

ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF ECONOMICS

**The Impact of Corporate Governance on Bank Performance: Evidence from
Ethiopian Banks' Board Structure and Financial Ratios**

A Thesis Submitted to the Addis Ababa University's Department of Economics of
College of Business and Economics, for partial fulfillment of requirements for the
degree Master of Science in Financial Economics.

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Declaration

Declaration

The Impact of Corporate Governance on Bank Performance: Evidence from Ethiopian Banks' Board Structure and Financial Ratios “is entirely original with no plagiarism, that all references have been properly cited, and that it hasn't been submitted for credit toward a degree at any other university.

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This is to certify that Temesgen Kibrekulu has carried out his research project work on the topic entitled *“The Impact of Corporate Governance on Bank Performance: Evidence from Ethiopian Banks' Board Structure and Financial Ratios”*. This work is original and it is sufficient for submission for the partial fulfillment for the award of Masters of financial Economics.

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Table of Contents

CHAPTER ONE.....	1
INTRODUCTION	1
1.1 Backgrounds of the Study	1
1.2. Statement of the Problem.....	3
1.3 Objectives of the study.....	6
1.3.1 General Objective	6
1.3.2 Specific Objective	6
1.4 Significance of the Study	6
1.5 Scope and limitation of the study.....	6
1.6 Organizations of the study	7
CHAPTER TWO.....	8
LITERATURE REVIEW	8
2. INTRODUCTION	8
2.1. Definition of Corporate Governance and Theoretical Concept	8
2.1.1 Agency theory	8
2.1.2 Stewardship theory.....	9
2.1.3 Stakeholder theory	9
2.1.4 Resource dependency theory.....	10
2.2 Ethiopian banking industry overview.....	11
2.3 Firms financial performance and corporate governance mechanisms	12
2.3.1. Firm performance and size of board members	12
2.3.3 Regulation and Bank performance	14
2.3.3.1 Bank performance and capital adequacy ratio.....	15
2.3.3.2 Legal reserve and bank performance.....	16
2.3.3.3 Bank performance and liquidity	17
2.3.4 Impact of depositors and bank performance.....	17
2.4 Empirical review	18
2.5 Conceptual Framework.....	21
CHAPTER THREE	22
RESEARCH METHODOLOGY	22
3.1 Introduction.....	22
3.2 Research Design	22

3.3 Sources of Data.....	22
3.4 Sampling design.....	22
3.5 Variables description	23
3.6 Data Analysis method.....	27
3.7 Regression Analysis.....	27
3.8 Model Diagnostic tests.....	28
CHAPTER FOUR	30
4 Results and Discussion	30
4.2. Correlation analysis.....	35
4.3. Regression Analysis: Results and Discussion	36
4.3.1 Panel unit root tests	36
4.3. Regression model tests.....	37
4.3.1. Model selection.....	37
4.4. Model Estimation.....	38
4.5 Discussion on the implication of results.....	39
CHAPTER FIVE	44
SUMMARY, CONCLUSION AND RECOMMENDATIONS	44
5.1 INTRODUCTION	44
5.2. Summary of Findings.....	44
5.3 Conclusion.....	45
5.4 Recommendations.....	46
References	48

List of Abbreviations

BGD	Board gender diversity
BODs	Board of directors
BS	Board of size
BZ	Bank size
CAR	Capital adequacy ratio
CEO	Chief Executive Officer
CRR	Cash reserve ratio
FGLS	Feasible generalized least square
LEVE	Banks leverage
LIQR	Liquidity ratio
N/A	Not Applicable
NBE	National bank of Ethiopia
OLS	Ordinary least square
RES	Banks reserve ratio
ROA	Return on asset
ROE	Return on Equity
TDTA	Total deposit to total asset ratio
VIF	Variance inflation factor

List of Tables

Table 1 summary for terms of measurement	27
Table 2 Descriptive Statistics of variables	Error! Bookmark not defined.
Table 3 correlation matrix of Dependent and independent variables	Error! Bookmark not defined.
Table 4 panel unit root test results	Error! Bookmark not defined.
Table 5 Hausman test results.....	Error! Bookmark not defined.
Table 6 Result of the heteroskedasticity test.....	Error! Bookmark not defined.
Table 7 variance inflation factor	Error! Bookmark not defined.
Table 8 Test of normality assumption result.....	Error! Bookmark not defined.
Table 9 Test of cross-sectional dependence results.....	Error! Bookmark not defined.

List of Figures

Figure 1 Conceptual frame work.....	Error! Bookmark not defined.
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Abstract

This study aims to investigate the influence of corporate governance on bank performance in Ethiopia, focusing on how board characteristics (such as size and gender diversity) and regulatory financial ratios impact banks from 2010 to 2023. The analysis is based on data gathered from 10 licensed commercial banks operating in the country. The effect of corporate governance methods on financial performance of banks, as measured by return on equity and Return on asset, was assessed using a quantitative research methodology. Panel data regression is adopted for estimation of main results. The notable findings show that board gender composition and liquidity ratio has a significant and positive relationship with bank performance. Furthermore, the results show that capital adequacy ratio have a significant and negative association with bank performance. Furthermore, the research revealed that the choice of performance metrics significantly impacts corporate governance analyses. The study observed varying outcomes depending on whether Return on Assets (ROA) or Return on Equity (ROE) was used to assess firm performance.

CHAPTER ONE

INTRODUCTION

1.1 Backgrounds of the Study

The relationship between shareholders, BODs, management, staff, regulators, all other stakeholders, and the community in deciding the course and performance of the firm is known as corporate governance (Ruin, 2001). The idea of BODs is a popular interpretation of corporate governance, which is defined as the procedures, norms, regulations, laws, and establishments that direct an organization or corporation's management, conduct, and control of its operations (Tricker, 2015).

In the literature to explain firm performance various theories have been proposed. Different opinions on which outcomes should be used to quantify an organization's efficiency have prevented consensus on a standard measurement of firm performance, since performance is explained in light of the research's theoretical framework and objectives. An achievement or the outcome obtained by management, money issues, and encouraging in order to provide competitiveness, proficiency, and suitability for the business is firm performance (Taouab & Issor, 2019).

According to Richard et al, (2009), firm performance is defined and categorized into three types of outcomes: (a) financial performance, which includes metrics such as earnings, return on investment, and return on assets; (b) market performance, encompassing sales, market share, and product market performance; and (c) shareholder returns, such as total shareholder economic value added and return. Firm performance as the actual output or results of a business, measured against its expected outcomes, goals, or objectives (Ismyrlis, 2019). Baum and Rowley (2002) further explain that firm performance represents the real output or achievements of an organization, reflecting its overall productivity, output, and accomplishments in relation to the various stakeholders it interacts with. Based on these definitions, firm performance can be understood as the results a firm achieves through the effective use of its resources. It can be evaluated using a variety of methods and approaches. From the above definition and category of firm performance this study concentrated on financial performance.

According to Khan et al. (2011), corporate governance offers a framework that benefits the company and can improve performance by lowering agency problems. To protect the interests of the stakeholders, various measures have been implemented (Sanda et al. al. (2005)). Among these corporate governance practices are the board's size, gender, the diversity of the board, the educational background, and the board of directors' experience, however all of the above practice is grouped under internal corporate governance practices.

According to NBE Directive No. SIB/42/2015 all Ethiopian banks are subject to regulation. Generally speaking, the company directors—who are chosen by the shareholders—will serve as the trustee and agent of the business. Stockholders to protect their interests as well as those of other stakeholders groups include clients, staff members, middlemen, the government, and the general public.

BODs provide the company's overall business orientation, together with estimates of capital needs, income sources, costs, and profitability. The board is also accountable for making sure that the Bank regulation, the laws and regulations formulated thereunder, and other applicable statutory requirements are properly followed. The board's has obligations in adhering to the particular corporate governance concepts and practices and protocols, making that they are used sensibly and carefully, and for authorizing and supervising the business objective of a firm implementation and tactics (SIB/42/2015 Directive No).

The Board might organize itself into committees to help it carry out its obligations in addition to the necessary National Bank-mandated. But the board is still in place accountable and will continue to be in charge of supervising and managing its subcommittees and outside service providers. A formal protocol ought to exist for specific functions within the specifying the scope of the delegation to the board in order for the board to appropriately fulfill its obligations and carry out its decision-making process in an efficient manner. When needed, board committees ought to have the liberty to seek independent professional assistance and to ask Senior Management for assistance with technical matters as needed. As outlined in directive No.SIB/42/2015,the board committee are expected to maintain and provide full information to the board.

In less developed countries like Ethiopia there was a limited attention on corporate governance method, while numerous studies have explored corporate governance in developed nation. This study seeks to address this gap by investigating the importance of efficient corporate governance mechanisms and analyzing the relationship between Ethiopian banks performance and corporate governance.

1.2. Statement of the Problem

According to leading analysts, the global economy faced its most severe financial crisis since the Great Depression of the 1930s by mid-2007. The credit crisis had widespread global effects, including the collapse of major corporations, economic activity fall down, challenges to solvency of banks, a reduction in consumer wealth, international stock market loss, and numerous government bailouts. A key factor contributing to the crisis was the excessive availability of credit, which created significant issues for the banking sector. Sundry (2008) suggests that failure of corporate governance may lead a financial crisis, indicating members of the board failed in identifying and efficiently manage the crisis. However, corporate governance issues are not limited to this crisis. Earlier business scandals, such as those involving Barings Bank, Enron, and WorldCom, exposed governance weaknesses caused by inadequate and ineffective control mechanisms (Vadiale, 2010). For instance, a 2008 report by the Ethics Institute of South Africa highlighted that WorldCom, the second-largest long-distance telephone provider in the U.S., lost approximately \$11 billion due to executive misconduct. This led to the company's bankruptcy, the layoff of 17,000 employees, and the sale of most of its subsidiary units. These outcomes were largely attributed to the board's failure to fulfill its oversight responsibilities and the neglect of fiduciary duties by those in charge (Vadiale, 2010).

The financial structure of banks and other financial institutions differs significantly from that of non-financial entities. Banks, in particular, are subject to extensive regulations and face a higher asymmetry of information between insiders and outsider. King and Levine (1993) emphasize the critical role of bank corporate governance in emerging economies through three key points: First, banks are vital drivers of economic growth and hold a dominant position in the financial sectors of developing nations. Second, in emerging markets, banks often serve as the primary source of funding for most businesses and act as instruments for implementing government monetary policies, especially where financial markets are underdeveloped or nonexistent. Finally, banks in

these regions typically function as the main custodians of the economy's savings and provide widely accepted payment systems

The OECD provides the following explanations for the distinction between corporate governance in non-financial industries and banking governance in their report "Policy Brief on Corporate Governance" (Alkhalidi 2008); First, because banks decide who gets access to financial resources (loans) and how to make payments, a weak banking governance structure causes the financial system to become unstable and increases the risks to the national economy. Second, in order to reduce the anticipated risks associated with managing bank deposits, banks are frequently subject to greater accountability from depositors and creditors. Third, government-sponsored safety nets, like insurance schemes on deposits and liquidity buffers, offer protection to banks and creditors. Last but not least, banks must adhere to a variety of systems and prudential rules, which are vital components of ensuring strong and sound banking governance. For the reasons listed above, the banking industry's corporate governance requires particular attention and specialized research.

Due to the previously mentioned global corporate scandals and failures, as well as the unique significance of depository financial institution (banks), banks corporate governance has become a burgeoning field of study and discussion, yielding a sizable body of knowledge. There is still disagreement over how corporate governance affects firm performance, according to Babatunde and Olaniran (2009), even though prior empirical research has shown a connection between financial performance of firms and corporate governance mechanisms. Therefore, more study is required to fully comprehend how corporate governance affects business performance.

Number of research on the interplay between corporate governance mechanisms have been carried out in industrialized nations and businesses' financial performance, with varying degrees of success (see, for instance, Bauer et al., 2008; Ibrahim (2010); Lupu and Nichitian (2011)). However, the majority of previous studies concentrated on big companies operating inside structured corporate governance frameworks in advanced economic structures. Different governing methods function differently for varying company sizes (Habbash, 2010). Consequently, it is challenging to generalize the same outcome based on those investigations' conclusions for comparatively tiny Ethiopian bank methods of industrial governance.

When it comes to understanding how corporate governance influences firm performance, existing studies reveal a lack of consensus. In the context of Ethiopia, empirical research on this topic remains limited. To my knowledge, few studies have specifically examined the relationship between corporate governance practices and bank profitability in the country. Moreover, much of the existing research in Ethiopia tends to concentrate on internal (Board Structure) corporate governance mechanisms within the banking sector, often overlooking the role of external (like financial ratio set by others) governance mechanisms. This gap highlights the need for a more comprehensive exploration of both internal and external governance factors and their collective impact on firm performance. Such as Sisay (2022) assessed the relationship between corporate governance and firm performance in insurance company, Habtamu (2012) examined how corporate governance practices influence bank performance over the period from 2004–05 to 2009–10, using internal corporate governance mechanisms variables only and Ferede (2012) also investigated the relationship between corporate governance practices and financial performance, focusing on few Ethiopian commercial banks over a five-year period (2007– 2011). However, all this empirical study used only internal corporate governance mechanisms. The aforementioned studies were constrained by limited observations, often due to small sample sizes, short time frames and the methodologies for data collection and analysis varied across these studies. Plus all the previous study employed a theory called agency theory, which posits that corporate governance primarily serves to protect shareholders' interests. However, this framework has limitations when applied to the banking sector, where agency issues are more complex. Banking governance systems may need to incorporate legislation, external procedures, and internal processes to address these complexities. Therefore this study employed stakeholder theory to analysis impact of corporate governance mechanisms on firm performance.

This research was incorporates financial stability ratios variables, such as the capital adequacy ratio, reserve ratio, liquidity ratio, and depository variables like the total deposit to total asset ratio, as critical governance mechanisms in addition to internal corporate governance variable like board size and board gender composition . These variables have received limited attention in previous studies but are becoming increasingly significant in today's business landscape. Additionally, the study broadens the scope of firm performance by simultaneously considering both return on assets (ROA) and return on equity (ROE), offering a more comprehensive assessment of how corporate governance impacts organizational outcomes. As a result, this study

aims to adopt panel data to analyze the impact of corporate governance—measured through various proxy variables—on the profitability of commercial banks in Ethiopia.

1.3 Objectives of the study

1.3.1 General Objective

To examine the impact of corporate governance mechanisms (board structure) and financial health metrics on the performance of commercial banks, as measured by return on assets (ROA) and return on equity (ROE).

1.3.2 Specific Objective

In order to accomplish the study's overarching goal, the following particular goals are established:

- 1 To analyze the relationship between board characteristics (board size, gender composition) and bank performance (ROA, ROE).
2. To assess the influence of financial stability ratios (capital adequacy, liquidity, reserve ratios, total deposit to total asset) on bank performance.

1.4 Significance of the Study

The findings of the study benefit the banking sector by highlighting pertinent corporate governance and the ways in which these characteristics impact organizational success. Therefore, this work may contribute to the body of knowledge already known about this field of inquiry for upcoming investigations, particularly the examination of variables and their connections. The findings of this investigation may add to the body of knowledge by demonstrating the relationship between corporate governance traits and the performance of Banks, as well as can serve as markers of corporate governance traits that are beneficial to regulators, management, and business people in the formulation of choices and policies. Thus, the purpose of this study is to raise the understanding and awareness of the seriousness and importance of corporate governance to the success of the banking sector.

1.5 Scope and limitation of the study

The performance of banks is likely influenced by several stakeholders. However, this study concentrated on a few notable stakeholders to examine their influence on performance. This covers depositors, regulations, and board structure. Furthermore, the study's scope was limited to

the commercial banking sector. The study covers a period of 14 years, running 2010 up to 2023. A constraint of this research was its dependence on accounting-based returns, namely return on asset (ROA) and return on equity (ROE), to analyze bank financial performance. Banking firms were purposefully chosen for this investigation based on the data that was available. Only two board of director structures, three financial ratio, and one depositor variable were used in the study.

1.6 Organizations of the study

This study is organized into five sections. The initial section introduces the context, defines the research problem, and describes the aims, importance, boundaries, and framework of the investigation. The following section delves into a review of existing literature. The third part explains the research approach and design. The fourth segment discusses the results and their implications. Concluding the report, the fifth section encapsulates the main insights, provides concluding remarks, and suggests actionable recommendations.

CHAPTER TWO

LITERATURE REVIEW

2. INTRODUCTION

This chapter includes a detailed discussion of the theoretical ideas of corporate governance, corporate governance structure, and the impact of corporate governance on business performance as supported by empirical research.

2.1. Definition of Corporate Governance and Theoretical Concept

Corporate governance refers to the interaction between the board of directors, shareholders, and top management in shaping the performance and direction of a corporation. It encompasses the relationships among various stakeholders and the objectives for which the firm is governed (Kwee, K.P., and Rasih, D., 2010). Governance involves the implementation and adherence to laws and regulations, the relationships these laws establish or influence, and the nature of those relationships (Otioku, 2010). Corporate governance is the framework that guides and controls businesses, with the primary goal of ensuring their sustained growth or survival and the fulfillment of the diverse objectives of corporate stakeholders, including investors, employees, and society at large.

According to Rashid, (2011) the significance of corporate governance mechanisms on the financial performance of firms is interpreted through several theoretical perspective. The most important theories are stakeholder theory, agency theory, stewardship theory and resource dependence theory (Maher and Andersson, 1999).

2.1.1 Agency theory

According to Habbash (2010), agency theory is widely recognized framework and has garnered significant attention from both scholars. It is built on the outsider-insider relationship, which arises from the separation of ownership and management in recent corporations. In contemporary businesses, shareholders (outsider) are typically dispersed and do not engage firms daily activity. Instead, shareholder appoint managers (agents) to do like a shareholder (Habbash, 2010). These agents are responsible for overseeing the daily activity of the firm. However, the separation of ownership and control creates an inherent dual interest between the principals (shareholders) and the agents (managers). In modern corporations, managers are hired by shareholders, who often

remain detached from the daily administration and operational decisions of the business (Habbash, 2010).

Agency theory proposes governance structures that address issues such as board size, composition, CEO compensation, director equity ownership, and equity holder rights (Luan & Tang, 2007; Rashid, 2011). Jensen and Meckling (1976) suggest that aligning the interests of managers with those of shareholders can be achieved through financial incentives. For instance, strategies such as offering senior executives the opportunity to purchase company shares, often at a discounted rate, can align their financial goals with those of the shareholders, thereby reducing conflicts of interest.

2.1.2 Stewardship theory

According to Davis, Schoorman, and Donaldson (1997), a steward is an individual who maximizes and protects shareholder wealth by ensuring the success of the company, as this aligns with the steward's utility functions. From this perspective, stewards are corporate executives and managers who prioritize shareholder interests by safeguarding their investments and generating profits (David and Tobias, 2013). This theory adopts a more optimistic view of human behavior, contrasting with or opposing the assumptions of agency theory. The stewardship theory posits that a manager's primary objective should be to enhance the company's performance, as this fulfills their need for achievement and success. A key distinction of stewardship theory is its emphasis on trust, respect for authority, and a tendency toward ethical behavior, replacing the distrust implied by agency theory (Coleman, 2007). Stewards are more focused on ensuring the long-term survival and success of the firm, viewing it as an extension of themselves, rather than exploiting the company for personal gain (David and Tobias, 2013).

2.1.3 Stakeholder theory

Stakeholder theory emerged within the field of management and subsequently broadened to encompass corporate responsibility toward diverse groups with vested interests (Abdullah and Valentine, 2009). It broadens the scope of agency theory, which assumes that the governing board acts solely in the behalf of shareholder. In comparison, this framework takes into account the needs and concerns of diverse stakeholders, encompassing social, environmental, and moral dimensions (Freeman et al., 2004). According to Habbash (2010), a stakeholder is any individual or group whose objectives are directly or indirectly tied to a firm, affected by the firm, or capable

of influencing the firm's ability to achieve its goals. This includes entities such as the government, political parties, workers, clients, providers, and the local community. It posits those involved in corporate governance have the ability to influence external factors that support the implementation of corporate social responsibility. Additionally, stakeholder involvement in governance can help companies prioritize the needs of customers, communities, and social organizations, while fostering a stable environment for long-term growth. The model emphasizes collaboration with stakeholders, addressing underinvestment linked to opportunistic behavior, and encouraging stakeholders to contribute to the long-term profitability of the business (Maher and Andersson, 1999).

As a result, managers must act as agents of the company to ensure its survival, protect the long-term interests of all stakeholder groups, and manage the firm in a way that benefits its stakeholders. This approach safeguards rights of shareholder and ensures their participation in decision-making processes (Fontain et al., 2006).

2.1.4 Resource dependency theory

The focus of resource dependency theory is on the board of directors' responsibility to grant the company access to the resources it needs (Abdullah and Valentine, 2009). According to this point of view, the board of directors' primary responsibility is to provide the company with resources. Directors are seen as valuable assets to the company. When directors are seen as resource providers, several dimensions of their diversity—such as gender, experience, qualification, and others—obviously become more significant. Abdullah and Valentine claim that directors provide the company with resources such as skills, knowledge, and business acumen as well as connections to key stakeholders like vendors, buyers, legislators, and social groups. They also give the business credibility. For businesses, boards of directors offer knowledge, abilities, information, and possible connections to the surrounding community (Argandona and Ayuso, 2007). The resource-dependency model argues that management can use the board of directors as a vehicle to develop links with the external environment to help achieve organizational goals. The resource-based approach allows the board to support management in areas where operational expertise is weak or insufficient (Wang, 2009).

2.2 Ethiopian banking industry overview

In both developed and developing countries, financial services, especially banking, are considered vital for economic growth and the success of various projects (Tarawneh, 2006). The banking sector plays a central role in Ethiopia's financial system. Banks form the foundation of any financial system and are essential in channeling savings from areas with excess resources to those with shortages. The effectiveness and competitive edge of a banking system are key indicators of the strength of any nation economy. Similar to other under developed nation, Ethiopia relies heavily on its banks to drive economic growth. The Ethiopian banking sector comprises 32 banks, including two state-owned banks and the remaining privately owned banks.

According to, Mulugeteta (2010) identified four main regulatory features: controls over the equities market, foreign exchange, credit limits, and interest rate regulation. Following the implementation of the financial liberalization (1992) measures, rules affecting banks are being loosened, even though some limitations are still in place. As a result, while big commercial banks and specialized institutions continue to be part of the public sector, the private sector's financial institutions are expanding.

Private financial institutions were able to participate in the economy thanks to the 1992 financial liberalization reform. The proportion of private banks' banking assets to all commercial banking assets has increased as a result of their growing engagement. Ethiopia's financial sector policy, like that of the majority of developing nations, attempts to improve soundness and depth as well as more effective intermediation (Mulugeteta, 2010). Mulugeteta claims that the Ethiopian government has decided to seek these objectives within a unique comprehensive plan for financial systems. Developing nation also stress the significance of enhancing the capabilities of financial industry professionals and further fortifying the corporate governance and accountability of financial institutions. It is becoming more widely acknowledged that improved corporate governance of businesses, financial institutions, and markets is a need for national prosperity.

The corporate governance process in banks has a multifaceted structure. The board of directors, managers, and other staff members of a bank are all included in this governance structure. In addition, banks are subject to a distinct set of public rules and regulators, as well as a vast set of

banking legislation. The way in which these factors interact to determine a bank's performance in meeting both public aims and stockholder demands is a key factor (Adusei, 2011).

In Ethiopia the corporate governance of banks is directed and supervised by national bank of Ethiopia. The NBE oversees and manages the banking industry and manages the nation's money supply. As a result, the NBE released guidelines regarding the number, make-up, and skill level of the board of directors. The NBE is tasked with issuing directives regarding the qualifications and competencies required of directors, the minimum number of directors on a bank's board, the duties, responsibilities, and good corporate governance of the boards of directors of banks, and the maximum number of years a director may serve in any bank, as stated in the banking business Proclamation No. 592/2008.

2.3 Firms financial performance and corporate governance mechanisms

Numerous studies have explored the impact of corporate governance practices on business performance (e.g., Sanda et al., 2005; Aljifri and Moustafa, 2007; Sunday O., 2008; Lupu and Nichitean, 2011; Al-Hawary, 2011; Khan et al., 2011; Al Manaseer et al., 2012). Strengthening the board, audit committee, and other corporate governance mechanisms can improve management oversight and reduce issues related to information asymmetry (Aldamen et al., 2011). Academic research in developed nation has linked improved firm performance to factors such as board size, gender composition, the audit committee (Klein, 1998; Aldamen et al., 2011).

Corporate governance practices are recognized as essential management tools for all organizations, including banks. There are multiple approaches to reducing agency costs, enabling the evaluation of corporate governance within a company. The corporate governance literature highlights various practices, such as audit committee size and board characteristics (e.g., gender diversity, size, and audit committee composition), as key elements in effective governance.

2.3.1. Firm performance and size of board members

Board member size is determined by the count of directors it comprises. Kiel and Nicholson (2003) emphasize that board size plays a critical role in achieving board effectiveness and enhancing corporate performance. Lawal (2012) further argues that the size of the board influences the strength of discussions within a group and the board's capacity to make efficient business decisions. Establishing an appropriate size of board member is vital, as excessively

large boards may negatively affect corporate governance performance beyond the optimal level. Because large board size face communication delays, conflicting opinions, and difficulty reaching consensus, slowing strategic decisions, Individual directors may disengage, assuming others will monitor management (violating agency theory principles) and Director fees, travel, and meeting costs rise disproportionately with board size. However, the corporate governance literature continues to debate the ideal board size, with no clear consensus (Lawal, 2012).

Dallas (2004) highlights that board size is a significant governance factor with a positive influence. Conversely, AL-Manaseer et al. (2012) note that overly large boards often face challenges in coordinating decision-making processes. Lawal (2012) suggests that smaller boards are preferable, as they foster more meaningful, critical, and intellectual deliberation among members, potentially leading to improved performance and more effective corporate decision-making and oversight. On the other hand, Klein (2002) argues that larger boards may enhance monitoring efficiency by distributing the workload among more members. As a result, the relationship between board size and business value can be either positive or negative, depending on the context.

Adetunji and Olawoye (2009) assert that the size of a board dictates the number of directors it should have, advocating for a reasonable number of directors with fixed terms. They also stress the importance of an ideal board size for both internal performance and effective corporate governance. The NBE (2014) mandates that a bank's board must include at least nine members. Despite this, numerous studies (e.g., Houssein and Ines, 2011; Ishaya, Francis, and Solomon, 2013; Adeusi et al., 2013; Musa et al., 2013; Turku, 2014; Anthony, 2007) reveal ongoing disagreement and debate regarding the optimal board size. Consequently, the number of members on a bank's governing body can greatly impact its overall performance.

2.3.2 Firm performance and board gender composition

Gender diversity is part of the broader concept of board diversity. The goal of a board's composition is to provide a range of perspectives. Increased female involvement on boards can bring perspectives and talents that would not be available on all-male boards (Boyle and Jane, 2011). There are some key points that supported by academic studies and empirical evidence regarding to female qualities and performance. First, Diverse Perspectives: Women bring diverse

perspectives, experiences, and problem-solving approaches to the boardroom, which can lead to more innovative and effective decision-making (Carter, Simkins, & Simpson, 2003; Post & Byron, 2015). Second, Improved Corporate Governance: Female directors are often associated with better corporate governance practices, such as increased transparency, accountability, and ethical behavior (Adams & Ferreira, 2009). Third, board dynamics: Gender-diverse boards tend to have better communication and collaboration, which can improve overall board effectiveness (Kristie, 2011). Therefore studies have sought to support the assertion that increased female representation on the board influences organizational outcomes. In recent times, there has been heightened attention toward exploring the impact of gender composition on a firm's effectiveness. Empirical investigations by Smith et al. (2005), Huse (2007), and Mersland and Strom (2007) suggest that greater inclusion of women in board roles enhances corporate performance. Because Women are often perceived as more risk-averse and detail-oriented, which can lead to better risk management and long-term strategic planning (Huang & Kisgen, 2013) and Female directors are often more attuned to the needs of various stakeholders, including employees, customers, and communities, which can improve a firm's reputation and stakeholder relationships (Bear, Rahman, & Post, 2010).

2.3.3 Regulation and Bank performance

The primary objectives of regulatory oversight in the financial sector are to ensure accountability, transparency, and effective monitoring for the benefit of various stakeholders in the economy. Instances of widespread fraud, misconduct, moral hazard, and financial collapses—such as the Asian and US financial crises or the global recession—highlight the significant failures of governance mechanisms. These crises, often driven by negative investor psychology, underscore the inadequacies of existing regulatory frameworks. For example, Anwar (2009) argues that weaknesses in regulatory governance were a contributing factor to the US financial crisis. Despite the complexity and opacity of banks, there is limited understanding of whether laws and regulations effectively enhance bank governance (Caprio and Levine, 2007). From this viewpoint, regulations aimed at safeguarding investors might not be sufficient to robust enough corporate governance framework for minority shareholders. Small stakeholders, in particular, may have not enough resources to monitor and manage huge banks, even in the presence of strong investor protection regulations.

Caprio and Levine (2007) suggest that formal bank regulations can be designed to prevent bank insiders from misusing or appropriating bank resources. Effective regulation that promotes institutional shareholding could boost investor confidence and increase market values. This principle underpins the rules and standards established by central banks and other regulatory authorities, which aim to foster greater accountability, transparency, and oversight within the financial system. Depositors, for instance, rely on government intervention to protect their bank deposits from mismanagement. Since the government bears a significant portion of the moral hazard costs, it incentivizes individuals and businesses to deposit their funds in banks.

To mitigate risks associated with unethical behavior, financial oversight measures like mandatory reserves, restrictions on asset holdings, caps on interest rates, and the division between commercial banking, investment activities, and insurance services are enforced. These measures restrict bank managers from over-issuing liabilities or engaging in excessively risky activities. Given the distinct characteristics of the banking sector, government oversight and control are essential to prevent exploitative management practices. From this viewpoint, both owners and managers must adhere to regulatory rules. The government enforces various regulations to protect the interests of banks and limit managerial discretion. Capital adequacy ratio, legal reserve, and liquidity ratio were used for regulatory variables.

2.3.3.1 Bank performance and capital adequacy ratio

Capital adequacy refers to the overall level of bank capital and shields depositors from any unexpected losses that a bank may suffer. According to Javed and Tanzila (2009), it assists in mitigating significant financial risks such as credit, market, foreign exchange, interest rate, and risk associated with off-balance sheet operations. According to Umoh (1991), having enough capital is a crucial component of company, particularly when employing other people's funds, like in banking. Furthermore, it is specified that insured banks must have sufficient capital to guarantee depositor security and the depositor insurance system, as well as to act as a buffer for potential losses or to provide cash for operational demand and development.

There is no consensus between regulators and bankers on what constitutes an adequate level of capitalization. Regulators primarily focus on ensuring the stability of banking system. On the other hand, financial institutions tend to favor maintaining reduced capital reserves, as a limited equity foundation enables higher leverage. According to Rose (1999), by depending significantly

on borrowed funds and keeping shareholder investment minimal, even a bank with modest asset returns can generate a comparatively strong equity yield. On the issue of capital adequacy, Kidwell et al. (2000) highlight the differing priorities between regulators and banks. Regulators are primarily concerned with minimizing the risk of bank failures, while bank management aims to maximize long-term profits, often through high leverage. As a result, regulators advocate for higher capital requirements to ensure the safety and stability of banks.

The capital adequacy ratio (CAR) has frequently been used as a proxy for corporate governance in various studies. Researchers such as Tandelilin et al. (2007), Kwee and Rasiah (2010), and Ibrahim (2011) have employed CAR to represent corporate governance. They argue that central banks use CAR to assess the financial health of institutions, classifying them as either sound or weak, thereby helping to mitigate declines in bank performance. Additionally, CAR serves as an indicator of a bank's regulatory compliance, ensuring the protection and advancement of public interests. Banks with higher CAR values are considered more responsive to public concerns, while lower CAR values suggest reduced sensitivity to public interests (Tandelilin et al., 2007).

2.3.3.2 Legal reserve and bank performance

The reserve ratio is a key external government policy designed to curb excessive risk-taking by bank managers. Tandelilin et al. (2007) and Kwee and Rasiah (2010) have employed this factor as a proxy for corporate governance. Cash reserve ratio (CRR) sets the baseline amount of reserves that banks are required to hold against their total deposit liabilities, as mandated by the central bank. This policy serves two primary purposes. First, an increase in the reserve ratio can be adopted to limit the volume of loans that banks can, ensuring they have sufficient liquidity to meet unexpected cash withdrawal demands from depositors. Second, it aims to protect the public and optimize profitability by discouraging managers from engaging in unnecessary risks. For instance, financial institutions are required to maintain deposits in interest-earning accounts with the Federal Reserve. An elevated CRR decreases the funds accessible for loans, whereas a reduced CRR expands them. Given that loans represent the main income stream for commercial banks, and the CRR does not contribute to earnings, it adversely affects their financial performance.

2.3.3.3 Bank performance and liquidity

Another regulation implemented by the national bank of Ethiopia to safeguard bank stakeholders is the liquidity ratio. Commercial banks act as financial intermediaries by using funds obtained from depositors and investing them in various portfolio classes. However, this operational model comes with risks, as depositors may demand their funds back if banks face difficulties in meeting their obligations. The significance of liquidity for bank performance is debated, with two contrasting perspectives. The first view suggests that liquidity positively influences bank performance, arguing that sufficient liquidity enables banks to raise funds through rising liabilities or quickly converting assets at fair prices, thereby enhancing profitability.

Second perspective, however, contends that holding more liquid assets negatively affects profitability, as such assets typically generate lower returns compared to illiquid assets. Research results examining the link between liquidity and financial institution performance have shown mixed outcomes. For example, investigations by Molyneux and Thornton (1992) and Guru et al. (2002) revealed an inverse association between liquidity and bank earnings. On the other hand, Pasiouras and Kosmidou (2007) discovered a strong direct link between liquidity and profitability in banks. Meanwhile, Olokoyo (2011) observed no significant relationship between the two, underscoring the ongoing disagreement among studies.

2.3.4 Impact of depositors and bank performance

The deposit to asset ratio is used to gauge depositor influence, much like Tandelilin et al. (2007) did. A lower ratio value suggests that depositors are less supportive of investments, most likely as a result of their perception of increased risk. An additional corporate governance mechanism is the ability of private individuals, like depositors, to influence and control banks' risk behavior. Risky banks may need high deposit interest rates or allow depositors and creditors to withdraw their money. Banks will refrain from taking excessive risks and practice prudential management if they realize that deposit withdrawals or high funding costs pose a threat to their survival (Hosono 2007). This ratio displays the percentage of capital provided by the general public to finance the assets of the banks. A lower deposit to asset ratio (TDTA) statistic suggests that the public contributes less to the banks' operations. According to Tandelilin et al. (2007), the ratio thus serves as a useful stand-in for an external corporate governance mechanism.

The risk-return trade-off theory states that a corporation's return will increase as it takes on more debt to finance its assets. Numerous empirical findings lend support to this theory. When corporation taxes were in place, Modigliani and Miller (1993) recommended that businesses use as much loan capital as feasible to increase the interest tax shield and hence enhance their worth. In a similar vein, Ebiad (2009) suggests that there is a clear correlation between higher performance levels and larger amounts of debt in the capital structure of the company.

2.4 Empirical review

This part of the literature review seeks to summarize insights and evidence from earlier studies related to the subject being explored. Although investigations into how corporate governance practices influence firm performance in developing nations are scarce and frequently contain shortcomings (Joan et al., 2010), numerous researchers contend that the governing board serves as the key internal oversight structure in a company. They highlight its function in supervising executive decisions and enhancing the organization's overall effectiveness (Jensen, 1993; Hillman et al., 2000; Joan et al., 2010). Previous research examining the link between corporate governance mechanisms and financial outcomes has produced inconsistent findings. This part outlines significant empirical investigations in the field.

Ernst et al. (2003) offer insights into the connection between a firm's economic outcomes and the demographic variety within its governing body. Their research examined two years of financial data and the representation of women and minority groups on the boards of 127 U.S. companies. Using correlation and regression techniques, they discovered that diversity in the boardroom is positively linked to performance indicators like return on equity and return on assets.

Sanda et al. (2005) explored the relationship between corporate governance mechanisms and firm financial performance in Nigeria, using a sample of 93 firms listed on the Nigerian Stock Exchange from 1996 to 1999. They employed pooled ordinary least squares regression analysis, with performance measures including return on equity, price-earnings ratio, director shareholding, board size, outside directors, ownership concentration, and the CEO's role. Firm size and leverage were used as control variables. The study revealed that leverage, director shareholding, ownership concentration, and separating the roles of board chairman and CEO positively impact firm performance, while larger board sizes negatively affect performance.

Abu-Tapanjeh (2006) examined the link between corporate governance mechanisms and the operational and financial performance of 39 industrial companies listed on the Amman Stock Exchange in Jordan from 1992 to 2004. Independent variables included the percentage of outside directors, family members on the board, general manager duality, gear ratio, and firm size. Performance was measured using the net sales to operating cost ratio and dividend payout ratio. The study found that the proportion of outside directors, general manager duality, and firm size positively and significantly influenced performance.

Aljifri and Moustafa (2007) studied the impact of corporate governance measures on the performance of 51 listed companies in the United Arab Emirates using 2004 data. And they employed cross-sectional regression techniques to evaluate the impact of governance factors on outcomes, while accounting for company scale. The research revealed that institutional investors, board dimensions, organizational size, and audit categories had minimal effects on results. However, state ownership, leverage ratios, and dividend distribution rates significantly affected performance, as indicated by Tobin's Q.

Rose (2007) examined the influence of women's presence on boards on organizational outcomes by analyzing information from 443 firms listed on the Copenhagen Stock Exchange from 1998 to 2001. Performance was measured using Tobin's Q, while board diversity was assessed through the percentage of female directors, foreign directors, and members' educational backgrounds. Control variables included firm size, growth, ownership concentration, and board compensation. The study found no significant relationship between board diversity and performance, attributing this to the assimilation of unconventional board members into traditional majority views.

Bathula (2008) explored the relationship between board characteristics and firm performance using data from 156 companies listed on the New Zealand Stock Exchange from 2004 to 2007. Board size, director ownership, CEO duality, gender diversity, educational qualifications, and meeting frequency were examined, with firm size and age as controls. Return on assets was used to measure performance. The research revealed that the number of board members, combined CEO and chair roles, and gender variety were positively linked to outcomes, whereas director equity stakes, frequency of board sessions, and advanced academic credentials had adverse effects on results. Firm size and age had no significant effect.

Babatunde and Olaniran (2009) analyzed the impact of internal and external governance mechanisms on the performance of 62 Nigerian companies listed on the Nigerian Stock Exchange from 2002 to 2006. Using panel data regression, they found a positive correlation between Tobin's Q and board size, block shareholders, and leverage. However, outside directors, firm size, audit committee independence, and director shareholdings negatively correlated with performance. Similar results were observed when return on assets was used as the dependent variable. The study highlighted the importance of performance metrics in governance research, as results varied depending on the metric used.

Ibrahim et al. (2010) compared the impact of corporate governance on the chemical and pharmaceutical industries in Pakistan using data from five companies in each sector from 2005 up to 2009. They employed Multivariate linear regression approaches using panel data techniques, focusing on board size, independence, and ownership concentration. Corporate governance significantly impacted return on equity in both industries but had no effect on return on assets. Sector-wise analysis revealed a stronger impact on return on equity in the chemical industry compared to the pharmaceutical sector.

Aldamen et al. (2011) studied the relationship between audit committee attributes and firm performance during the global financial crisis using data from 120 companies listed on the S&P 300 in 2008 and 2009. They found that smaller, more experienced audit committees with financial expertise positively influenced market performance. However, longer tenure of audit committee chairs negatively affected accounting performance. Block holder representation, chairs with managerial experience, and members with external directorships positively impacted accounting performance.

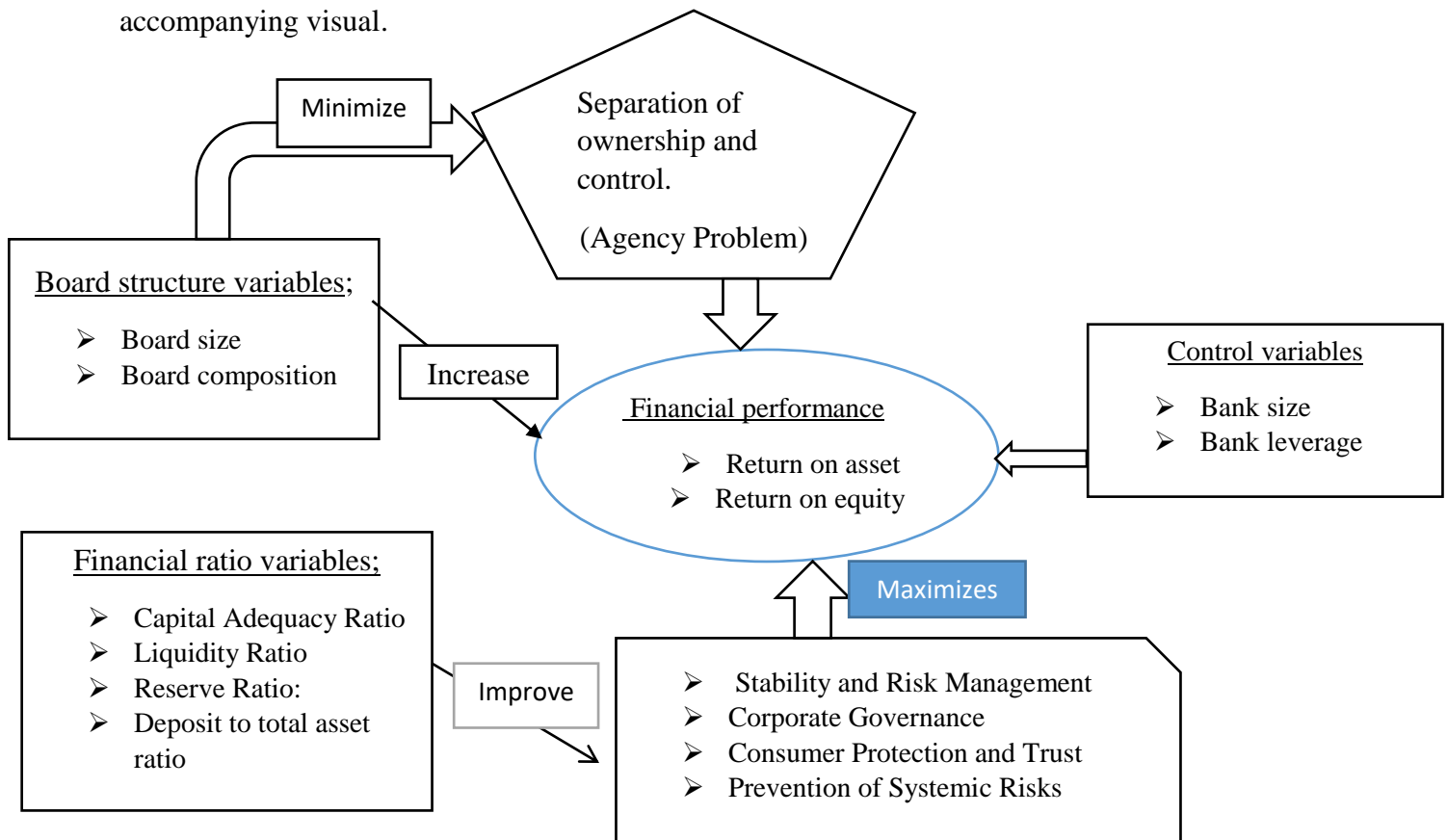
Adusei (2011) examined the relationship between board structure and bank performance in Ghana using pooled OLS regression on data from 17 out of 26 universal banks. Dependent variables included return on assets and cost-income ratio, while independent variables were board size and independence. Control variables included bank age, size, funds, ownership structure, and listing status. The study found that smaller boards improved profitability, while board independence had a negligible negative impact. Bank size showed no significant

correlation with performance, leading to a recommendation for smaller boards with limited independent directors.

Al-Manaseer et al. (2012) investigated the impact of corporate governance on the outcomes of 15 Jordanian banks traded on the Amman Stock Exchange between 2007 and 2009. Employing pooled OLS regression, they assessed board dimensions, structure, CEO role, foreign investment, and institution scale as predictors, with return on equity, return on assets, profit margin, and earnings per share as outcome measures. The research revealed an inverse relationship between board scale and performance indicators such as return on equity and earnings per share. Institution size negatively affected return on equity, return on assets, and profit margin, whereas foreign investment and board structure positively impacted results. The CEO's dual role had a detrimental influence.

2.5 Conceptual Framework

To examine the connection between corporate governance practices and the performance of bank in Ethiopia, a conceptual model was employed to depict how these elements interact. The proposed framework, adapted and refined from existing research, is presented in the accompanying visual.



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodologies that will be used in this research. It explains the techniques and procedures for gathering, processing, and analyzing data. In particular, it covers the data sources, study design and approach, study population and sample size determination, as well as the study variables, model specification, and methods for data analysis.

3.2 Research Design

The main aim of this research is to examine the impact of governance structures on the financial outcomes of banks. To achieve this objective, an explanatory research approach was employed. This methodology is effective for exploring and evaluating cause-and-effect connections among the variables under investigation (Marczyk et al., 2005).

According to Gujarati, (2004) a panel data research framework, combining aspects of both cross-sectional and time-series datasets, was applied. A significant advantage of this approach is its ability to deliver more accurate parameter estimates for the model.

3.3 Sources of Data

The information for this research was mainly obtained from the banking supervision department of the National Bank of Ethiopia (NBE) and the verified yearly financial statements of specific commercial banks. The NBE, responsible for regulating all commercial banks in the nation and preserving their audited financial records, evaluates the banking industry's performance by monitoring key financial metrics.

The variables examined in this research were chosen according to both professional judgment and empirical evidence. The dataset was obtained from the National Bank of Ethiopia and the audited financial reports of the sampled banks.

3.4 Sampling design

In Ethiopia, the financial sector is categorized into two main groups based on ownership: state-owned financial corporations and privately owned financial corporations. State-owned financial corporations are government-owned, while privately owned financial corporations are owned by

individuals or private entities. Privately owned financial corporations can be further divided into two types: depository financial corporations and non-depository financial corporations. Depository corporations include banks, which accept customer deposits and provide financial services such as loans and investments. Non-depository institutions, on the other hand, include insurance companies that offer insurance products and services to individuals and businesses. This research primarily focuses on depository financial corporations, specifically banks.

The research population consists of all 32 banks functioning in Ethiopia. A targeted sampling method was employed to choose sample commercial banks. Institutions with comprehensive financial records for the analysis timeframe were incorporated into the sample, considering their operational history and data accessibility throughout the study duration. The selected banks includes Awash Banks, Dashen Banks, Wegagen banks, Bank of Abyssinia, United bank, Nib international bank, Lion international Bank, Zemen Bank, Oromiya bank ,Corporative bank of Oromiya.

3.5 Variables description

In this study, the variables were selected by evaluating different theoretical perspectives and earlier empirical investigations on governance and organizational outcomes. Informed by these frameworks and research results, the analysis determined its predictors and outcome measures to explore the impact of governance structures on the economic performance of financial institutions.

Dependent variables

The dependent variables are those utilized to assess the financial performance of the sampled commercial banks. To evaluate financial performance, the study will employ the most commonly used profitability metrics, specifically accounting-based measures of profitability, as supported by prior research (Erhardt, 2003; Abu-Tapajeh, 2006; Bathula, 2008; Ibrahim, 2010).

Return on Assets (ROA) - This metric evaluates the overall effectiveness of management by indicating how efficiently management utilizes the company's assets to generate profits.

$$ROA = \textit{Profit After Tax / Total Asset}$$

Return on Equity (ROE) - This metric assesses a profitability of a firm by indicating the amount of profit generated from the funds invested by shareholders. It reflects how effectively the shareholders' capital is managed and utilized to produce returns.

$$\text{ROE} = \text{Profit after Tax} / \text{Total Equity}$$

Independent variables

The independent variables are those chosen to analyze the impact of corporate governance characteristics on the financial performance of banks. The study's independent variables include board size, board gender diversity, audit committee size, bank size, loan-to-deposit ratio, and reserve ratio. The definitions and measurement methods for these variables are outlined below:

Board size - This pertains to the overall count of directors on the board. Agency theory suggests that limiting the number of board members can improve financial outcomes, as the benefits of increased size are frequently overshadowed by challenges like ineffective communication and slower decision-making processes in overly large boards. Earlier studies have consistently found an inverse correlation between the number of directors and performance (Jensen, 2003; Sanda, 2005; Aduesi, 2011; Al-Manaseer, 2012). In this research, a larger board is expected to adversely affect performance.

Board gender diversity -This metric is calculated as the ratio of female directors to the total count of board members. Since boards vary in size, employing a proportional measure provides a more accurate and standardized comparison, justifying the use of percentages. Gender diversity within boards is thought to improve organizational outcomes by bringing innovative ideas and varied perspectives (Bathula, 2008; Erhardt et al., 2003). The inclusion of women introduces unique viewpoints to decision-making processes, which might otherwise be absent in male-dominated boards.

Regulations

Bank regulation represents the existence of interests that diverge from the private objectives of the firm. Regulation serves as a governing tool aimed at protecting the public interest, particularly that of financial service consumers. Because of these conflicting interests, regulators

do not have a contractual relationship with the principals of the enterprise or with financial institutions (Ciancanelli and Gonzales, 2000). The established laws and guidelines emphasize the critical function of bank supervisors and regulators in the corporate governance framework. These rules encompass provisions like reserve mandates and capital adequacy criteria. In Ethiopia, the National Bank of Ethiopia (NBE) serves as the principal authority tasked with monitoring the governance structures and operational activities of commercial banks. As outlined in Proclamation No. 592/2008 of FDRE (2008), the NBE holds the authority to oversee and regulate other banks by issuing essential directives. A key regulatory approach employed by the NBE involves evaluating various financial metrics of individual banks. In this research, three indicators were utilized as proxies for regulation. They include:

A) Capital Adequacy Ratio (CAR). The Capital Adequacy Ratio, or CAR, is calculated by dividing a bank's capital by its risk-weighted average assets. CAR includes both primary and secondary capital. Both the Basel Accord and NBE's Directive No. SBB/24/99 mandate that banks maintain a minimum CAR of 8%. The CAR value reflects a bank's adherence to regulatory standards, which are designed to serve and protect the public interest. A higher CAR indicates that a bank is more aligned with the public interest. According to Konishi and Yasuda (2004), commercial banks tend to take on less risk when capital adequacy regulations are enforced. As a result, this ratio, calculated as described, serves as an effective proxy for implementing robust corporate governance mechanisms:

$$\text{Total Capital / Total Risk Weighted Asset} = \text{CAR}$$

B) Legal reserve. The total reserve ratio is another indicator for central bank regulation that this study uses. Each bank's total reserve is divided by its total assets to arrive at this ratio. Legal reserves are mandatory reserves that banks must hold against their deposit liabilities. These reserves ensure that banks have sufficient liquidity to meet withdrawal demands. Studies indicate that higher legal reserves can reduce profitability in the short term but lead to greater financial stability and improved performance (measured by ROA and ROE) in the long term by reducing risk (Acharya et al., 2020).

C) Liquidity ratio. Liquidity ratio is another instrument that NBE uses as a governance mechanism. And the following formula is used to determine liquidity for this study:

Liquid asset/Total asset = Liquidity ratio

Depositors' influence. Market discipline, which refers to the ability of private individuals to influence bank risk-taking, is one of the many regulatory mechanisms gaining increasing attention from economists and policymakers (Tandelilin et al., 2007). Depositors (and creditors) may either demand higher interest rates from riskier banks or withdraw their funds altogether. Banks are likely to avoid excessive risk-taking and adopt prudent management practices if they recognize that deposit withdrawals or increased funding costs could threaten their survival (Hosono, 2007). This variable is measured using the deposit-to-asset ratio, consistent with the approach used by Tandelilin et al. (2007).

TDTA = Total deposit/Total asset

Control variables. To assess the influence of the selected explanatory factors on banks' financial performance, this study incorporates two bank-specific control variables to account for their potential effects. The chosen control variables are bank size and bank leverage. The selection of these control variables is based on prior research, as firm size and leverage have been widely used as control variables in previous studies (Habbash, 2010; Aljifri & Moustafa, 2007; Al-Hawary, 2011).

Bank size: This is measured using the natural logarithm of the bank's total assets at the end of the year.

Bank leverage: This is calculated by dividing the total debt by the total equity capital.

.Table 3.5.1 Summary for terms of measurement

variables	Description	Measure	Expected sign
ROA	Return on asset	Profit after tax expressed as a percentage of total assets.	N/A
ROE	Return on equity	Profit after tax represented as a percentage of total equity.	N/A
BS	Board size	Total number of directors serving on the board of directors	-

BGD	Board gender composition	The percentage of number of female directors divided by the total number of board members	+
LIQR	Liquidity ratio	Percentage/ratio of liquid asset to total asset	-
CAR	Capital adequacy ratio	Ratio of total capital to total risk-weighted assets, expressed as a percentage.	+
TDTA	Total deposit to total asset ratio	Ratio of total deposits to total assets, expressed as a percentage.	+
RES	Reserve ratio	Ratio of total reserve to total asset	-
BZ	Bank size	Log of total asset	+
LEVE	Leverage	Percentage/ratio of total debt to total equity	+

Table 1 summary for terms of measurement

3.6 Data Analysis method

To examine the information gathered for this research, both descriptive statistics and econometric approaches are utilized. Descriptive methods are applied to summarize and describe the dataset by computing metrics such as averages, variability, lowest, and highest values. Furthermore, econometric techniques are employed to analyze the panel data and estimate the model. The selected analytical approach focuses on panel data regression methods. A significant benefit of panel data is its capacity to address unobserved, time-invariant individual differences, which, if ignored, might introduce bias in conventional estimators such as OLS.

3.7 Regression Analysis

To evaluate the impact of corporate governance mechanisms on the financial outcomes of the banks, most of prior empirical research like Bhagat, S., & Bolton, B. (2008) and Adams, R. B., & Mehran, H. (2012) used the following general empirical model.

$$Y_{it} = \beta_0 + \sum \beta_k X_{it} + \epsilon_i$$

The specified models, based on the chosen variables, are outlined as follows.

$$ROA_{it} = \beta_0 + \beta_1 BS_{it} + \beta_2 BGD_{it} + \beta_3 RES_{it} + \beta_4 LIQR_{it} + \beta_5 CAR_{it} + \beta_6 TDTA_{it} + \beta_7 BZ_{it} + \beta_8 LEVE_{it} + \epsilon_{it} \dots \dots \dots \text{Model_1}$$

$$ROE_{it} = \beta_0 + \beta_1 BS_{it} + \beta_2 BGD_{it} + \beta_3 RES_{it} + \beta_4 LIQR_{it} + \beta_5 CAR_{it} + \beta_6 TDTA_{it} + \beta_7 BZ_{it} + \beta_8 LEVE_{it} + \epsilon_{it} \dots \dots \dots \text{model_2}$$

Where β 's are coefficients

- **ROA** represents Return on Assets, and **ROE** represents Return on Equity for bank *i* during time period *t*.
- **BS_{it}** denotes Board Size for the *ith* bank during time period *t*.
- **BGD_{it}** represents the proportion of Female Directors on the board for the *ith* bank during time period *t*.
- **RES_{it}** indicates the Reserve Ratio for the *ith* bank during time period *t*.
- **LIQR_{it}** refers to the Liquidity Ratio for the *ith* bank during time period *t*.
- **CAR_{it}** signifies the Capital Adequacy Ratio for the *ith* bank during time period *t*.
- **TDTA_{it}** represents the Total Deposit to Total Asset Ratio for the *ith* bank during time period *t*.
- **BZ_{it}** denotes Bank Size for the *ith* bank during time period *t*.
- **LEVE_{it}** indicates Leverage for the *ith* bank during time period *t*.

In this equation, β_0 denotes the intercept, while ϵ_{it} signifies the residual for observation *i* at time *t*, with *i* indicating banks from 1 to 10 (cross-sectional dimension).

3.8 Model Diagnostic tests

The research employed the following diagnostic checks to evaluate the model's stability and reliability:

1. **Panel Unit Roots Test:** Time series data frequently exhibit non-stationarity, and using such variables can result in unreliable regression findings. To verify stationarity and identify unit roots within the time series, the research performed a panel unit root test, preventing misleading regression results.
2. **Test for Heteroskedasticity:** To assess heteroskedasticity in the model, the research employed a modified Wald test for group-wise heteroskedasticity. This test examines the null hypothesis of constant error variance (homoscedasticity) versus the alternative hypothesis of non-constant error variance (heteroskedasticity).
3. **Test for Autocorrelation:** The models used in this study were examined to determine whether the errors were linearly independent (uncorrelated). Correlation among error terms could lead to estimation biases and autocorrelation issues. The presence or absence of autocorrelation was assessed using the Durbin-Watson test and the Breusch-Godfrey LM test for autocorrelation.
4. **Test for Normality:** Reliable regression models rely on the assumption that residuals are normally distributed. This research examined the premise that the error term adheres to a normal distribution, characterized by a mean of 0 and a consistent standard deviation. The skewness/kurtosis test was used to confirm the normality of the error term's distribution.
5. **Test for Multicollinearity:** To assess the independence of the explanatory variables and detect potential Multicollinearity problems, the research employed a correlation matrix of independent variables and performed a variance inflation factor (VIF) test on the regression model.
6. **Test for Cross-Sectional Dependency:** The research also examined cross-sectional dependence within fixed-effects panel data models, questioning the typical assumption that error terms are uncorrelated across entities. To identify potential correlations in the residuals, the study utilized the Pesaran Cross-Sectional Dependence test.

CHAPTER FOUR

4 Results and Discussion

This chapter outlines the study's results, structured into three parts. The first part provides an overview of the descriptive statistics for both dependent and independent variables. The second part examines the diagnostic tests conducted on the variables. The third part presents and interprets the findings from the analysis.

4.1. Descriptive Statistics

This section presents the descriptive statistics for the dependent variables, Return on Equity (ROE) and Return on Assets (ROA), along with the explanatory variables. These include board size (BS), board gender diversity (BGD), reserve ratio (RES), total deposit to total asset ratio (TDTA), capital adequacy ratio (CAR), and liquidity ratio (LIQR).

The table below summarizes the mean, median, maximum, minimum, and standard deviation of both the dependent and independent variables for the period from 2010 to 2023.

Table 4.1. Descriptive statistics of variables

Variables	Obs	Mean	Std. Dev.	Min	Max
Return on Asset	126	0.027	0.009	.002	.052
Return on Equity	126	0.219	0.058	.103	.367
Reserve Ratio	126	0.060	0.085	.011	.560
Liquidity Ratio	126	0.215	0.068	.017	.367
Capital Adequacy Ratio	126	0.188	0.075	.081	.399
Total Deposit to Total asset	126	0.771	0.069	.539	.918
Bank size	126	10.251	0.488	9.194	11.350
Board size	126	9.563	1.612	7	12
Proportion of female board Member	126	0.193	0.084	0	0.375
Debt to equity capital ratio	126	6.784	1.570	2.449	11.704

Based on the descriptive statistics in Table 4.1, the Return on Assets (ROA) reveals that Ethiopian banks have achieved an average after-tax profit of 2.7% over the past 14 years. This

means that, on average, banks earned 2.7 cents for every birr invested in assets. The top-performing bank in the sample generated 5 cents for every birr invested, while the least profitable bank earned only 2 cents. Furthermore, the standard deviation suggests minimal variation in performance among the sampled banks, indicating relatively consistent profitability levels across the sector.

Figure 4.1 Trend of return on Asset during the sample period

Sources financial report of each banks and own computation

The figure illustrates the performance trend of Ethiopian private commercial banks, measured by return on assets, on average, the highest performance was observed in 2014, while the lowest occurred in the 2021 fiscal year. Additionally, following 2016, the performance showed a consistent year-on-year decline, except 2020 and 2023.

In terms of board characteristics, the average board size for the banks is approximately 9.563 members, ranging from a minimum of 7 to a maximum of 12 members, with a standard deviation of 1.612%, suggesting moderate variation in board size. When we look the trend from figure 4.2, there is no consistency, for instance from 2010 up to 2012 there is improvement, and then it was decrease. As a result, we cannot infer whether the size of the board increase or decrease consistently.

Figure 4.2 Trend of board size during the sample period

Sources data collected from each banks annual report

Regarding to board gender composition, on average, 19.3% (mean = 0.192) of the directors are female, reflecting limited gender diversity, with female representation ranging from 0% to 37.5% and a standard deviation of 8.4%. Figure 4.3, shows that the proportion of female directors is higher in 2015 compared with the other years.

Figure 4.3 Trend of board gender composition during the sample period

Sources data collected from each banks annual report

The sample banks exhibited an average Capital Adequacy Ratio (CAR) of 18.88%, which is substantially higher than the minimum CAR requirements set by the Basel Accord and the

National Bank of Ethiopia (NBE). While maintaining a higher CAR reflects a greater level of public confidence, banks with excess capital relative to their target show a strong negative correlation between capital and profitability. Both the Basel Accord and NBE regulations mandate a minimum CAR of 8%, yet Ethiopian banks have consistently maintained an average CAR of 18.88% over the past fourteen years. This significant surplus could adversely affect the banks' profitability.

Figure 4.4 Trend of capital adequacy ratio during the sample period

Sources financial report of each banks and own computation

Figure 4.4, indicates that banks maintained a significantly higher Capital Adequacy Ratio (CAR) in 2013, but it decreased substantially by 2022. From 2017 onwards, the CAR declined gradually, yet the sample banks consistently maintained an average above 10% each year. The trend suggests that Ethiopian banks are highly responsive to public interest, but it also reveals that they hold an excessive amount of CAR, which negatively impacts their profitability.

In terms of the reserve ratio, Ethiopian banks held an average of 6% of their assets as reserves with the NBE during the study period. The highest recorded value of 0.56 indicates that one bank retained 56% of its assets as reserves at the central bank. Figure 4.5, indicates that in 2015 the sample banks contain a higher reserve in national bank of Ethiopia compared with others. However, from 2011 up to 2014, the banks contain a lower reserve compared with other years.

Figure 4.5 Trend of reserve ratio during the sample period

Sources financial report of each banks and own computation

Regarding to depositor influence, on average, 77.1% of the assets of the Ethiopian sample banks are financed by deposits over the specified time period. Additionally, the pattern from the data demonstrates that bank deposit mobilization has been steadily rising. Two things are implied by this tendency. First, increased deposit raising capacity is an indication of better corporate governance because deposit mobilization is a major component of bank operations. Furthermore, by utilizing deposits to finance the majority of their assets, depositors were able to control bank managers' actions by taking their money out of riskier banks and putting it in less risky ones. Second, banks that use more deposits to support their assets may put depositors in a riskier situation since there is a greater likelihood that they will lose a lot of money if the banks experience unexpected crashes. However, if banks experience a sudden shock, depositors will only have to deal with a minimum amount of disaster because the regulation offers many backups, such as CAR, liquidity ratio, and reserve on NBE. Figure 4.6, Trend of total deposit to total asset ratio, reveals a gradual upward trend in bank deposit mobilization between 2010 and 2018.

In terms of liquidity, Ethiopian banks typically allocate 21.5% of their funds to liquid assets, which is more than the 15% legal minimum. About 5.6% of the 21.5% total liquidity ratio is held at NBE as a settlement, payment, and deposit reserve account. Approximately 15.9% of the remaining sum is allocated to other liquid assets. As depicted in the above Figure, Ethiopian

banks, on average, invested more than 20% of their capital in liquid assets across all the years covered in the survey. This demonstrates two things. First, Ethiopian banks typically keep liquid assets above the 15% statutory limit in all sample years, which is a positive indication of strong corporate governance. However, the sample banks' average reserve ratio was far lower than the regulation's minimum requirement. In the latter scenario, maintaining a higher level of liquid assets may lower commercial banks' profitability due to their low returns in comparison to other assets.

Figure 4.7 Trend of liquidity ratio during sample period

Sources: financial report of each bank and own computation

4.2. Correlation analysis

The relationship between two variables is measured by the extent of their linear association. To evaluate these relationships, the Pearson product-moment correlation coefficient was employed. This coefficient ranges from +1 to -1, where +1 represents a perfect positive correlation, -1 indicates a perfect negative correlation, and a value of zero suggests no association between the variables (Brooks, 2008).

Table 4.2.1. Correlation matrix of dependent and independent variables

Pairwise correlations										
Variables	ROA	ROE	RES	LIQR	CAR	TDTA	BZ	BS	BGD	LEVE
ROA	1.000									
ROE	0.657	1.000								
RES	0.037	0.068	1.000							
LIQR	0.694	0.8749	0.083	1.000						

CAR	0.261	-0.114	-0.083	-0.034	1.000					
TDTA	-0.229	-0.015	-0.099	0.030	-0.361	1.000				
BZ	-0.305	-0.052	0.103	-0.007	-0.497	0.3576	1.000			
BS	0.029	0.0008	-0.034	0.033	0.116	-0.021	-0.023	1.000		
BGD	0.043	0.044	-0.043	0.053	-0.127	-0.001	0.013	-0.144	1.000	
LEVE	-0.319	0.279	0.059	0.270	-0.060	0.0245	0.042	-0.063	0.062	1.000

The correlation results presented in Table 4.2.1 reveal that board gender diversity, liquidity ratio, capital adequacy ratio, board size, and reserve ratio exhibit a positive correlation with the dependent variable ROA. On the other hand, the ratio of deposits to assets and leverage has an inverse relationship with Return on Assets (ROA). Additionally, a negative relationship is observed between the capital adequacy ratio and deposit-to-total asset ratio with ROE. On the other hand, board gender diversity (BGDT), reserve ratio, and liquidity ratio demonstrate a positive correlation with ROE. The remaining variables do not display strong correlations with one another.

4.3. Regression Analysis: Results and Discussion

This segment presents the results derived from regression analysis, accompanied by insights from preliminary assessments like correlation studies and subsequent diagnostic checks on the model. These checks encompass examinations for panel unit roots, Multicollinearity, autocorrelation, normality, heteroscedasticity, and cross-sectional dependency.

4.3.1 Panel unit root tests

The research utilized panel unit root examinations to assess whether the dataset exhibited stationarity or contained unit roots, as non-stationarity might result in inconsistent regression outcomes. In particular, the Fisher-type method was applied for this analysis, aiming to confirm that the information was stationary either in its original form or after first differencing. In this study, the ADF-Fisher panel unit root test, which is well-suited for panel data, was applied. This test uses chi-square test statistics, assumes independent unit root processes across units, and removes higher-order autoregressive components by employing a selected lag of 1.

Table 4.2.2. Results of panel unit root test

Variables	The ADF test statistic (inverse chi-squared value) was calculated for the variables in their level form.	The ADF test statistic (inverse chi-squared value) was calculated for the variables in their first difference form
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ROA	36.8541**	
ROE	49.1225***	
RES	82.3614***	
LIQR	30.1265*	
CAR	62.3322***	
TDTA	107.7378***	
BZ	27.8785*	
BS	145.2731***	
BGD	205.5385***	
LEVE	27.1097	69.6191***

***, **, * indicate significant at 1%, 5% and 10% level respectively.

At the 1% significance, the null hypothesis is rejected, as evidenced by the p-values displayed in parentheses within the table. This hypothesis for the panel unit root test presumes non-stationarity. For every variable, the likelihood that the Augmented Dickey-Fuller (ADF) Fisher Chi-square statistic will be significant at the 1%, 5%, and 10% can be presented in either level or first difference format. This demonstrates that the variables are stationary and refutes the assumption that they possess a unit root.

4.3. Regression model tests.

Evaluations for suitability, underlying conditions, and the adequacy of the regression framework are crucial for conducting valid hypothesis testing and ensuring the accuracy of regression results. To achieve this, the study employs various techniques to choose between models such as random effects, fixed effects, or others. Additionally, several key regression diagnostic tests are conducted, including tests for normality, Multicollinearity, heteroskedasticity, autocorrelation, and model specification.

4.3.1. Model selection

According to Brooks (2008), panel data analysis in finance primarily relies on two estimator methods: fixed and random effects models. To choose between these models, the Hausman test is applied. The null hypothesis of the test suggests that the random effects model is appropriate, whereas the alternative hypothesis supports the use of the fixed effects model. But as we observe from the trend across the years in corporate governance variables above the fixed effect ignored because corporate governance indicators have been shown to be time invariant (Gompers et al,

2003; Core et al, 2005; and Johnson et al, 2008). Therefore, the study employed the random effect model.

4.4. Model Estimation

This section outlines the findings from the random effects regression model. The estimated beta coefficients reveal the magnitude and direction (positive or negative) of each variable's influence on the dependent variable. The R-squared values measure the model's ability to account for variations in the dependent variable.

Panel Regression Result on Corporate Governance and Firm Performance

Random effect for model 1 and model 2			
	ROA		ROE
Variables	Coefficients	Variables	Coefficients
RES	-0.00185 (-0.40)	RES	-0.0104 (-0.35)
LIQR	0.112*** (18.74)	LIQR	0.745*** (19.13)
CAR	-0.0168* (-2.39)	CAR	-0.119** (-2.60)
TDTA	-0.0184** (-3.00)	TDTA	-0.0560 (-1.40)
BZ	-0.00137 (-1.45)	BZ	-0.0121* (-1.95)
BS	-0.000122 (-0.51)	BS	-0.000634 (-0.40)
BGD	0.00125** (0.27)	BGD	-0.0167 (-0.55)
LEVE	-0.00326*** (-9.88)	LEVE	0.000369 (0.17)
Constant	0.0585*** (5.48)	Constant	0.256*** (3.69)
R-square	0.826	R-square	0.668
Adjusted R-squared	0.776	Adjusted R-squared	0.551
DW	1.965	DW	1.70
F- Statistics	0.0000	F- Statistics	0.0000

Modified Wald Test (Heteroskedasticity): p-value; model 1= 0.4677, model 2= 0.4981

Wooldridge Autocorrelation Test: p-value ; model 1 =0.4682, model 2 =0.1173

The skewness/kurtosis test for residuals: joint P-value model 1=0.3615, Model 2=0.1173

Pesaran CD (Cross-section): p value model 1 = 0.0816, model 2=0.0674

Max VIF: 1.759

***. **, * indicate significance at 1%, 5% and 10% level respectively

For model 1, the model's reliability is reinforced by the above regression outcomes, with the F-statistic—assessing its capacity to dismiss the null hypothesis that all predictors are insignificant—showing strong significance at the 1% level. The R-square 82.6% in this framework indicates how well the predictors account for fluctuations in individual banks' financial performance across periods, capturing intra-unit changes in the dependent variable. Liquidity ratio, Total deposit to total asset, capital adequacy ratio, board gender composition and leverage ratio were significant at different significance level.

For model 2, the regression outcomes suggest the model is reliable, with the F-statistic showing strong significance at the 1% level of significance, firmly rejecting the null hypothesis that all predictors are irrelevant. The R-square 66.8% measures the framework's capacity to account for fluctuations in the dependent variable.

4.5 Discussion on the implication of results

This section examines and explains the outcomes derived from the random effect panel regression used for both frameworks. It links these insights to the empirical studies discussed in Chapter Two, providing a contextual basis for interpreting how corporate governance practices influence financial performance indicators.

Board size and banks performance

The effect of board size on bank performance was not statistically significant. The regression results for this variable do not align with agency or stakeholder theories, which suggest that larger boards are less efficient in coordination, making them more susceptible to CEO influence and allowing managers to prioritize their own interests over those of other stakeholders. In contrast, resource dependency theory favors larger boards, arguing that more directors can enhance access to critical resources and connections. Although the findings contradict these

theories, they are consistent with the studies by Ibraheem (2011) and Getahun (2013). A possible explanation is that the administrative costs associated with additional board members (such as director fees and commissions) may be offset by their contributions, including resource networks, innovative ideas, and added expertise.

Board gender Composition and banks performance

Findings reveal a positive relationship between board gender diversity (BGD) and bank financial performance, with a statistically significant impact (at the 5% level) on Return on Assets (ROA). The study demonstrates that a greater representation of female directors is associated with enhanced financial outcomes, particularly in ROA. This suggests that women contribute to more effective board governance, thereby improving organizational performance through multiple pathways. Some of the key Mechanisms Explaining the Positive Impact, a) Broader Perspectives & Enhanced Decision-Making – Female directors introduce diverse viewpoints, mitigating groupthink and encouraging more comprehensive deliberations. This results in more informed risk evaluation and strategic choices, critical in the banking sector; b) Stronger Governance & Risk Management – Research indicates that women often adopt a more cautious and meticulous approach, leading to stricter oversight and reduced reckless risk-taking, thereby bolstering financial stability; c) Increased Stakeholder Confidence & ESG Appeal – Gender-balanced boards reflect inclusive leadership, strengthening the bank’s reputation and appealing to socially conscious investors focused on ESG criteria; d) Innovation & Talent Attraction – A gender-inclusive culture not only draws top-tier talent but also fosters creativity, a competitive advantage in the dynamic banking industry. These findings align with existing literature (e.g., Bathula, 2008; Erhardt et al., 2003; Ferede, 2013), reinforcing the argument that female directors enhance board decision-making and overall firm performance.

Capital adequacy ratio and banks performance

The research revealed an unexpected negative and statistically significant association between the capital adequacy ratios (CAR)—calculated as equity divided by total risk-weighted assets—and bank performance. This outcome contradicts conventional assumptions that higher capital levels should improve performance by minimizing financial distress costs, such as bankruptcy risks. Rather, the results support the risk-return trade-off principle, which suggests that increased

equity (lower leverage) tends to reduce expected returns, as debt financing often offers cost advantages due to tax benefits and market inefficiencies, as noted by Modigliani and Miller (1958). The inverse relationship between CAR and return on equity (ROE) may also stem from Ethiopian banks maintaining capital reserves exceeding regulatory requirements, such as those imposed by the National Bank of Ethiopia (NBE) and the BASEL Accord. Osborn (2011) corroborates this observation, noting that banks with capital surpluses relative to their targets frequently exhibit a strong negative correlation between capital and profitability. This implies that holding excess capital can be inefficient, eroding returns. In conclusion, the findings suggest that Ethiopian banks may be operating with unnecessarily high capital buffers, which could adversely affect their profitability. These results are consistent with Tandelilin et al. (2007), who similarly identified a negative link between capital adequacy and performance. Consequently, the study refutes the hypothesis that CAR positively influences bank performance, indicating instead that overly conservative capital holdings may undermine profitability in Ethiopia's banking sector.

Reserve ratio and banks performance

The study found that legal reserves (measured as total reserves divided by total assets) have no significant effect on the profitability of Ethiopian banks. In other words, reserve requirements appear to have minimal influence on bank performance in the Ethiopian context. According to liquidity preference theory, banks maintain reserves to satisfy short-term liquidity needs and regulatory obligations. While higher reserves enhance liquidity protection, they typically yield low or no interest, potentially reducing profitability. Conversely, lower reserves might boost returns but increase vulnerability to liquidity crises. The trade-off theory between liquidity and profitability further suggests that banks must balance holding reserves for safety against investing in income-generating assets. Greater reserves lower insolvency risk but constrain profit opportunities, while fewer reserves may improve return on assets (ROA) but raise liquidity risks. However, the empirical results of this study conflict with both theoretical perspectives. The findings neither support the presumed relationship between reserves and profitability nor confirm the initial hypothesis about their significant connection. This suggests that in the Ethiopian banking sector, reserve levels may operate independently of profitability considerations.

Liquidity ratio and banks performance

The study reveals that liquidity levels, calculated as liquid assets divided by total assets, have a significant positive effect on Ethiopian banks' profitability, as evidenced by both ROA and ROE measures. This finding presents two contrasting theoretical viewpoints on liquidity's role in banking performance. The first perspective maintains that liquid assets diminish profitability due to their relatively low returns, creating an opportunity cost when funds could be invested in higher-yielding alternatives. The opposing view, grounded in bankruptcy cost theory, posits that greater liquidity enhances financial stability, reduces default risk, and consequently lowers capital costs while increasing investor confidence. Contrary to the first perspective, this study's empirical results demonstrate that the benefits of maintaining liquidity - including regulatory compliance, financial shock absorption, and stability assurance - appear to exceed the potential gains from more profitable but riskier investments. These findings corroborate Amdemikael (2012) research, suggesting that while liquid assets may offer lower returns, their role in risk mitigation and financial soundness ultimately contributes positively to overall bank performance. The results imply that for Ethiopian banks, the protective advantages of liquidity provision outweigh the opportunity costs of holding lower-yielding assets, highlighting the importance of adequate liquidity buffers in maintaining sustainable profitability.

Deposit to asset ratio and banks performance

The study employed the deposit-to-total-asset ratio as an indicator of depositors' ability to affect managerial risk decisions through deposit adjustments. Contrary to theoretical expectations, results revealed a statistically significant negative relationship (at the 1% level) between this ratio and return on assets (ROA). While this confirms depositors' capacity to influence bank management, the inverse correlation challenges conventional risk-return theory, which suggests that greater reliance on deposit financing should enhance bank performance through increased income generation. These findings present an interesting paradox: although depositors appear to exercise market discipline as predicted by agency theory, their influence doesn't translate into improved profitability as expected. This may indicate either suboptimal utilization of deposit funds by Ethiopian banks or difficulties in achieving the right balance between depositor pressure and prudent risk management. The results underscore the nuanced interplay between deposit financing and bank performance, pointing to potential inefficiencies in deposit allocation or risk management practices within Ethiopia's banking sector. This unexpected outcome

warrants deeper investigation into how banks might more effectively harness their deposit base to drive better financial results while maintaining appropriate risk levels.

Bank size and banks performance

The study's results align with existing literature demonstrating an inverse relationship between bank size and performance (Sanda et al., 2005; Babatunde and Olaniran, 2009; Amran, 2011; Al-Manaseer et al., 2012). Notably, Al-Manaseer et al. (2012) reported a statistically significant negative impact on return on equity (ROE), while the effect on return on assets (ROA) was negative but not statistically significant. While conventional wisdom suggests that larger institutions should benefit from economies of scale and scope, these potential advantages appear to be counterbalanced by growing agency issues and operational inefficiencies as banks expand. The challenges of effectively overseeing increasingly complex operations may contribute to diminished performance outcomes. The research indicates that although Ethiopian banks possess the theoretical capacity to translate size into improved financial results, they currently fail to realize these benefits. This performance gap likely stems from difficulties in managing larger asset portfolios or suboptimal resource deployment strategies. The findings underscore that mere asset growth does not automatically translate to enhanced performance without corresponding improvements in operational efficiency. Consequently, Ethiopian banks should prioritize strengthening their governance frameworks and operational effectiveness to better harness the advantages of scale.

Bank leverage and banks performance

The findings reveal that increased leverage negatively impacts bank performance, as measured by Return on Assets (ROA), suggesting that lower debt levels correspond with improved financial results. Banks with higher debt-to-equity ratios tend to demonstrate weaker performance compared to their less leveraged counterparts. This outcome stands in contrast to agency theory, which posits that debt financing serves as a disciplinary tool, limiting managerial misuse of excess cash flows and potentially enhancing operational efficiency. Instead, the study's conclusions align with prior research conducted by Khatab et al. (2011), Sanda et al. (2005), and Babatunde and Olaniran (2009), reinforcing the observed inverse relationship between leverage and bank performance.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

Based on the study this chapter provides a summary, conclusions, and recommendations. The main goal of the study was to examine the impact of corporate governance practices on the performance of Ethiopian banks. The study analyzed various factors, including board characteristics and financial ratio proxies, to assess their influence on key performance metrics such as return on assets (ROA) and return on equity (ROE). The findings offer insights into the relationship between governance mechanisms and bank performance, highlighting areas of significance and potential improvement. Additionally, recommendations for future research are provided to address gaps and further explore the dynamics of corporate governance in the banking sector.

5.2. Summary of Findings

The primary aim of this study was to empirically investigate how corporate governance mechanisms influence the financial performance of commercial banks in Ethiopia. To address this, data on governance-related factors and firm performance metrics were gathered. Utilizing balanced panel data, the analysis focused on a sample of 10 banks that had been operational for a minimum of fourteen years, spanning the period from 2010 to 2023. This methodology enabled a thorough exploration of the impact of governance structures on critical financial performance measures across an extended duration.

In this study, corporate governance variables were categorized into three main areas: financial ratio, depositor influence, and board structure. To represent financial ratio, the study used the capital adequacy ratio (CAR), legal reserve ratio, and liquidity ratio as proxies. For board characteristics, board size and gender composition were selected as key variables. The deposit-to-asset ratio was employed to measure the influence of depositors. Financial performance, the dependent variable, was quantified using return on assets (ROA) and return on equity (ROE). Additionally, the study incorporated control variables, including bank size and leverage, to account for their potential impact on the relationship between corporate governance practices and bank performance. This comprehensive approach ensured a robust analysis of the factors influencing the financial performance of Ethiopian commercial banks.

The econometric analysis in this study focused on identifying the factors influencing return on equity (ROE) and return on assets (ROA) as key performance metrics. Bank-specific control variables, such as leverage and bank size, were included in the model to account for their potential effects. Following diagnostic tests, the study determined that the fixed effect model was the most appropriate for estimation. Additionally, the study conducted tests to ensure the stationarity of the variables and assessed the presence of unit roots, confirming the reliability and validity of the model.

5.3 Conclusion

The study's findings, based on financial ratio-related proxies, indicate that the liquid asset-to-total asset ratio (LIQR) and capital adequacy ratio (CAR) has a significant positive influence on both return on equity (ROE) and return on assets (ROA). These results suggest that liquidity management plays a crucial role in enhancing bank performance, whereas higher capital adequacy requirements may constrain profitability, particularly in terms of ROE. Furthermore, while the reserve ratio does not have a statistically significant impact, it exhibits a negative correlation with both ROA and ROE.

The results related to board attributes indicate that while board size did not have effect on Return on Assets (ROA) and return on Asset. Additionally, the proportion of female directors on the board shows a statistically significant relationship with ROA, suggesting that capable and qualified female directors contribute to improved bank performance, especially when measured by ROA. Thus, the presence of skilled female directors plays a vital role in enhancing bank performance.

Moreover, the results reveal that bank performance was adversely impacted by a higher deposit-to-total asset ratio. This finding challenges the agency theory's assumption that depositors can leverage market mechanisms to influence banks' performance positively.

Lastly, the findings show that among the two bank-specific control variables, leverage had a statistically significant, though negative, impact on performance metrics. In contrast, bank size had a negligible effect on Return on Equity (ROE) but a significant and negative influence on Return on Assets (ROA).

Generally speaking, the outcome show that , depending on the performance metric being employed, firm, particularly banks with strong corporate governance practices have better financial performance. The study has accomplished its goal by finding the characteristics that aid in testing the research hypothesis, even though not all corporate governance factors support the given hypotheses. Stakeholder theory, according to this study, provides a generally sound account of the relationships between company governance practices and financial success.

5.4 Recommendations

The study's conclusions led to the following potential recommendations.

- The board of Ethiopian commercial banks dominated by male directors, with minimal gender diversity present. As a result, it is crucial to effectively implement the directive mandating a minimum number of female members on boards of directors (BODs), while also ensuring careful consideration of their qualifications and competencies.
- The Need to Address Board Structure Issues: NBE must use monitoring and evaluation systems to ensure that the directive is implemented. Because the ratio of female to male directors in some banks' boards does not meet the directive's requirements, the number of female directors is low, and in some banks, there are no female directors at all.
- NBE must issue directions requiring the disclosure of various pertinent information to various stakeholders and ensure that these directives are carried out by various banks. Most banks are unwilling to make this information public, even if there is a directive requiring them to make the information available to the public.
- The government's corporate governance guidelines for banks can help promote equal governance standards across the country's commercial banks. However, merely establishing directives is insufficient to ensure the proper functioning and stability of banks. It is essential to actively monitor and evaluate the corporate governance practices of commercial banks. Additionally, the government should focus on stabilizing the macroeconomic environment to enhance the performance of commercial banks and maximize the effectiveness of these directives and overall corporate governance. To further strengthen banking sustainability and safety, the national bank must enhance its supervision and regulation of commercial banks. This will also contribute to improving the competitiveness of commercial banks within the financial sector.

Lastly, the study looked into how corporate governance practices affected banks' performance. However, not all corporate governance methods were included in the statistical analysis's variables. Therefore, additional factors such as the board members' educational background, business management expertise, industry-specific knowledge, size of audit committee, Frequency of board meeting, Efficiency of board and management could be included in future studies. Additionally, this analysis can be extended to other non-bank sectors. Examining the state-owned and private sectors independently and determining whether corporate governance differs in terms of ownership structure.

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