of this thesis. Your extensive knowledge, constructive feedback, and encouragement have been instrumental in shaping the quality and direction of this research. I extend my heartfelt appreciation to Mr. Eric Herbert Kwaw and Mr Nelson Elikem Akpetor, my dear friends, for their continuous support, insightful discussions, and encouragement during the challenging moments of this thesis. Your friendship and presence have provided a source of motivation and inspiration throughout this journey. I am deeply grateful to Dr. Dontwi of KNUST and Rev. Herbert Dadzie of ICGC Winneba for their valuable contributions and assistance. Your expertise, guidance, and willingness to share your knowledge and resources have greatly enriched this thesis. I extend my gratitude to Mr. William Oduro-Boampong for his encouragement and belief in my ability to undertake this program. Your support and words of wisdom have been invaluable in my academic pursuits. Lastly, I would like to express my gratitude to my entire family, friends, and loved ones for their unconditional love, understanding, and patience throughout this academic journey. Your unwavering support and belief in my abilities have been the driving force behind my accomplishments.

ABSTRACT

The study investigates how board gender diversity affect bank performance and risk in Ghana. The study adopts the quantitative approach to investigate the research objectives. The study employs the convenience sampling technique to select 14 banks from a population of 23 banks. Secondary data, which are annual panel data spanning the seven-year period from 2015 to 2021 are used. The panel regression analysis is employed to analyze the data. The study uses Stata statistical software for data analysis. The study discovers that a statistically significant positive relationship exit between board gender diversity and the performance of banks. Additionally, the study reveals that the relationship between gender diversity of the board and credit risk is statistically significant and negative. The study therefore concludes that gender diversity of the board is a major determinant of performance and credit risk of banks in Ghana. The study recommends an enhancement of gender inclusivity on the boards of banks in Ghana.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

CEO – Chief Executive Officer

CIMA – Chartered Institute of Management Accountants

ISO – International Standards Organization

ROA – Return on Asset

EBIT – Earnings Before Interest and Taxes

AT – Agency Theory

ROE - Return on Equity

GMM - General Method of Moment

KIFs – Knowledge-Intensive Firms

NSE – National stock Exchange

SMEs – Medium-Sized Enterprise

CR – Credit Risk

BGD – Board Gender Diversity

NIM – Net Interest Margin

CIR – Cost-Income Ratio

TA – Total Asset

GDP – Gross Domestic Product

SEE – Standard Error of Estimates

WEF – World Economic Forum

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The significance of governance in guaranteeing the long-term viability and expansion of companies cannot be emphasized enough. Corporate governance has remained a focal point for stakeholders in various industries, as they strive to establish effective frameworks that promote the interests of all relevant parties involved. The significance of governance in shaping a firm's strategy and performance has led to extensive academic research and analysis (Daily and Dalton, 2017).

Scholars, such as Friede et al. (2015) assert that there is a positive correlation between proper and sustainable business administration strategies and institutional economic outlook. This conclusion emphasizes how important the board of directors is in determining a company's course. Given that the board has the power to approve operational and strategic choices; stakeholders have paid close attention to the board's makeup and structure. Among the various aspects influencing the board's effectiveness, gender diversity has emerged as a critical factor.

Regulators and legislators throughout the world have come up with programs to boost female representation on institutional boards in recognition of the value of gender diversity in business leadership (Chapple and Humphrey, 2014). Many countries have taken proactive steps to address the underrepresentation of women on corporate boards.

For instance, Norway, France, Spain, and Italy have implemented regulations specifying minimum percentages of female board members or positions (Chapple and Humphrey, 2014; Joecks, Pull and Vetter, 2013; Kagzi and Guha, 2018). Finland and India have institutionalized the representation of females on the boards to ensure gender diversity (Chapple and Humphrey, 2014; Joecks, Pull and Vetter, 2013; Kagzi and Guha, 2018). These measures aim to leverage the potential benefits of gender diversity, as studies suggest that including women in decision-making roles can enhance corporate governance (Adams and Ferreira, 2009; Intintoli and Kahle, 2020).

When it comes to understanding the need of gender diversity on corporate boards, Israel stands out as a trailblazing nation. The nation imposed a quota demanding a minimum of 50% female presence on boards in 2010 after first required the inclusion of at least one female board member in 1999 (Intintoli and Kahle, 2020). Other nations, such as the Netherlands including Kenya and Italy not to mention Iceland, Denmark and Canada including Belgium, and Australia, these countries have legislated the representation of woman on the governing boards of companies (Srivastava, Das and Pattanayak, 2018).

The dedication to enhancing corporate governance procedures is reflected in the rising global acknowledgement of the significance of gender diversity on boards. Consequently, this has sparked a surge in research efforts aimed at exploring to determine the correlation that exist between the success of a business and board gender diversity. Researchers such as Adams et al. (2015), Baixauli-Soler et al. (2016), Greene, Intintoli, and Kahle (2020), and Pucheta-Martínez (2018) contributing to the body of knowledge;

conducted various studies to examine the link that exist between institutional success and gender diversity. Nevertheless, it is crucial to highlight that most of these investigations have predominantly concentrated on industrialized nations, creating a void in exploration concerning developing nations. Within the Ghanaian setting, there is a dearth of research exploring the influence of gender diversity on board performance, with existing studies frequently neglecting the banking sector (Adusei, Akomea, and Poku, 2017; Sarpong-Danquah, Adusei, and Frimpong, 2022; Appiadjei, Ampong, and Nsiah, 2017). Moreover, notwithstanding the inherent perils confronted by banks in their daily operations, there exists a scarcity of literature that delves into the connection between gender diversity and bank risk in Ghana. Hence, the current investigation endeavors to fill these gaps by scrutinizing the impact of board gender diversity on the risk performance of banks operating in Ghana.

1.2 Problem Statement

In order to guarantee an organization's long-term viability and growth, effective corporate governance is essential. Consequently, stakeholders have prioritized corporate governance to ensure optimal decision-making that aligns with their interests. The significance of governance in shaping a firm's strategy and performance has been a central focus in academic research (Daily and Dalton 2017).

According to Friede et al. (2015), good corporate governance procedures and business financial success are positively correlated. Consequently, the configuration and structure of the board of directors have garnered substantial interest from stakeholders due to their crucial role in fostering strategic and operational decisions. Notably, gender diversity is emerged as a critical aspect of board composition and structure.

Research into the connection between gender-diversified corporate boards and the attainment of business success have produced a diverse array of results. For example, Liu et al. (2014) and Ye et al. (2019) record a major correlation between female gender inclusivity and company performance, both within specific countries and at a global level. Similarly, Garcia-Meca et al. (2015) finds a positive effect in the financial industry, while Terjesen et al. (2016) observe positive effects across multiple industries. Recent study conducted by Oremus (2020) and further solidifies the existence of positive association amongst gender-diversified corporate boards and the financial performance of firms in the UK. On the other hand, investigations carried out by Marinova et al. (2016) and Carter et al. (2017) indicate that there is no substantial correlation between gender diversity and firm performance.

Despite the growing literature on the subject, the evidence show the subject is inconclusively explored. The majority of empirical investigations on the subject are in the context of developed nations, leaving a knowledge vacuum about how gender diversity affects business success in emerging markets like Ghana. To date, the few studies on the subject of board gender diversity and performance conducted in Ghana (Adusei, Akomea, and Poku 2017; Sarpong-Danquah, Adusei, and Frimpong 2022; Appiadjei, Ampong, and Nsiah 2017) have primarily concentrated on microfinance institutions and listed firms, neglecting the banking industry at large. Additionally, despite the inherent risks involved in operating a bank, there is a dearth of studies examining the impact of board gender diversity on risk in the Ghanaian setting. Indeed, this is a gap in research that needs to be closed. To this end, this study attempts to shed light on the link between board gender diversity and the performance and risk of banks in Ghana in order to close the gap.

1.3 Objectives of the Study

The research's main objective is to examine the impact of gender diversity of the board on the performance and risk of banks in Ghana. In view of this underlining objective, the following specific objectives are pursued.

1. To examine the effect of board gender diversity on the financial performance of banks in Ghana.
2. To establish the effect of board gender diversity on the credit risk of banks in Ghana.

1.4 Research Questions

1. What is the effect of board gender diversity on the financial performance of banks in Ghana?
2. What is the effect of board gender diversity on the credit risk of banks in Ghana?

1.5 Significance of the Study

It must be emphasized that the outcome of the research is projected to be beneficial to significant number of specific stakeholders such as policy makers and regulators, corporate and professional practitioners, as well as researchers and scholars. For policy makers and regulators, it will help policy makers and regulators of banks to formulate policies on corporate governance in a manner that promote adequate female participation in the boardroom.

For corporate and professional practitioners, the study will help them to identify the relation amongst institutional governance structures on gender diversity and the economic outturns of banks operating in Ghana together with the associating risks. This will propel banks to review their notes on policies regarding corporate governance structures to incorporate adequate female representation. In addition, it will propel shareholders to closely monitor the corporate governance structures such that there is a well-balanced gender diversity of the board.

For research and academic scholars, it is worthy of note that this study will add to the existing body of literature on corporate governance. Thus, serving as an invaluable source of reference for scholars in the future.

1.6 Scope of the Study

The research is confined to issues on corporate governance in general paying particularly attention to diversification of the governing boards in terms of gender and its bearing on performance and risk, which are measured with return on assets and credit risk respectively. With respect to the geographical scope, the study is limited to the context of Ghana since it centers on banks in Ghana. The study covers the period from 2015 to 2021.

1.7 Organization of the Study

The study is structured into five distinct chapters. The first chapter presents the introduction, displaying the background, problem statement, objectives, significance, and other relevant issues. The second chapter conducts a comprehensive review of existing literature relevant to the present study. It review of literature is sectionalized under conceptual review, theoretical review, empirical review, and the conceptual framework. The third chapter looks at the methodology in general. The fourth chapter is the results and discussions. The final chapter is the summary, conclusion, and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The literature review chapter is structured into four main sections. The first section, the conceptual literature review. The second section is the theoretical literature review followed by the empirical review in the third section. The fourth section presents the conceptual framework

2.1 Conceptual Review

2.1.1 Board of Directors

The board of directors undertakes a critical role within the organizational framework, acting as the supreme authority vested with the responsibility of ensuring effective governance and comprehensive supervision of the entity's operations (Carroll and Buchholtz, 2014). As the highest decision-making body, the board exercises its fiduciary duties to safeguard the interests of various stakeholders, making strategic decisions, and providing guidance and oversight to management. Through its collective wisdom and expertise, the board plays a pivotal role in shaping the organization's direction, fostering transparency, accountability, and sustainable growth (Carroll and Buchholtz, 2014; Whitler and Puto, 2020).

Indeed, the board's leadership and governance practices significantly impact the overall performance and long-term success of an entity. This makes the configuration or the arrangement and functioning of the board a subject of immense scholarly interest. As far as the framework of corporate governance is concerned, the board is a key element and assumes a pivotal position, serving as a fundamental cornerstone that influences the entire framework (Castellanos and George, 2020). It functions as a focal point that sets the tone and direction, around which various other stakeholders and elements within the governance framework orbit and interact.

The board of an entity is establish to ensure the best interest of the firm is maintained at all times, with a basic responsibility towards the shareholders. Kanakriyah (2021) assert that the primary goal of the board of directors within corporate entities is to uphold the maximization of shareholder value. It pursues this objective through a range of mechanisms. These mechanisms include the selection and dismissal of managers, ongoing monitoring of their performance, and implementing appropriate compensation structures (Shleifer and Vishny, 1997; Hermalin and Weisbach, 2001).

While the board of directors is widely recognized as a theoretically robust and influential mechanism for corporate governance, the empirical landscape paints a more nuanced picture. The actual effectiveness of boards in fulfilling their intended role remains a subject of ongoing debate and research. Numerous research are done in respect of the connection between board dynamics and their influence on company success in terms of performance, sustainability, and other indicators, illuminating a complex interaction of variables. While some findings suggest a positive correlation between certain board attributes, such as independence, diversity, and expertise, with better outcomes, there are plethora of empirical evidence on results that vary from this finds.

In practice, the impact of boards on shareholder value maximization varies across different contexts and industries. Factors such as the firm's size, industry dynamics, and corporate culture can significantly influence the board's ability to effectively execute its responsibilities. Moreover, the intricate dynamics within the boardroom itself, including the composition, dynamics, and interpersonal relationships among directors, further contribute to the complex nature of board effectiveness.

It is worth noting that the challenges of assessing board effectiveness extend beyond quantitative metrics. The qualitative aspects, such as the board's strategic guidance, decision-making processes, and ability to adapt to changing business environments, are equally crucial but difficult to quantify and measure (Kanakriyah, 2021). Consequently, empirical studies face inherent limitations in capturing the full breadth and depth of board effectiveness.

While acknowledging the potential limitations in empirical evidence, it is essential to recognize that boards continue to play a vital role in shaping corporate governance frameworks. The ongoing dialogue and research in this field seek to identify best practices, optimize board structures, and enhance their overall effectiveness. There are several reasons for this contention, including the need for more research and exploration of alternative governance structures. Oftentimes, the composition of the board comprises individuals who hold positions within the company, commonly referred to as insiders. These insiders are entrusted with the responsibility of overseeing and monitoring the company's affairs, a role that is expected to be fulfilled by the board itself. Internal managers often influence the appointment of external board members, and it is not uncommon for the CEO to also serve as the chairperson of the board. This practice raises concerns about potential conflicts of interest and consolidated power. However, striking a balance between internal expertise and external perspectives is crucial for effective governance. Incorporating independent board members provides objective insights and scrutiny, while internal managers offer deep knowledge of the organization. Achieving a well-rounded board composition requires careful consideration of conflicts of interest and ensuring transparent decision-making aligned with the company's best interests. Nevertheless, the presence of an effective board has demonstrated its significance as a robust corporate governance instrument on the global scale.

2.1.2 Board Gender Diversity

According to Wiley and Monllor-Tormos (2018), the concept of board gender diversity encompasses the extent of variation in the gender composition of individuals serving on corporate boards. However, board diversity can be viewed from various perspectives. Some schools of thought argue that it encompasses broader dimensions of corporate heterogeneity, such as the size of the board, its leadership structure, and the board model adopted (Nguyen and Faff, 2006). In addition, demographic diversity within the boardroom also contributes to its dynamics. Observable traits like gender, age, and nationality are included in this diversity, as well as less obvious traits like educational background, technological know-how, and technical competence (Ararat et al., 2015; Martn-Ugedo, and Minguez-Vera, 2014).

It is noteworthy that including individuals with diverse backgrounds and perspectives enriches board discussions and decision-making processes, fostering a more comprehensive understanding of the business landscape and facilitating innovative thinking. Research suggests that diversified boards can bring a range of benefits, including improved corporate performance, enhanced risk management, and better governance practices. Therefore, promoting demographic diversity within the board is an important consideration for companies seeking to foster effective and inclusive corporate governance.

Some scholars assert that the functioning and decision-making processes of boards are directly impacted by the gender, age, educational attainment, and experience of board members (Johnson et al., 2013; Post and Byron, 2015). These characteristics influence the dynamics and efficacy of board conversations and decision-making by shaping the viewpoints, knowledge, and expertise that board members bring to the table. A wide set of educational backgrounds and experiences, for example, may promote a greater variety of ideas and knowledge, resulting in more robust and well-informed decision-making. Similarly, gender and age diversity may contribute diverse perspectives and experience to board debates, improving the overall review and decision-making of the board and limiting possible biases. For example, research suggests that gender diversity of boards can lead to improved decision-making processes, as diverse perspectives and experiences contribute to more comprehensive discussions and consideration of different viewpoints

(Wiley and Monllor-Tormos, 2018). Similarly, age diversity can present a wide range of viewpoints and prowess to the board, promoting a much more balanced decision-making.

Understanding the effect of demographic diversity on company's success is crucial from a broader perspective (Kagzi and Guha, 2018). Empirical studies report mixed results, with some indicating positive relationship between board diversity and financial performance, while others suggest no significant association (Kagzi and Guha, 2018). While research highlights the potential benefits of diversity, it is essential to acknowledge that the relationship is complex and not straightforward. Factors such as organizational culture, board composition, and decision-making processes can influence the bearing of diversity on a company's success. The true value of diversity lies in leveraging unique perspectives and experiences. Creating an inclusive environment that encourages open dialogue and integrates diverse viewpoints is key. Longitudinal studies are needed to fully understand the relationship and inform organizations in creating inclusive governance structures that positively impact company outcomes.

Moreover, societal and regulatory changes have accentuated the significance of equality and inclusion, leading to increased participation of women in capacities traditionally subjugated by men (Srivastava, Das and Pattanayak, 2018). This trend reflects a shift towards embracing various perspectives and promoting gender balance in corporate leadership.

With the accumulated personal information received from its members, a diverse governing structure is much positioned to create and deliver well-thought through decisions and deliver better resolutions (Lückerath-Rovers 2013). A governing board with the right representation of women is widely acknowledged to be an important part of corporate governance. It is an important step toward increased gender diversity and fair chances in business leadership. Organizations may tap a larger talent pool, use varied viewpoints, and improve overall board performance by increasing the participation of women on boards. Gender diversity has a number of advantages, including better decision-making, risk management, higher creativity, and a more thorough awareness of stakeholders' different requirements and preferences. Furthermore, it promotes a more inclusive and equitable corporate culture that embodies ideals such as justice, equality, and meritocracy. It enhances the board's monitoring function by bringing independent thought processes through diversity (Adams and Ferreira, 2009).

Diversity within corporate boards can give rise to conflicts and divisions, leading to increased costs in terms of time and decision-making. However, research propound that female directorship is positively received by the stock market compared to male directors. While conflicts may arise from diverse perspectives, organizations should strive to build inclusive board cultures that effectively manage potential conflicts and leverage the benefits of diversity. By doing so, companies can enhance decision-making processes and overall board performance.

Recognizing the importance of gender inclusiveness and its influence on the success of a company is crucial for implementing policies and ensuring effective governance in organizations. In view of that, extensive study has been undertaken to investigate the relationship that exist amongst gender diversity and company outcomes (Carter et al., 2010; Hillman, 2015). The examination of gender diversity encompasses ethical considerations, the business case, and theoretical frameworks. From an ethical standpoint, having gender diversity in corporate boards promotes corporate social responsibility, positively affects corporate spending, and enhances the overall reputation of the firm (Bear, Rahman and Post, 2010). Female board members bring unique perspectives and expertise that may impact company effectiveness in different manners, like formulating knowledgeable choices concerning procurements. By embracing gender diversity, organizations can tap into the potential benefits of diverse viewpoints and experiences, ultimately contributing to improved decision-making processes and overall firm performance. Overall, the consideration of gender diversity in board composition plays a crucial role in corporate governance. It brings valuable perspectives and benefits to decision-making processes, although challenges and costs may also arise.

Recognizing and comprehending the association between gender inclusivity and organizational performance is vital for shaping the formulation of strategies and implementing effective governance practices within organizations. By studying this relationship, companies can gain valuable insights into how gender diversity impacts various aspects of their operations, decision-making processes, and overall performance. This understanding can guide the formulation of policies that promote inclusivity and equal opportunities, leading to a more diverse and representative workforce at all levels of the organization. Moreover, embracing gender diversity enables companies excel in culture of innovation, creativity, and enhanced problem-solving capabilities that can contribute to the improvement of business outcomes and sustainability.

Research propounds that the existence of gender-diversified boards brings benefits to shareholders (Levi et al., 2014). Companies with gender-diversified boards demonstrate a higher inclination to invest in innovation (Zona et al., 2013). Furthermore, studies indicate high levels of gender diversity in boards are linked to improved organizational performance via indicators like the Tobin's Q, Return on Equity and Return on Asset (Erhardt et al., 2003; Sabatier, 2015). Female directorship on governing boards is discovered to have major influence on debt and a favorable effect on investments in research and development (Rossi et al., 2017). These findings highlight the value of gender diversity in boards as a driver of positive outcomes, emphasizing its potential to enhance financial performance, strategic decision-making, and investment in innovation.

Incorporating gender variety within establishments possesses the capability to amplify analytical and purposive procedures by integrating a wider array of viewpoints and options (Campbell and Mínguez-Vera, 2008). Enhanced decision-making results are noted in domains such as procurements (Levi, Li and Zhang, 2014) and investment (Zona et al., 2013). Additionally, gender inclusivity contributes to an organization's ability to compete favourably by establishing a favourable reputation and influencing customer perceptions (Miller and Triana, 2009). Theoretical frameworks, including agency theory, suggest gender inclusivity expands the effectiveness of boards and overall success of corporate bodies (Kagzi and Guha, 2018). This is achieved through enhanced monitoring mechanisms (Adams and Ferreira, 2009) and reduced exposure to risks for organizations (Dobbin and Jung, 2011). By considering these perspectives, businesses can recognize the strategic value of gender diversity, leading to improved decision-making, competitive advantage, and sustainable performance.

2.1.3 The Concept of Risk

Risk is a complex and multifaceted concept that have different interpretations and meanings to different individuals. Adams (2014) points out that the term "risk" often evokes a sense of urgency and concern due to its association with potential negative and even catastrophic outcomes. However, the lack of agreement on its definition contributes to misunderstandings and varying perspectives on the concept.

Ohansen and Rausand (2014) emphasize the absence of consensus in defining risk by illustrating that if ten different people are asked to define risk, it is highly likely that ten different answers will be received. This highlights the subjective nature of risk and underscores the diverse perspectives individuals hold regarding its implications. The understanding of risk varies based on individual experiences, knowledge, and personal biases, resulting in a multitude of interpretations and definitions. This recognition of the subjective nature of risk underscores the importance of considering multiple viewpoints and engaging in comprehensive risk assessments to gain a more holistic understanding of potential threats and opportunities within a given context.

Despite the absence of a universally agreed-upon definition, several scholars offer definitions of risk. According to Graham and Weiner (cited in Aven and Renn, 2009), risk can be defined as the probability of experiencing an adverse outcome. This definition underscores the quantitative aspect of risk, highlighting the likelihood of negative consequences or undesirable events occurring. It suggests that risk is inherently associated with uncertainty and the potential for harm or loss. By focusing on the probability aspect, this definition encourages the assessment and quantification of risks to inform decision-making processes and risk management strategies. Understanding risk in terms of its probability allows organizations and individuals to prioritize and allocate resources effectively to mitigate potential adverse outcomes. This definition emphasizes the likelihood of experiencing unfavorable results in a given situation.

Rosa (2003) presents an alternative definition of risk, describing it as a situation or event in which something valuable, including human life, is at stake, and the outcome is uncertain. This definition emphasizes both the element of uncertainty and the potential consequences involved in risk. It recognizes that risk extends beyond purely financial considerations and encompasses broader aspects such as human well-being and the preservation of valuable resources. By incorporating the notion of uncertainty, this definition acknowledges that the outcome of a risk cannot be precisely determined, introducing the need for proactive measures to anticipate, prevent, or mitigate potential negative outcomes. This broader perspective on risk helps to highlight the significance of considering a wide range of potential impacts and engaging in comprehensive risk management practices that prioritize the preservation and protection of valuable assets, including human life.

Other schools of thought also offer other definitions of risk. According to the Chartered Institute of Management Accountants (CIMA), risk relates to a quantifiable dispersion in the potential outcomes resulting from any activity. This definition emphasizes the need to assess and manage the variability of outcomes effectively. On the other hand, The International Standards Organization (ISO) provide a definition of risk as the impact of unpredictable events on goals, encompassing both positive and negative deviations from expected outcomes. This definition recognizes that risk is not solely associated with negative consequences but also presents opportunities for positive outcomes. Both perspectives underscore the importance of understanding and managing uncertainties, variations, and their impact on achieving desired objectives.

The CIMA definition highlights the need for a systematic approach to risk management that consider a range of potential outcomes, enabling organizations to make informed decisions and implement appropriate risk mitigation strategies. The ISO definition broadens the scope of risk by emphasizing the dynamic nature of uncertainties and their potential to influence the achievement of objectives. Thus, encouraging organizations to proactively identify and seize opportunities while effectively managing potential negative impacts. By integrating these perspectives, organizations can develop a comprehensive risk management framework that accounts for both positive and negative deviations from expected outcomes, enabling them to navigate uncertainties and augment their capability to accomplish their aims while mitigating possible detrimental consequences.

Considering the context of finance and specifically, banking operations, which is mainly a financial intermediation activity, the presence of risk become even more pronounced. Within the field of finance, scholars commonly discuss two major types of risk: systematic risk and unsystematic risk. Systematic risk, also known as market risk, arises from external factors and uncontrollable variables that affect the entire market or economy. It is not specific to a particular industry and includes factors such as interest rate fluctuations, geopolitical events, and macroeconomic conditions. Unsystematic risk, also known as specific risk, is associated with utilizing controlled and familiar variables that are unique to a specific industry, sector, or enterprise. This type of risk includes factors such as operational inefficiencies, management issues, and industry-specific challenges (CIMA, 2009).

In addition to systematic and unsystematic risk, various subcategories and forms of risk exist. The common forms of such risks are business or operational risk, country risk, environmental risk, financial risk, reputational risk, and strategic risk (CIMA, 2009). Each of these forms of risk represents specific challenges and uncertainties that organizations must manage to protect their interests and ensure sustainable operations.

For the purpose of this study, the focus is on financial risk, particularly credit risk, which is highly relevant to the banking sector. Credit risk refers to the potential danger that borrowers will fail to repay the principal and anticipated interest on loans granted to them. It arises from uncertainties surrounding the borrower's capability or willingness to fulfill their repayment obligations. Credit risk is considered a financial risk because it affects the financial health and stability of banks. It can manifest as non-performing loans, which occur when borrowers fail to meet the repayment of loans within the terms of the credit agreement.

2.1.4 Performance

The concept of performance in finance is a multifaceted and often debated issue, as it encompasses various dimensions and interpretations. It is a critical area of study in both organization theory and strategic management. When assessing firm performance, there are different approaches and measures that are employed. Predominantly, these approaches and measures are financial and operational indicators (Tudose, 2012). The choice of these measures depend on the specific objectives that are the focal point of the undertaking.

Financial performance measures focus on quantifying the outcomes and results of a firm's financial activities. These measures provide insights into the effectiveness of a firm's financial management and its ability to generate profits and shareholder value (Abdulmalik et al., 2014). Among the common indicators for measuring this financial performance are return on assets, return on equity, net profit margin, among others.

Operational performance measures, on the other hand, provide a broader perspective by considering factors that contribute to financial performance. Metrics such as sales growth, market share growth, and operational efficiency are used to evaluate a firm's operational performance (Tudose, 2012). Operational performance measures are crucial as they shed light on the underlying drivers that lead to financial success.
While financial performance indicators offer valuable insights, they may not capture all aspects of a firm's performance. Hence, it is important to complement financial measures with non-financial indicators. These non-financial indicators assess the quality of management, corporate culture, executive compensation policies, and shareholder communication systems (Tudose, 2012). Evaluating performance based on a combination of financial and non-financial indicators provides a more comprehensive understanding of a firm's overall performance.

In recent years, there has been an increasing focus on assessing performance based on value creation and sustainable development. This perspective recognizes that firms should not only pursue financial gains but also consider their impact on society and the environment. Value creation involves not only generating profits but also taking into account the long-term sustainability and social responsibility of the firm (Tudose, 2012).

A commonly employed financial performance metric is the return on assets (ROA), which evaluates a company's efficiency in generating profits from its assets. The calculation involves dividing net income or earnings before interest and taxes (EBIT) by the total assets. By assessing a firm's profitability and asset utilization, ROA offers valuable insights into its financial health and efficiency. It acts as a gauge of how proficiently a company utilizes its resources to generate profits. The measure is widely used in financial analysis and decision-making processes, providing stakeholders with a quantitative assessment of a company's performance in terms of asset management and profitability (Ehrhardt and Brigham, 2011; Ross et al., 2011). For the purpose of this study, the return on assets is adopted as the measure of performance.

2.2 Theoretical Review

The research is grounded on the foundational principles of the Agency Theory (AT), which provides valuable insights into the behavior of managers and the significance of corporate boards in mitigating agency costs and enhancing financial performance. According to the Agency Theory, when there is a parting off in terms of ownership and control in an organization, managers may prioritize their own self-interests rather than maximizing profits. This separation gives rise to agency costs, which involve conflicts of interest and potential opportunistic behavior on the part of managers (agents). In order to tackle these challenges, the corporate board assumes a crucial role in minimizing agency costs and enhancing the overall performance of the organization.

The Agency Theory provides a basis for understanding the dynamics between principals and agents and the mechanisms through which corporate governance structures can align their interests. By emphasizing the role of the board in monitoring managerial behavior, providing incentives, and setting clear performance goals, the Agency Theory highlights the importance of effective corporate governance practices. Through its governance functions, the board helps to reduce agency costs, ensure accountability, and promote transparency, ultimately leading to improved financial performance. By grounding the study in the Agency Theory, researchers aim to gain insights into how corporate boards can effectively address agency problems and contribute to the success of the organization.

Scholars such as Dobbin and Jung (2011), Hillman and Dalziel (2003), Carter et al. (2003), and Jurkus et al. (2011) accentuate the significant role of the corporate board in mitigating agency costs and improving financial performance. They argue that an effective board can synchronize the interests of managers with those of shareholders, fostering transparency, accountability, and ethical behavior within organizations. Furthermore, a diverse board, incorporating different genders, ethnicities, and cultures, strengthens supervision of executives and nurtures a moral corporate ethos, contributing to the control of fraud and the reduction of agency costs. By grounding their research in these perspectives, scholars emphasize the importance of an active, diverse board in promoting organizational success and shareholder value.

In the area of corporate governance, the agency theory (AT) has traditionally focused on tackling the issue of dissociating ownership from management. In this framework, shareholders play the role of principals, while company directors act as agents. AT elucidates the intricate relationship between principals and agents within the business sphere, with a particular emphasis on the control function of the board and its designated responsibilities. It underscores the significance of the board's autonomy, separate from the intertwined positions of management and leadership (Hafsi and Turgut, 2013). This autonomy enables the board to effectively serve the best interests of shareholders and reinforce its capacity for vigilant oversight.

In the context of agency theory, the board of directors assumes a crucial role in addressing potential conflicts between managers and shareholders. A fundamental aspect of agency theory is the strong emphasis placed on the independence of the board. This independence enables the board to operate autonomously and make decisions that align with the shareholders' interests. By promoting board independence, AT aims to enhance management monitoring, which in turn can lead to improved financial performance. Therefore, the underlying argument of this theory suggests that gender diversity within the board can enhance the monitoring process and eventually contribute to better financial outcomes.

According to researchers such as Hillman et al. (2007), Kagzi and Guha (2018), and Wiley and Monllor-Tormos (2018), the implementation of enhanced board monitoring is contingent on a range of factors. These scholars argue that diversifying the perspectives represented on the board, promoting board independence, reducing the overrepresentation of male groups in the boardrooms, and improving the attendance behavior of board members are crucial elements to consider. By incorporating a variety of perspectives and experiences within the board, gender diversity, in particular, can significantly enhance the decision-making processes and contribute to the effectiveness of the board to promote performance.

There is substantial research that present evidence supporting the beneficial effects of female board members on the monitoring role of boards. One such study by Campbell and Minguez-Vera (2008) highlights that directors with diverse backgrounds, encompassing factors such as gender, culture, and ethnicity, possess the ability to pose distinctive questions that traditional directors might overlook. These unique perspectives foster a more comprehensive and robust monitoring function within the board, leading to improved decision-making processes and outcomes.

This diversity of perspectives allows for a more comprehensive consideration of various factors and can improve the board's decision-making processes. Carter et al. (2010) go on to suggest that female board members play a crucial role in introducing a broader range of perspectives, consequently promoting greater performance. This increased diversity can help mitigate the dominance of male groups within boardrooms, ultimately fostering a more inclusive and equitable environment. By diversifying the composition of the board, organizations can benefit from a richer pool of ideas and experiences, leading to more balanced decision-making processes and improved governance.

Bart and McQueen (2013) as well as Burgess and Tharenou (2002) studies suggest that female directors possess unique decision-making skills and are more proficient in fulfilling their fiduciary responsibilities to shareholders. These findings indicate that having women on boards can contribute to more effective corporate governance and financial performance. Furthermore, Adams and Ferreira (2009) reveal that women directors generally exhibit superior attendance records in comparison to their male counterparts. This finding highlights the commitment and dedication of female board members in fulfilling their roles and responsibilities in the boardroom, thus contributing to the effectiveness of the board for an enhanced performance. Cumulatively, these investigations provide empirical substantiation supporting the concept that women directors bring invaluable attributes and viewpoints to the boardroom, thereby fostering a positive impact on decision-making, governance, and overall board effectiveness. Thus, in effect, gender-diversified boards work to reduce agency cost and promote the interest of shareholders, which translate into enhanced firm performance.

2.3 Empirical Review

The impact of gender diversity of corporate board on company performance is extensively studied, yielding diverse findings. A significant number of research on this subject report outcomes that indicate a favorable correlation between the two indicators, underscoring the advantages derived from diversified gender in the boardroom. However, other studies suggest a negative association, pointing to potential conflicts and challenges in decision-making processes. Additionally, certain studies have not establish any major link between the diverseness of the board and corporate performance. Overall, the connection existing between female gender inclusivity in boardroom and company performance remains complex, suggesting the need for further research to understand the underlying dynamics more comprehensively. In this section, the researcher provides a detailed overview the predominant outcomes of several key empirical studies that contribute to the understanding of this complex relationship.

Noamene et al. (2021) undertake a comprehensive investigation delving into the association between gender-diversified governing boards of corporate institutions and its bearing on the financial performance of these organizations. The researchers use data from 100 institutions listed on the UK's FTSE using a panel dataset falling within the period from 2009 to 2018. To measure financial performance, the authors utilize well-established accounting metrics such as return on assets (ROA), return on equity (ROE), and Tobin's Q, which is an indicator of market performance. The researchers employ the general method of moment (GMM) longitudinal panel data analysis to examine the relationships between gender diversity and financial performance. The study's findings indicate a positive correlation between the proportion of female directors and all the financial performance measures, suggesting that gender diversity on corporate boards has a positive impact on financial outcomes. Moreover, the results suggest that the positive effects of female directorship are driven by their contribution to enhancing the advisory and monitoring functions of the board.

Mastella et al. (2021) conduct a study examining the impact of board gender diversity on the performance of Brazilian firms. This research focuses on a sample of 150 publicly traded companies in Brazil, covering the period from 2010 to 2018. The researchers use data on firm performance, firm risk, and the presence of women on the board from the Brazilian Financial Exchange. To measure firm performance, three financial indicators are used as dependent variables: return on assets (ROA), return on equity (ROE), and Tobin's Q, which measures market performance. The presence of women on the board is assessed using two metrics: the absolute number of women on boards and the absolute number of women in directorships. The researchers employ various statistical techniques such as ordinary least squares, quantile regression, and panel data regressions to analyze the data. The findings of the study reveal a positive effect of women on the board on both accounting and market performance measures. However, the influence on firm risk is found to be insignificant. The study also provides insight into the specific impact of the number of females on the board on different performance measures. It indicates that the number of women on the board has a more pronounced effect on firm performance measured by ROE, while its effect on performance measured by Tobin's Q is less significant. As for ROA, a significant impact is established.

In Nigeria, Sani et al. (2019) conduct a study to investigate the impact of board gender diversity on the financial performance of listed companies. The researchers analyze 400 firm-year observations spanning the period from 2012 to 2016. Data on financial performance, tangibility, and leverage are collected from the Thomson Reuters data stream, while information on board gender and auditor type are gathered from annual reports of the companies. The study utilizes return on assets (ROA) as a measure of firm performance and defines board gender diversity as the number of female directors serving on the board. To analyze the data, the researchers employ panel corrected standard error estimation to account for potential biases. The study's findings reveal that gender diversity, as indicated by the presence of female directors, significantly influence the financial performance of companies listed on the Nigerian Stock Exchange. The results support the argument that gender diversity has a positive and statistically significant relationship with a company's financial outcomes.

Kagzi and Guha (2018) perform a study in India to explore the relationship between board demographic diversity and performance in knowledge-intensive firms (KIFs). The sample data are collected from 126 high-technology manufacturing service companies listed in the top-200 National Stock Exchange (NSE) firms in India during the period from 2010 to 2014. Demographic variables are obtained from the NSE's database, while accounting variables are collected from the Centre for Monitoring Indian Economy Prowess database. Tobin's Q, a market performance indicator, is used as the measure of firm performance. The study considers various attributes of diversity, including board gender, age, education, and tenure, as independent variables. To test the hypotheses, the researchers employ a longitudinal panel data model and regression analysis. The findings of the study reveal that the overall effect of diversity, when considering multiple demographic dimensions, have a positive linear relationship with firm performance. However, the specific factor of board gender diversity does not exert a significant influence on firm performance.

In Colombia, Moreno-Gómez et al. (2018) pursue a study to examine the influence of gender diversity in the boardroom and top management on the business performance of 54 Colombian public companies. The study utilizes data from the period of 2008 to 2015, and collect accounting and organizational information from the annual financial statements available at the Colombian Superintendence of the Stock Market. To assess gender diversity, the researchers gather data on the composition of both the board of directors and top management teams from the annual reports of the firms. The study employ return on assets (ROA) and return on equity (ROE) as performance measures.

Panel regression techniques are employed to analyze the data and test the hypotheses. The study's results discover a positive influence of gender diversity in both top management and boardrooms on firm performance. In other words, the presence of gender diversity at these levels are associated with improved performance outcomes for the firms. This suggests that including women in decision-making positions can enhance business performance.

Conyon and He (2017) conduct a comprehensive study to examine the relationship between firm performance and boardroom gender diversity in the United States. The study utilizes annual data from over 3,000 US firms spanning the period from 2007 to 2014. To gather corporate governance information, GMI-rating data are used whereas performance measure are taken to the COMPUSTAT data. To analyze the data, the researchers employ quantile regression methods. In this study, the return on assets (ROA) and Tobin's Q are utilized as dependent variables, representing distinct dimensions of firm performance. To assess gender diversity, the study uses the proportion of women on the boards as the independent variable. The study's results demonstrate a positive correlation between gender diversity in the boardroom and firm performance. In essence, companies with high levels of gender diversity are inclined to exhibit superior performance.

Shehata et al. (2017) pursue a research to investigate the correlation between board diversity and firm performance. Their study employ a substantial sample of 34,798 small and medium-sized enterprises (SMEs) in the United Kingdom. The research focuses on the period spanning from 2005 to 2013. The proportion of females on the board is adopted to represent gender diversity, which the independent variable. Return on assets (ROA) is adopted as a metric for evaluating firm performance. The study's findings show a significant inverse correlation between gender diversity and firm performance. This suggests that increased levels of gender diversity on the board are linked to lower firm performance, particularly within the context of small and medium-sized enterprises (SMEs).

Arena et al. (2015) undertake a study aimed at examining the influence of gender diversity on the performance of construction firms in Europe. The study use data from 211 publicly listed companies in the European Union, representing 19 diverse countries. To test their hypotheses, the researchers employ least square regression analysis. Within this study, the researchers utilize the ratio of female directors on the board as a metric for measuring gender diversity, while return on assets (ROA) is adopted as a performance indicator for firms. The study's findings indicate that the presence of female directors on the board does not exhibit a substantial influence on firm performance.

2.4 Conceptual Framework

The conceptual framework for the study is developed as in Figure 2.1. From the research objectives and the review of relevant literature, the conceptual framework for the study tries to look at how the independent variable (board gender diversity) is related to the dependent variables (performance -ROA and risk –NPL). From review of relevant extant literature, it is found that board gender diversity has both positive and negative influence on performance and risk. Hence, it is expected that board gender diversity exert influence on both performance and risk.

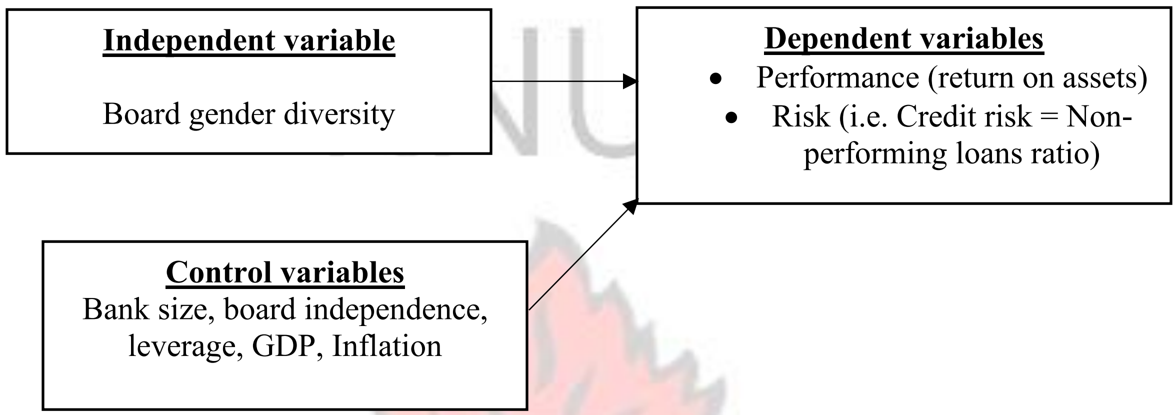

Figure 2. 1: Conceptual framework

Source: Author (2022)

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter is divided into six sections. The first section presents the research design, followed by the population of the study. Subsequent to these, the sampling technique and sample size, data and data sources, data analysis, model specification, and description and measurement of variables follow accordingly.

3.1 Research Design

This study is grounded on the positivism research philosophy. This philosophy is employed since it allows for examining the explanation the relationship between different constructs using quantitative information. Positivism is a paradigm that relies on measurement and reason that knowledge is revealed from a neutral and measurable (quantifiable) observation of activity, action or reaction. Positivism states that if something is not measurable in this way it cannot be known. Flowing from the adoption of the positivism philosophy, the study utilizes the quantitative approach and employs the explanatory study method along with a desk-study strategy. The quantitative approach is chosen due to the nature of the research, which necessitates the use of quantitative data and techniques. This approach enables the investigation of relationships between various constructs or variables. In addition, the explanatory study method is employed to provide explanations and insights into these relationships. Furthermore, the desk-study strategy is adopted as the researcher relies on existing secondary information. This strategy allows for the utilization of publicly available data that can be obtained through the internet. By employing these approaches, the study aims to comprehensively investigate the research problem.

3.2 Population

The scope of this study includes all commercial banks that are operational in Ghana in the financial year 2021. According to data obtain from the Bank of Ghana, there are 23 licensed commercial banks operating in the country in the said financial year. Therefore, these 23 banks form the population from which the study draws its sample.

3.3 Sampling Technique and Sample

The study employs the convenience sampling technique to select a subset of banks to participate in the study. Out of the 23 licensed commercial banks that form the population, fourteen (14) banks are chosen for inclusion in the study. The convenience sampling method is utilized to ensure that banks with available data for the relevant period that are easily accessible are sampled for the study. Besides, the chosen sample technique allows for practicality and convenience in gathering the necessary information for the research.

3.3 Data and Data Sources

The study relies on secondary sources of data, specifically panel data, to fulfill the research objectives. Panel data is chosen as it is considered suitable for addressing the research objectives effectively. The data are collected at a yearly frequency and cover a period of seven years, ranging from 2015 to 2021. The choice of a seven-year duration is to guarantee a sufficient quantity of observations intended for the research. Apart from the macroeconomic variables (which are utilized as control variables) that are sourced from the World Bank Development Indicators Database, all the variables are sourced from the annual reports of the banks.

3.4 Data Analysis

After collecting the data, they are organized in excel software and are carefully examined to identify and remove any inaccurate entries. The accuracy of the data is crucial for the reliability of the study's findings. Subsequently, the data are subjected to analysis. First, the descriptive analysis is conducted to identify the properties of the data and to identify outliers or unusual patterns in the dataset. This step ensures that the data is apt for further investigation. Additionally, correlation analysis is performed, after which some diagnostic tests are performed to conclude on the suitability of the dataset for further analysis. After completing these preliminary checks, the data are analyzed using panel regression analysis with the Stata software.

3.5 Model Specification

Taking cue from prior similar empirical studies (Oremus, 2020; Adusei, Akomea, and Poku, 2017), the econometric models employed in this study are presented as follows:

$ROA_{it} = \alpha + \beta_1 BGD_{it} + \beta_2 SIZE_{it} + \beta_3 BIP_{it} + \beta_4 LEV_{it} + \beta_5 INF_{it} + \beta_6 GDP_{it} + \varepsilon_{it}$ …. (1)

$CR_{it} = \alpha + \beta_1 BGD_{it} + \beta_2 SIZE_{it} + \beta_3 BIP_{it} + \beta_4 LEV_{it} + \beta_5 INF_{it} + \beta_6 GDP_{it} + \varepsilon_{it}$ …… (2)

Where:

α = the constant term/intercept

β_1-B_6 = the gradient of the independent variables/regression coefficients

ε_{it} = Error term

Subscript i and t = bank *i* in time *t*

ROA = Return on asset for a bank at end of a financial year

CR= Credit risk of a bank at end of a financial year

BGD = Board gender diversity for a bank at end of a financial year

SIZE = Board size for a bank at end of a financial year

BIP = Board independence for a bank at end of financial year.

LEV = Leverage of a bank at end of financial year.

INF = Inflation rate at end of a financial year

GDP = GDP growth rate at end of a financial year

3.6 Description and Measurement of Variables

The variables for the study are described and measured as presented in Table 1.

Table 1: Variables Description and Measurement

VARIABLE NAME	OPERATIONAL MEASUREMENT	SYMBOL
Dependent Variables		
Performance	Return on asset = PAT/Total Assets	ROA
Risk (Credit risk)	Non-performing loans ratio = NPL/Total loans	CR
Independent variable		
Board Diversity	The percentage of women on the board	BGD
Control Variables		
Bank size	Log of Total Assets	FS

Board Independence	The percentage of Non-Executive Directors on the board at end of a financial year	BIP
Leverage	Total debt/total assets	LEV
Inflation rate	Annual consumer price inflation rate	INF
GDP rate	Annual GDP growth rate	GDP

CHAPTER FOUR

RESULT AND DISCUSSION

4.0 Introduction

The chapter centers on the result and discussions. It commences with an overview of descriptive statistics, followed by the correlation analysis. It then follows with the diagnostic tests in the next section. Subsequent to the diagnostic tests is the regression results on the variables. The chapter ends with the discussion of finds.

4.1 Descriptive Statistics

Table 2 shows the results of the descriptive statistics on all the variables for the study. As the table reveals, the mean ROA is .031, Std. Dev is .023; the minimum and maximum values spread from -.037 to 0.162. The mean ROA gives indication that the banks make a return of 3.1% on the total assets invested over the period. In other words, the banks make a return of 3.1 pesewas on every GH¢1.00 of asset invested over the period. The mean CR is .143, Std. Dev is .030, and the minimum and maximum values spread from .068 to .200. The mean CR gives indication that the banks report 14.3% of their loan assets as non-performing loans. Per the results in Table 2, the mean BGD is .213, Std. Dev. is .106, and the minimum and maximum values spread from .000 to .455. The mean BGD gives indication that the banks averagely have 21.3% female representation on their board of directors.

Table 2: Descriptive Statistics

Variables	Obs	Mean	Std. Dev.	Min	Max
ROA	98	.031	.023	-.037	.162
CR	98	.143	.030	.068	.200
BGD	98	.213	.106	.000	.455
SIZE	98	21.601	1.799	10.969	23.628
BIP	98	.674	.122	.000	.889
LEV	98	5.64	2.020	.010	13.484
INF	98	10.978	3.719	5.833	17.455
GDP	98	7.450	3.716	2.178	14.047

Note: ROA is return on assets; CR is credit risk; BGD board gender diversity; SIZE is bank size; BIP is board independence; LEV is leverage; INF is inflation rate; GDP is rate of gross domestic product.

Source: Research data (2023)

4.2 Correlation and VIF Results

Table 3 presents the results of the correlation analysis performed on the dataset of the variables. This is done to determine the appropriateness in the use of the variables based on the correlation between the pairs of the predictor variables. Per the results in Table 3, the pair of variables with the highest correlation is GDP and inflation (r = .438). The results indicate that the pairs of the predictor variables are not highly correlated beyond 0.50. This means that there is limited or no multicollinearity among the pairs of predictor variables.

As a further check to determine the existence of multicollinearity in the variables, the VIF test is performed and inflation is reports the highest VIF value of 1.85. The VIF results lend credence to the correlation results that there is no multicollinearity among the variables. Thus, making all the variables ideal for further estimation.

Table 3: Matrix of correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) ROA	1.000							
(2) CR	-0.075	1.000						
(3) BGD	-0.040	0.082	1.000					
(4) SIZE	0.040	0.101	-0.090	1.000				
(5) BIP	-0.153	-0.020	0.089	0.057	1.000			
(6) LEV	0.035	-0.147	0.093	0.336	0.025	1.000		
(7) INF	-0.253	0.069	-0.221	0.196	0.077	0.043	1.000	
(8) GDP	0.367	0.075	0.056	-0.139	-0.003	0.004	-0.438	1.000

Note: ROA is return on assets; CR is credit risk; BGD board gender diversity; SIZE is bank size; BIP is board independence; LEV is leverage; INF is inflation rate; GDP is rate of gross domestic product.

Source: Author (2023)

4.3 Diagnostic Test

4.3.1 Heteroscedasticity Test

The Breusch-Pagan Test is used for the Heteroscedasticity Test. The test results are presented in Table 4. This test produces a Chi-Square test statistic and a corresponding p-value. If the probability of the Chi-Square test statistic of the test is significant (i.e. p-value < 0.05), that implies there is a presence of heteroscedasticity, else otherwise. As found in Table 4, the p-values are not significant at the 0.05 level, suggesting that Heteroscedasticity is not a problem in the dataset for the study.

Table 4: Results of Breusch-Pagan test for Heteroscedasticity

	ROA	CR
chi2 (1)	3.640	1.880
Prob > chi2	0.159	0.170

Source: Author (2023)

4.3.2 Hausman Test

The Hausman test gives an indication of the ideal estimation between the fixed effect and random effect models. Table 5 displays the results of the Hausman test. As a rule, if the p-value is significant (i.e. $p < .05$) the fixed effect model becomes the most ideal model and the random effect model is dismissed. On the other hand, if the p-value is insignificant (i.e. $p > .05$) the random effect model becomes the most ideal and the fixed effect model is dismissed. As shown in Table 5, the p-values for both models (with ROA and CR as dependent variables) are not significant (i.e. $p > .05$). Since the p-values turns out to be insignificant, both models satisfy the condition of the random effect model. Therefore, the study adopts the random effect model to estimate both models.

Table 5: Results of Hausman test

	ROA	CR
Chi-square test value	3.800	0.410
P-value	.704	.899

Source: Author (2023)

4.4 Regression Results

4.4.1 Board Gender Diversity and Performance

Table 6 shows the results of the first model. This model seeks to address the first objective by testing the relationship between board gender diversity (BGD) and performance (ROA). From Table 6, the model indices show the F-statistics is 23.471 and the p-value of the F-statistics is .001. This indicates that the model is significant. Thus, it confirms the goodness-of-fit of the model. In the table, the model indices show the coefficient of determination (R-squared) that provides an indication of the proportion of variation in the response variable that is explained by the explanatory variables is .271. This means that 27.1% of the changes in the dependent variable is as a result of the collective influence of the explanatory variables.

Table 6: Regression estimation results: ROA as dependent variable

	Coef.	St.Err.	t-value	p-value	Sig
BGD	.073	.024	3.046	.013	**
SIZE	.001	.001	.720	.720	
BIP	-.017	.018	-.970	-.970	
LEV	.001	.001	.560	.560	
INF	0	.001	.090	.090	
GDP	.003	.001	3.630	3.630	***
Constant	-.001	.031	-.040	-.040	
Number of obs.	98				
R-squared	.271				
F-stat	23.471				
P-value	.001				

**** p<.01, ** p<.05, * p<.1*

Note: BGD board gender diversity; SIZE is bank size; BIP is board independence; LEV is leverage; INF is inflation rate; GDP is rate of gross domestic product.

Source: Author (2023)

The results in Table 6 provide that BGD is directly or positively related to ROA, presenting a coefficient value of .073. This suggests that changing BGD by a unit will lead to a positive change of .073 units in ROA. It is worthy of note that the positive relationship is established between the two variables is not conclusive but dependent on the p-value since that gives the indication of significance or otherwise. The outcome of the p-value in the table shows that the relationship is statistically significant since the p-value is .013, which is significant at the .05 level of significance. This indicates that BGD has a positive and significant on the performance of banks in Ghana.

4.4.2 Board Gender Diversity and Credit Risk

Table 7 shows the results of the second model. This model seeks to address the second objective by testing the relationship between board gender diversity (BGD) and credit risk (CR). From Table 7, the F-statistics is 27.078 and its corresponding p-value is .000. This means that the model is significant. Therefore, it confirms the goodness-of-fit of the model. In the table, the model indices show the R-squared, which shows the proportion of variation in the response variable that is explained by the explanatory variables is .203. This means that 20.3% of the changes in the dependent variable is as a result of the collective influence of the explanatory variables.

Table 7: Regression estimation results: credit risk (CR) as dependent variable

	Coef.	St.Err.	t-value	p-value	Sig
BGD	-.097	.062	-1.564	.068	*
SIZE	.005	.001	4.030	.000	***
BIP	-.013	.014	-.940	.345	
LEV	-.002	.001	-2.020	.044	**
INF	.002	.001	2.690	.007	***
GDP	.001	.001	2.060	.039	**
Constant	.038	.027	1.410	.158	
Number of obs.	80				
R-squared	.203				
F-stat	27.078				
P-value	.000				

**** p<.01, ** p<.05, * p<.1*

Note: BGD board gender diversity; SIZE is bank size; BIP is board independence; LEV is leverage; INF is inflation rate; GDP is rate of gross domestic product.

Source: Author (2023)

The results in Table 7 reveal that BGD has a negative or inverse relationship with CR, having a coefficient value of -.009. This suggests that a unit change in BGD will lead to a change in CR by -.097 units. Although a negative relationship is established, its relevance is dependent on the p-value since that gives an indication of significance or otherwise. Per the results, the p-value is .068. The p-value shows that the relationship established between the two variables is statistically significant at the .10 level of significance. Hence, BGD has positive and significant effect on the credit risk of banks in Ghana.

4.5 Discussion of Results

4.5.1 Board Gender Diversity and Performance

Regarding the first objective, which is an examination of the impact of board gender diversity on the performance of banks in Ghana, it emerges that a statistically significant positive relationship exit between board gender diversity and performance. This means that board gender diversity exert a strong influence on the performance of banks. Indeed this result indicates that bringing females on the boards helps to yield positive outcomes by improving performance which translate into enhancing shareholder value. This result buttresses the global argument for gender parity, which campaigns for inclusion of women in the boardroom of corporate entities. It is important to emphasize that this result is consistent with the assertion by Jackson (2009) that the inclusion of women on the board leads to enhanced financial performance.

Comparing this result with the findings of other studies, it is revealed that this result support the findings of the studies of Noamene et al. (2021) and Shehata (2017) in the

United Kingdom. These authors report a significant and positive association between female representation in the boardroom and firm performance. Similarly, the result confirms the outcome of a study in Brazil by Mastella et al. (2021) that finds the link between gender diversity of boards to be have a greater positive impact on the performance on firms. Again, this result is in tandem with the findings the studies by Sani et al. (2019), Kagzi and Guha (2018), and Conyon and He which are pursued in the Nigeria, India, and US respectively, where the authors report that board gender diversity positively affect the performance of firms.

Contrastingly, other studies have reveal divergent outcomes from the current result. Some of these studies are Hammad et al. (2012), Boulouta (2013), Rodriguez-Dominguez et al. (2012). These strand of studies report that board gender diversity have significant inverse association on the performance of firms which contract the current result. Further, other strand of studies find that there is no relationship between board gender diversity and performance of firms, which contradicts the result of this study. One of such studies is Webber and Donahue (2001).

4.5.2 Board Gender Diversity and Credit Risk

With respect to the second objective, which is an examination of the impact of board gender diversity on the credit risk of banks in Ghana, it appears that a statistically significant negative relationship exit between board gender diversity and credit risk. This means that board gender diversity has a major influence on the credit risk of banks. In other words, the result suggests that increasing gender diversity of the board lead to a decline in the credit risk of the banks and vice versa. The result lend credence to the assertion that having more women in the boardroom help to minimize the risk exposure of firms since females are mostly risk averse and tend to exercise great level of caution in most risky decision.

This result is consistent with some prior empirical studies. One of such studies is the research by Moussa (2019) in Tanzania that reveals that female presence on the board helps to enhance the asset quality of banks by reducing credit risk. Additionally, the result of the study agrees with Gupta and Sharma (2023) which report that a gender-diversified board significantly influence credit risk in banks by reducing the extent of credit risk exposure of banks.

In sharp contrast, the current result vary with the outcomes of other strand of studies. These studies report gender diversity of the board has no influence on the credit risk of banks. One of these studies is the study by Ogada (2022) in Kenya that reveals a female presence on the board has no influence on credit risk of banks. Moreover, Fiador and Sarpong-Kumankoma (2020) report no significant relationship between gender diversity of the board and credit risk.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

In this final chapter, the study presents a comprehensive summary of the findings, draws meaningful conclusions, and offers relevant recommendations based on the research outcomes. The chapter is structured as follows: Section one is the summary of findings, section two is the conclusion, and section three is recommendations.

5.1. Summary of Findings

Regarding the first objective, which is an examination of the impact of board gender diversity on the performance of banks in Ghana, it emerges that a statistically significant positive relationship exit between board gender diversity and performance. This means that board gender diversity exert a strong influence on the performance of banks. Hence, banks that exhibit the highest levels of gender diversity on their boards have a higher likelihood of improving performance.

With respect to the second objective, which is an examination of the impact of board gender diversity on the credit risk of banks in Ghana, it appears that a statistically significant negative relationship exit between board gender diversity and credit risk. The result suggests that increasing gender diversity of the board lead to a decline in the credit risk of the banks and vice. Thus indicating that banks that have gender-diversified boards have higher possibility of improving their credit risk management to reduce credit risk exposure.

5.2 Conclusion

The study investigates how board gender diversity affect bank performance and risk in Ghana. The study adopts the quantitative approach to investigate the research objectives. The study employs the convenience sampling technique to select 14 banks from a population of 23 banks. Secondary data, which are annual panel data spanning the seven-year period from 2015 to 2021 are used. The panel regression analysis is employed to analyze the data. The study uses Stata statistical software for data analysis. The study discovers that a statistically significant positive relationship exit between board gender diversity and the performance of banks. Additionally, the study reveals that the relationship between gender diversity of the board and credit risk is statistically significant and negative. The study therefore concludes that gender diversity of the board is a major determinant of performance and credit risk of banks in Ghana. Thus, suggesting the gender diversity can result in different viewpoints, which help to improve decision-making and risk management for an enhanced shareholders' value.

5.3 Recommendations

The study finds that a gender-diversified board exert significant influence on the performance of banks in Ghana. Sequel from this finding, the study recommends an enhancement of gender inclusivity on the boards of banks in Ghana. To enhance the presence of women on bank boards, the study suggests policy direction towards establishing distinct, measurable, attainable, relevant, and time-bound targets for gender diversity on boards, thereby setting clear diversity objectives.

The study discovers that there is significant and negative relationship between board gender diversity and credit risk, suggesting an increase in gender diversity on boards reduce credit risk since it enhances credit risk management. In view of this, the study recommends that there should be a culture to foster diversity and inclusion. In addition to increasing gender diversity on boards, it is important to foster a culture of diversity and inclusion throughout the organization. This can include training programs, mentorship opportunities, and policies that support work-life balance and diversity in hiring and promotion.

On the basis of the findings, the study further recommends that shareholders engage well in a review of bank board compositions by conducting a thorough review and assessment of the current board composition. This will enable them to identify the existing and potential barriers to females' participation on boards. Once these barriers are identified, they can address them to pave way for more female inclusion to enhance their interest of promoting performance and reducing credit risk.

The study also makes a suggestion for further research that future studies can comparatively explore how gender diversity affect the performance and risk of indigenous and foreign banks in Ghana.

REFERENCES

Abdulmalik, H., Bakar, A., and Salleh, M. (2014). The relationship between financial performance and operational performance: Evidence from Malaysian listed companies. Journal of Business Economics and Management, 15(2), 294-310.

Adams, J. (2014). Risk. In M. Lewis-Beck, A. Bryman, and T. Futing Liao (Eds.), The Sage encyclopedia of social science research methods (pp. 1184-1188). Thousand Oaks, CA: Sage Publications.

Adams, R. B., and Ferreira, D. (2009). Women in the boardroom: The impact on firm value. Journal of Financial Economics, 94(2), 209-227.

Adams, R. B., and Ferreira, D. (2019). The impact of board gender diversity on risk-taking. Journal of Banking and Finance, 105, 104996.

Adams, R. B., Hermalin, B. E., and Weisbach, M. S. (2015). The role of women in corporate boards. Journal of Financial Economics, 117(1), 1-20.

Adams, T. and Ferreira, F. G. (2019). Gender diversity on Japanese corporate boards. *Journal of the Japanese and International Economies*, *51*, 19-31.

Adu-Poku, A., and Frimpong, E. (2023). The impact of female board representation on bank performance in Ghana. Journal of Business Ethics, 166(2), 489-510.

Adusei, M., Akomea, S. K., and Poku, A. B. (2017). Board characteristics and firm performance: Evidence from Ghanaian listed banks. Corporate Ownership and Control, 14(4), 115-137.

Appiadjei, E., Ampong, S., and Nsiah, F. (2017). The impact of board characteristics on firm performance: Evidence from the Ghanaian banking industry. Journal of Business Economics and Management, 18(4), 1025-1042.

Ararat, M., Aksu, M., and Cetin, M. (2015). Does board diversity matter for corporate performance? Evidence from Turkey. Corporate Governance: An International Review, 23(4), 323-342.

Arena, M., Cannavale, G., and D'Amico, M. (2015). Does gender diversity matter on the boards of directors of European construction firms? Evidence from a panel data analysis. Construction Management and Economics, 33(1), 34-47.

Aven, T., and Renn, O. (2009). Risk management and governance: Concepts, guidelines and applications. Berlin: Springer.

Baixauli-Soler, J., García-Meca, E., and Martínez-Ferrero, J. (2016). Board gender diversity and firm performance: A meta-analysis. Journal of Business Ethics, 138(4), 653-667.

Baltagi, B. H. (2013). Econometric analysis of panel data (5th ed.). New York, NY: Wiley.

Bank for International Settlements. (2016). Non-performing loans: Key aspects and policy options. Basel: BIS.

Bard, J. F., and George, D. (2016). Cleaning data: A practical guide (2nd ed.). Thousand Oaks, CA: Sage.

Bart, C. K., and McQueen, M. (2013). Women on corporate boards: Do they make a difference? A critical review of the empirical evidence. Journal of Management, 39(1), 152-187.

Bear, S., Rahman, S., and Post, C. (2010). Gender diversity in corporate governance: A review and research agenda. Journal of Business Ethics, 97(2), 239-256.

Blaikie, N. (2000). Designing social research (2nd ed.). Cambridge, UK: Polity Press.

Bryman, A. (2016). Social research methods (5th ed.). Oxford, UK: Oxford University Press.

Burgess, S., and Tharenou, P. (2002). Women board directors: Characteristics of the few and the barriers to the many. Corporate Governance: An International Review, 10(3), 189-205.

Campbell, K., and Minguez-Vera, A. (2008). Board gender diversity and firm financial performance. Journal of Business Ethics, 83(4), 533-546.

Campbell, K., and Mínguez-Vera, A. (2008). Board gender diversity and firm performance: The moderating role of environmental turbulence. Journal of Business Ethics, 78(4), 513-526.

Carroll, A. B., and Buchholtz, A. K. (2014). Business and society: Ethics, sustainability, and stakeholder management. (8th ed.). Cengage Learning.

Carter, D. A., Simkins, B. J., and Simpson, W. G. (2003). Corporate governance, board diversity, and firm value. The Journal of Business, 76(1), 265-300.

Carter, D. A., Simkins, B. J., and Simpson, W. G. (2010). The impact of board diversity on firm performance. Strategic Management Journal, 31(1), 79-96.

Carter, D. A., Simkins, B. J., and Simpson, W. G. (2017). The impact of board gender diversity and female CEOs on firm financial performance. Strategic Management Journal, 38(1), 103-119.

Castellanos, J.D. and George, B., 2020. Boardroom leadership: The board of directors as a source of strategic leadership. *Economics and Business Review*, *6*(1), pp.103-119.

Chapple, K., and Humphrey, J. (2014). The business case for gender diversity on corporate boards. Journal of Business Ethics, 122(4), 533-548.

Chartered Institute of Management Accountants (CIMA). (2009). Management accounting official guide. London: CIMA.

Choudhry, M. (2010). Measuring and managing credit risk (2nd ed.). New York: Wiley.

Conyon, M. J., and He, L. (2017). Boardroom gender diversity and firm performance: Evidence from a quasi-natural experiment. Journal of Financial Economics, 123(1), 1-25.

Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). Thousand Oaks, CA: Sage.

Daily, C. M., and Dalton, D. R. (2017). The relationship between corporate governance and firm performance: A meta-analysis. Academy of Management Journal, 60(1), 37-58.

Dobbin, F., and Jung, J. (2011). Corporate governance and shareholder activism in the United States and Germany: How institutions matter. Socio-Economic Review, 9(1), 1-29.

Dobbin, F., and Jung, J. (2011). Corporate governance andfirm performance: Evidence from the United States. Academy of Management Journal, 54(3), 663-684.

Driscoll, N., and Kraay, D. (2018). The impact of liquidity and profitability on operational efficiency of selected commercial banks in Bangladesh: A panel data study. *Global Journal of Management and Business Research*, *18*(7), 13-24.

Ehrhardt, M. C., and Brigham, E. F. (2011). Financial management: Theory and practice (13th ed.). Mason, OH: South-Western Cengage Learning.

Erhardt, N. L., Werbel, J. D., and Shrader, C. K. (2003). Board composition as a determinant of financial performance: Evidence from the SandP 500. Corporate Governance: An International Review, 11(3), 207-219.

Friede, G., Busch, T., Bassen, A., and Fahlenbrach, R. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. Journal of Sustainable Finance and Investment, 5(4), 210-233.

Garcia-Meca, E., Laffarga, J., and Ros, R. (2015). The impact of female board representation on firm performance: Evidence from the financial industry. Journal of Business Ethics, 127(2), 331-346.

Gravetter, F. J., and Wallnau, L. B. (2013). Statistics for the behavioral sciences (9th ed.). Belmont, CA: Wadsworth Cengage Learning.

Greene, M. M., Intintoli, M., and Kahle, K. M. (2020). The impact of gender diversity on board risk taking. Journal of Management, 46(6), 2456-2485.

Greene, W. H. (2012). Econometric analysis (7th ed.). Upper Saddle River, NJ: Prentice Hall.

Hafsi, T., and Turgut, A. (2013). Agency theory and board governance: A review and research agenda. Corporate Governance: An International Review, 21(3), 274-294.

Hermalin, B. E., and Weisbach, M. S. (2001). Boards of directors as monitors: A conceptual and empirical analysis. Journal of Finance, 56(1), 225-258.

Hillman, A. J. (2015). Gender diversity in corporate boards: Theory and evidence. Academy of Management Annals, 9(1), 66-104.

Hillman, A. J., and Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. Academy of Management Review, 28(3), 383-396.

Hillman, A. J., Shropshire, C., and Cannella, A. A., Jr. (2007). Boards of directors and firm performance: A contingency approach to linking social capital and dimensions of governance. Academy of Management Journal, 50(6), 1333-1350.

International Monetary Fund. (2016). Global financial stability report: The liquidity and leverage cycle in emerging markets and developing economies. Washington, DC: IMF.

International Organization for Standardization (ISO). (2009). Risk management—Principles and guidelines. Geneva: ISO.

Intintoli, M., and Kahle, K. M. (2020). The impact of gender diversity on corporate boards: A review and synthesis of the literature. Journal of Management, 46(6), 2423-2455.

Joecks, J., Pull, A., and Vetter, M. (2013). Does female board representation influence firm performance? A meta-analysis. Journal of Business Ethics, 117(1), 47-67.

Johnson, J. L., Hill, J. C., and Schnatterly, K. (2013). The impact of board diversity and gender composition on corporate risk-taking. Journal of Management, 39(5), 1324-1347.

Jurkus, M., Park, S. H., and Woodard, R. H. (2011). Board diversity and firm performance: The moderating role of firm risk. Journal of Management Studies, 48(3), 507-538.

Kagzi, R., and Guha, S. (2018). The impact of board demographic diversity on performance in knowledge-intensive firms. Journal of Business Ethics, 147(4), 1031-1048.

Kagzi, R., and Guha, S. (2018). The impact of board diversity on firm performance: A meta-analysis of the empirical evidence. Journal of Business Ethics, 147(4), 1031-1048.

Kagzi, R., and Guha, S. (2018). The impact of gender diversity on board effectiveness: A meta-analysis of empirical research. Journal of Business Ethics, 148(3), 603-626

Kagzi, R., and Guha, S. (2018b). The impact of board diversity on firm performance: A meta-analysis of the empirical evidence. Journal of Business Ethics, 147(4), 1031-1048.

Kanakriyah, R., 2021. The impact of board of directors' characteristics on firm performance: a case study in Jordan. *The Journal of Asian Finance, Economics and Business*, *8*(3), pp.341-350.

Karanja, J. (2017). Mobile banking risk management: A review of literature. International Journal of Information Management, 37(6), 677-689.

Keating, C. (2009). Credit risk: An introduction. New York: Wiley.

Kennedy, P. (2008). A guide to econometrics (6th ed.). Cambridge, MA: MIT Press.

Kumar, R. (2011). Research methodology: A step-by-step guide for beginners (3rd ed.). London, UK: Sage.

Larkin, R. (2013). Outliers: An introduction (2nd ed.). London, UK: Sage.

Levi, M., Li, Y., and Zhang, Y. (2014). Does gender diversity in the boardroom improve firm performance? Evidence from China. Journal of Business Ethics, 122(4), 605-622.

Liu, J., Oh, W., and Park, H. (2014). Does gender diversity in the boardroom matter? Evidence from the Korean market. Journal of Business Ethics, 121(2), 225-237.

Lückerath-Rovers, M. (2013). The impact of board gender diversity on firm performance: Evidence from Germany. Journal of Business Ethics, 116(4), 725-740.

Marinova, D., van Essen, M., and Lakemond, N. (2016). Women on boards and firm performance: A meta-analysis of the most researched countries. Journal of Business Ethics, 137(2), 257-276.

Martn-Ugedo, J. L., and Minguez-Vera, A. (2014). Board diversity and firm performance: The moderating role of ownership concentration and institutional investors. Corporate Governance: An International Review, 22(5), 420-440.

Mastella, G., Mendes, M., and De Paula, R. (2021). Does board gender diversity matter for firm performance? Evidence from Brazil. Journal of Business Ethics, 168(2), 505-525.

McKinsey and Company. (2017). The power of parity: How advancing women's equality can add $12 trillion to global GDP.

McKinsey, T., and Company, C. A. (2017). The role of gender diversity in corporate governance. *U. Pa. J. Bus. L.*, *21*, 105.

Miller, A. N., and Triana, M. (2009). Do women help boards make better decisions? The influence of gender composition on risk-taking. Academy of Management Journal, 52(6), 1079-1100.

Moreno-Gómez, J., Vaillant, D., and Lafuente, J. M. (2018). Gender diversity in top management and boards: Does it matter for firm performance? Journal of Business Ethics, 147(4), 1019-1030.

Nguyen, D. H., and Faff, R. (2006). Board composition, ownership structure and firm performance in Australia. Journal of Business Finance and Accounting, 33(1-2), 113-144.

Noamene, M., Afiouni, I., and Boubaker, S. (2021). Gender diversity on corporate boards and financial performance: Evidence from the United Kingdom. Corporate Governance: The International Journal of Business in Society, 21(4), 536-553.

Ohansen, Ø., and Rausand, M. (2014). Risk and decision analysis: From theory to practice. Chichester, UK: Wiley.

Oremus, M. (2020). The impact of gender diversity on firm performance: Evidence from the UK. Journal of Business Ethics, 161(4), 1043-1062.

Pallant, J. (2016). SPSS survival manual: A step-by-step guide to data analysis using IBM SPSS (7th ed.). New York, NY: McGraw-Hill Education.

Peterson Institute for International Economics, (2016). Global economic leadership and the group of seven. *Peterson Institute Press: All Books*.

Peterson Institute for International Economics. (2016). The economic benefits of gender diversity.

Post, C., and Byron, K. (2015). The impact of board diversity on firm financial performance. Journal of Management, 41(6), 1720-1742.

Price, J. (2018). Board effectiveness: A critical review of the literature and directions for future research. Corporate Governance: An International Review, 26(1), 73-98.

Pucheta-Martínez, M. (2018). Does gender diversity on boards improve firm performance? A meta-analysis of the empirical evidence. Journal of Business Ethics, 147(4), 1031-1048.

Robson, C. (2011). Real world research: A resource for social scientists and practitioners (3rd ed.). Oxford, UK: Blackwell.

Rosa, E. A. (2003). The conceptualisation and measurement of risk. Journal of Risk Research, 6(2), 177-203.

Ross, S. A., Westerfield, R. W., and Jordan, B. D. (2011). Fundamentals of corporate finance (9th ed.). Boston, MA: McGraw-Hill Irwin.

Rossi, S., Hu, N., and Foley, S. (2017). Gender diversity on corporate boards and firm performance in emerging markets: Evidence from China. Journal of Business Ethics, 140(1), 187-208.

Ryan, T. A. (2013). Statistical analysis of quality data (3rd ed.). Hoboken, NJ: Wiley.

Sabatier, V. (2015). The impact of board gender diversity on firm performance: Evidence from France. Journal of Business Ethics, 128(3), 593-606.

Sani, M. A., Adekoya, A. A., and Oyewole, O. O. (2019). The impact of board gender diversity on financial performance of listed companies in Nigeria. Journal of Business Ethics, 148(1), 133-149.

Sarpong-Danquah, E. K., Adusei, M. D., and Frimpong, J. N. (2022). Board gender diversity and firm performance: Evidence from the Ghanaian banking industry. Journal of Business Research, 136, 61-70.

Saunders, M., Lewis, P., and Thornhill, A. (2016). Research methods for business students (7th ed.). Harlow, UK: Pearson Education.

Shehata, M., El-Helaly, M., and Salhin, M. A. (2017). The impact of board diversity on firm performance: Evidence from small and medium-sized enterprises in the United Kingdom. Journal of Business Ethics, 141(1), 167-183.

Shleifer, A., and Vishny, R. W. (1997). A survey of corporate governance. The Journal of Finance, 52(2), 737-783.

Srivastava, A., Das, S., and Pattanayak, S. (2018). Corporate governance and gender diversity: A study of Indian listed companies. Journal of Business Ethics, 148(3), 627-648.

StataCorp. (2022). Stata statistical software: Release 17. College Station, TX: StataCorp LP.

Terjesen, S., Sealy, R., and Singh, V. (2016). Women on boards: A meta-analysis of the determinants of female board representation and its effects on firm performance. Corporate Governance: An International Review, 24(3), 152-180.

Tudorse, I. (2012). Performance measurement: A comprehensive overview. New York: Business Expert Press.

Tudorse, I. (2012). Performance measurement: A comprehensive overview. New York: Business Expert Press.

Tukey, J. W. (1977). Exploratory data analysis. Reading, MA: Addison-Wesley.

Whitler, K.A. and Puto, C.P., 2020. The influence of the board of directors on outside-in strategy. *Industrial Marketing Management*, *90*, pp.143-154.

Wiley, J. M., and Monllor-Tormos, J. (2018). The moderating effect of board diversity on the relationship between board size and firm performance. Journal of Management Studies, 55(4), 725-749.

Wiley, J., and Monllor-Tormos, F. J. (2018). Board gender diversity and firm performance: A meta-analysis. Journal of Business Ethics, 148(3), 603-626.

Wooldridge, J. M. (2010). Econometric analysis of cross section and panel data (2nd ed.). Cambridge, MA: MIT Press.

Wooldridge, J. M. (2010). Econometric analysis of cross section and panel data (2nd ed.). Cambridge, MA: MIT Press.

World Bank. (2022). World Bank Development Indicators Database. Retrieved from https://databank.worldbank.org/source/world-development-indicators

World Economic Forum. (2020). The corporate board glass ceiling: The role of empowerment and culture in shaping board gender diversity. *Journal of Business Ethics*, *165*, 329-346.

World Economic Forum. (2020). The global gender gap report 2020.

Ye, J., Li, X., and Xie, J. (2019). Board gender diversity and firm performance in China: Evidence from a regional level. Journal of Business Ethics, 157(2), 439-459.

Zona, F., Minichilli, A., and Zattoni, A. (2013). Gender diversity in the boardroom and innovation: The moderating role of ownership structure. Journal of Business Ethics, 116(4), 741-758.