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EFFECTS OF CORPORATE GOVERNANCE ON THE FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN ETHIOPIA

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List of acronyms and abbreviations

AUDEFF = Audit Committee Effectiveness

BFRQ = Board Meeting Frequency

BIND = Board Independence

BSIZE = Board Size

CBE = Commercial Bank of Ethiopia

CEOD = CEO Duality

CG = Corporate Governance

ETB = Ethiopian Birr

FE = Fixed Effects

GMM = Generalized Method of Moments

IFRS = International Financial Reporting Standards

LM = Lagrange Multiplier

NBE = National Bank of Ethiopia

NPL = Non-Performing Loan

OLS = Ordinary Least Squares

OWNSTR = Ownership Concentration

RE = Random Effects

ROA = Return on Assets

ROE = Return on Equity

VIF = Variance Inflation Factor

ABSTRACT

This paper would research on the impacts of corporate governance on the financial performance of commercial banks in Ethiopia. The paper analyses one hundred and ten bank-years of panel data of ten commercial banks during the time 2014-2024. There are six governance variables, including board size, board independence, CEO duality, audit effectiveness, frequency of board meetings, and ownership concentration. ROA and ROE are used to measure financial performance. The research design used is explanatory research design based on a quantitative approach. In the case of Hausman test, fixed effects regression is employed. Diagnosis checks show that there is no heteroskedasticity and autocorrelation, but multicollinearity is observed between the independence of the board and audit performance. Both Return on Assets and Return on Equity have negative and statistically significant correlation with the board size, which have an adverse impact on the financial performance of large boards. CEO duality is observed to positively and significantly influence both the performance measures hence indicating that unified leadership is effective in promoting performance within the Ethiopian context. Concentration of ownership has adverse impact on Return on Assets as well as Return on Equity. Returns on Assets are not impacted by audit effectiveness in a negative way. No significant effects are found in board independence and the frequency of meeting. The models account about seventy one percent of within bank variation in performance. These results undermine traditional wisdom of governance and create an indication that Ethiopian banks require context-specific governance structures. The research suggests that the NBE should issue purer procedures on optimum board size, indorsing an adequate range that heightens efficiency and decision-making. Management should evaluate leadership structure based on ownership bank size, and operational complexity instead of implementing uniform corporate governance practices. Investors should pay close attention to ownership structure and board size when making investment decisions, as higher board size and high ownership concentration are negatively affect financial performance.

Keywords: *Corporate Governance, Financial Performance, Board Size, Board Independence, CEO Duality, Audit Committee Effectiveness*

CHAPTER ONE

Introduction

1.1 Background of the study

The system of process, rules, and practice that can be a company is directed and controlled is corporate governance. And also it is how power and responsibilities are distributed between boards of director, management, and other stakeholders. Corporate governance strength's trust and protects companies through ensuring responsibility and transparency (chen and shapiro, 2011).

Corporate governance strongly influence the financial performances of bank overall (worldwide) by linking essential metrics such as return on asset and return on equity to corporate governance mechanisms. This means a bank with good corporate governance tends to report higher and stable financial performance. Sound corporate governance eventually improves bank stability and profitability which balance management, and shareholders interest (Amare & Endashaw, 2024). Furthermore, The studies indicates that good corporate governance and risk management systems are important for maintaining performance, especially when financial crisis occurred in financial institution (Aebi, Sabato, & Schmid, 2022). Therefore, improving overall financial outcomes requires banks to better their governance processes.

In African banking industry particularly in commercial banks the problems of governance amidst economic volatility reveal a pressing need for robust practice (Alelign, 2017). In generally, corporate governance is a mechanism through which banks ensures risk management, and accountability effectively. The managerial conduct is monitor by independent audit, internal control, risk management, and external supervision. One of the arrangements is boards of director which gives strategic oversight and helps to ensures institutional expectation and risk management of the banks. And also the Basel III have mandated stronger governance arrangement particularly in risk management including independent boards with clear oversight responsibilities following the financial crisis of late 2000s (Kebede, 2016). Previous studies indicates board diversity ensure better decision making and risk management or positively correlates with improved bank performance (Sakilu & Getinet, 2015).

In Africa there are higher rates of non-performing loans that need for stronger internal controls and audit mechanism. Political influences and insufficient regulatory frameworks often result in higher rates of non-performing loans, highlighting the need for stronger internal controls and audit mechanisms (Wolelitu, 2022). According to Tesfaye, 2018 improved governance quality is directly tied to sustained profitability in East African banks, emphasizing that effective corporate governance practices can bolster resilience in volatile markets. High degree of state ownership and ongoing liberalization, which creates distinct governance issues are the characteristics of Ethiopian banks landscape. Many commercial banks in Ethiopia experience's large board size, significant political interference, complicating effective governance and impairing financial performance (Getahun, 2007).

In generally corporate governance plays a great role in impacting the financial performance of commercial banks internationally, the definite problems faced by Ethiopian banks ranging from political interference, and board size to compliance with emerging regulatory frameworks suggest that the necessity of a tailored approach. Enhancing the effectiveness of boards and establishing strong governance mechanisms will be necessary for improving the financial health of these institution, as governance changes(reforms) continue to evolve, By focusing on this crucial issues, this study tries to illuminate how tailored corporate governance framework can strengthen financial performance in Ethiopian banking. Fundamentally, improving corporate governance structures promises to produce more accountable, high performing financial institutions, resilient, stable and growth of Ethiopian banking sector. The overall objective of the study is to examine the effects of corporate governance on the financial performance of commercial banks in Ethiopia, by examining various governance mechanisms, such as board size, audit committee effectiveness, ownership structure, CEO duality, frequency of board meeting, and board independence to understand the impacts on financial performance. By distinguishing the relationships among these corporate governance and financial outcomes, this study targets to provide insights and recommendations that can enhance the effectiveness of corporate governance frameworks that improve the overall performance of Ethiopian banks.

1.2 Statement of the Problem

Ethiopia's commercial banking sector plays a great role in the country's economic growth with the total asset more than ETB 4.7 trillion in 2026. But, the financial performance of banking sector is significantly undermined by governance deficiencies (NBE, 2026). In spite of the directive from the national banks of Ethiopia, such as SBB/91/2024 which emphasizes effective audit committees and boards of independence their implementation depart consistent. In practice, several banks not completely fulfilled these governance requirements, leading to persistent gap among actual compliance and regulatory expectations.

Many factors contribute to this slow improvement. Firstly, several banks have large board size, averaging between 12 and 15 members, which complicate coordination and decision-making processes. Secondly, CEO duality is common, with approximately 60% of private commercial banks having a CEO who also serves as the board member. This concentration of power can lead to reduce accountability and boasts conflict of interest. In addition, Weak audit effectiveness further blends these governance issues, as does the presence of state-dominated ownership structures that are often susceptible to political interference, the frequency of board meetings is concerning, with many banks holding less than 10 meetings yearly(Sakilu & Getinet, 2015; Amare & Endashaw, 2024).The limited availability of compressive study, up to date (2020- 2025) empirical studies that investigate interactions among corporate governance variables in Ethiopian commercial banks system by using NBE's data creates critical gaps in understanding how corporate governance mechanism shape bank performance.

Many Previous researches emphasize several critical gaps in understanding the corporate governance nexus in Ethiopia's commercial banking sector. For instance, Alelign (2017) identified a negative relationship between financial performance and board size and but did not consider CEO duality implications. Similarly, Sakilu and Getinet (2015) affirmed the positive impact of audit committee's effectiveness on financial performance, yet they ignored ownership structures. Amare and Endashaw (2024) focused on board independence but employed a limited dataset from 2015 to 2020, and also ignore post-COVID dynamics. Tesfaye (2018) primarily examined the CBE without benchmarking against private commercial banks. Other studies like Duressa (2022) and Kebede (2016) examined CEO duality and board meeting frequency only partially, via cross-sectional analysis and without considering a longitudinal perspective. While

Wolelitu (2022) and Rao and Desta (2016) investigated ownership structure issues. But, they failed to propose integrated models that include all governance variables such as, CEO duality, board size, board independence, audit effectiveness, board meeting frequency, and ownership structure—against financial performance.

The limited availability of compressive study, up to date (2020- 2024) empirical studies that investigate interactions among corporate governance variables in Ethiopian commercial banks system by using NBE's data creates critical gaps in understanding how corporate governance mechanism shape bank performance. Accordingly, this research paper investigates the effects of corporate governance on the financial performance of commercial banks in Ethiopia, with particular attention to board independence, board size, audit committee effectiveness, CEO duality, ownership structure, and board meeting frequency. And aims to identify how corporate governance collectively influences financial performance and to give evidence that can notify efforts to strengthen the effectiveness of Ethiopian commercial banking sector oversight and management.

1.3 Research Question

1. How does board independence affect Ethiopian commercial banks financial performance?
2. To what extent does board size influence financial performance of Ethiopian commercial banks?
3. In what ways does audit committee effectiveness affect financial performance of commercial banks in Ethiopia?
4. What effect does CEO duality have on the Ethiopian commercial banks financial performance?
5. How does ownership structure influence financial performance of Ethiopian commercial banks?
6. How is board meeting frequency related with the Ethiopian commercial banks financial performance?

1.4 Objective of the study

1.4.1 General objective of the study

The overall objective of the study is to investigate the effects of corporate governance on the financial performance of commercial banks in Ethiopia.

1.4.2 Specific Objectives

- To investigate the relationship between board size and financial performance of commercial banks in Ethiopia.
- To assess the effect of board independence on the financial performance commercial banks in Ethiopia.
- To examine the impact of CEO duality on the financial performance of Ethiopian commercial banks.
- To evaluate how the audit committees effectiveness affects the financial performance of commercial banks in Ethiopia.
- To examine the relationship between board meeting frequency and the financial performance of Ethiopian commercial banks.
- To determine the impact of ownership structure on the financial performance of commercial banks in Ethiopia.

1.5 Significance of study

The significance of this research paper lies in its capable to give essential insights into the relationship among financial performance and corporate governance in the Ethiopian banking industry. Given the regulatory reforms and rapid economic growth in Ethiopia, understanding how corporate governance structures affect financial outcomes is vital for promoting stability and accountability within the banking institutions.

As Ethiopian banks navigate many challenges such as lacking board composition, concentrated ownership, and weak risk management practices, this paper aims to illuminate how effective governance mechanisms can minimize these issues, by investigating variables such as board size, and ownership structures. The research will provide empirical evidence that can notify governance reforms and policy making. Additionally, the findings will add to the growing part of literature on corporate governance in developing countries, and highlighting best practices that can be tailored to fit the Ethiopian context.

1.6 Scopes of the study

The scope of this research paper covers critical dimensions necessary to understand the impacts of corporate governance on the financial performance of commercial banks in Ethiopia. It is divided into four main areas: methodological, geographical, thematic, and time scope. Thematic scope includes investigating several main aspects of corporate governance. This includes examining the relationship between board size and financial performance, analyzing the effect of board size, board independence, evaluating the effect of CEO duality on financial performance, and examining how the effectiveness of audit committees affects financial performance. In addition, and also explore the relationship board meeting frequency and financial performance, and determine the effect of ownership structure on Ethiopian commercial banks' performance.

The methodological part includes an explanatory research design, utilizing quantitative analysis through statistical tools such as pane data analysis, drawing data from NBE’s financial reports and regulatory documents. Geographically, this study aims on commercial banks operating in Ethiopia, including both state-owned and private banking industries.

1.7 organizations of the study

This study organized in to five chapters. Following the introduction part, chapter two presents the review of related theoretical and empirical literature regarding corporate governance and financial performance. Chapters three discuss research methodology employed and model specification. Chapter four presents discussions and empirical results of the study and finally chapter five includes conclusion and recommendation.

CHAPTER TWO

Literature review

2.1 Conceptual review

Corporate governance basically means the way companies are run and directed (Cadbury Committee, 1992). According OECD (2015), it's the mix of relationships between a company's management, its board, shareholders, and everyone else with a stake in the company. Good corporate governance sets the framework for a company's goals, and keeps track of how well it does. This becomes especially important in banking. Banks deal with a ton of leverage, their assets can be pretty hard to understand, and they face extra risks because of things like deposit insurance and the belief some banks are "too big to fail" (Basel Committee on Banking Supervision, 2015). The Basel Committee points out that having strong corporate governance in banks isn't merely beneficial. Good corporate governance helps banks operate in safe, well-regulated manner and responsible by setting clear oversight, ethical decision making and responsibility.

Corporate governance and financial performance are intertwined with a number of theoretical perspectives, such as agency theory, stewardship theory, and resource dependence theory. The theories provide different prognostications on the design of governance structure in order to optimize firm performance.

2.1.1 Agency Theory

According to Jensen and Meckling (1976), Agency theory is the most widely used theoretical framework to explain corporate governance .The theory considers the firm to be a nexus of contracts between the principals (shareholders) and the agents (managers) where both parties are believed to be utility maximizes. The agency problems arise as a consequence of the separation of ownership and control since the managers can act in their own interest contrary to maximizing the wealth of the shareholders.

Agency costs have three origins referred to as monitoring expenditure by the principal, bonding expenditure by the agent to ensure that he/she was not injuring the interest of the principal and residual loss, which is the welfare that is wiped out by the principal despite monitoring and

bonding (Jensen and Meckling, 1976). The corporate governance systems aim at reducing these agency costs that may exist between the managers and shareholders.

When applied to banking, the agency theory argues that good governance structure i.e. board independence, frequent board meetings, and robust audit committees help lessen managerial opportunism and improve financial performance (Fama and Jensen, 1983). The agency theory however indicates that there might be other agency issues which could arise due to certain governance structures. As an illustration, CEO duality gives too much power to one person, which may make agency problems worse through decreased efficiency of the board of directors (Jensen, 1993). Equally, the bigger boards can experience coordination issues and free riders, which will reduce their monitoring ability (Lipton and Lorsch, 1992).

The prediction is informed by the agency theory that the financial performance was positively affected by the presence of agency cost reduction through board independence, audit effectiveness and regularity of board meetings. On the other hand, the theory predicts that the presence of CEO duality and oversized boards had negative impact on performance in terms of compromised monitoring and augmented coordination issues.

2.1.2 Stewardship Theory

Another theory that can be used in place of the agency theory is the theory of stewardship, in which managers are assumed to be inherently good and will act in the best interest of shareholders (Davis, Schoorman, and Donaldson, 1997). In contrast with the assumption of self-interested agents of agency theory, the theory of stewardship presupposes that managers are satisfied with the organizational success and consider themselves as custodians of business property.

To create harmony between the interests of managers and shareholders, Davis et al. (1997) argued that the utility of the steward is best maximized when the organizational goals are fulfilled and therefore, no complex monitoring systems need to be established. According to the theory, governance structures are supposed to provide and enable managers and not control them. Under this model, the concept of CEO duality can be useful since this means having one distinct leader and authority, thus being able to make decisions faster and carry out strategic plans more efficiently (Donaldson and Davis, 1991).

The agency theory also questions the agency theory prescription of independent boards as per the stewardship theory, which argues that boards dominated by insiders can be more effective since these boards have greater firm-specific information and are in a better strategic position to offer guidance (Muth and Donaldson, 1998). The theory focuses on trust, empowerment, and collective orientation at the expense of control and monitoring.

The stewardship theory represents an opposite view of the agency theory especially in terms of CEO duality. Agency theory predicts undesirable impacts of duality whereas stewardship theory predicts beneficial impacts in those cases where managers are motivated by achieving organizational success. Such a theoretical conflict is especially applicable to the Ethiopian banking environment where fast decision-making and strategic agility can potentially be required as a source of competitive advantage.

2.1.3 Resource Dependence Theory

The resource dependence theory by Pfeffer and Salancak (1978) is an open system of an organization, which relies on external resources to survive and prosper. The theory assumes that boards of directors are a tool of controlling the environmental dependencies and the acquisition of vital resources. Boards are sources of access to outside networks, expertise, legitimacy, and resources which the organization cannot produce internally.

Pfeffer and Salancik (1978) established that boards serve four main resource provision functions which include (1) advice and counsel to the management, (2) enhancement of legitimacy and prestige, (3) information communication channels between the firm and external organizations and (4) preferential access to commitments or support by important external elements. It might be preferable to have larger boards within this framework since they represent a wide range of expertise and networking (Hillman, Cannella, and Paetzold, 2000).

Resource dependence theory in the banking scenario indicates that boards having the heterogeneous membership such as independent directors having regulatory skills, political contacts, and industry insight can boost performance of banks by making the banks freely access to capital, regulatory licenses and business prospects (Zahra and Pearce, 1989).

Resource dependence theory is used to inform the hypothesis that bigger board and more independent boards can bring better financial results due to the availability of external resources

as well as expertise. The theory further indicates that regular board meetings enable sharing of information and acquiring of resources which may enhance a better performance outcome.

2.1.4 Theoretical Perspectives Synthesis

All three theoretical viewpoints present some complementary and sometimes conflicting predictions regarding the corporate governance and the financial performance. Table 2.1 summarizes the main predictions of each of the theories on the variables of governance that are considered in this paper.

Table 1 Theoretical Prediction for Governance Variables

Governance Variable	**Agency Theory Prediction**	**Stewardship Theory Prediction**	**Resource Dependence Prediction**
Board Size	Negative (coordination costs, free-riding)	No clear prediction	Positive (diverse resources)
Board Independence	Positive (effective monitoring)	Negative (insiders have better knowledge)	Positive (external linkages)
CEO Duality	Negative (power concentration)	Positive (unified leadership)	No clear prediction
Audit Effectiveness	Positive (reduces information asymmetry)	No clear prediction	Positive (legitimacy)
Meeting Frequency	Positive (enhanced monitoring)	No clear prediction	Positive (resource coordination)
Ownership Concentration	Ambiguous (may align or entrench)	Positive (committed owners)	No clear prediction

Source: Compiled by researcher from theoretical review

This study draws on all three theoretical perspectives while recognizing that their applicability may vary depending on the specific institutional context of Ethiopian banking. The findings were contribute to understanding which theoretical framework best explains governance-performance relationships in an emerging market context characterized by concentrated ownership, political interference, and ongoing liberalization.

2.2 Corporate Governance and Financial Performance

The connection between corporate governance and financial performance is well-researched in the developed markets. The evidence has always shown that firms that are well governed have better financial performance and improved valuation as well as reduced cost of capital (Gomers, Ishii, and Metrick, 2003; Bebchuk, Cohen, and Ferrell, 2009). Research in the banking industry after the 2008 global financial crisis indicated the significant contribution of governance failures to the onset of bank distress (Kirkpatrick, 2009; Aebi, Sabato, and Schmid, 2012).

In a study on 573 US banks in the 2007-2008 financial crisis, Aebi, Sabato and Schmid (2012) observed that the stock returns and the return on equity of banks that had superior risk governance, in particular, where the chief risk officer reported to the board, rather than the CEO, were significantly high during the period of the crisis. This observation is important in highlighting the significance of governance frameworks that guarantee autonomous risk management.

Regulatory bodies like the OECD Principles of Corporate Governance (2015) and the Corporate Governance Principles of Banks by the Basel Committee (2015) are some of the international regulations that stipulate the composition of boards, risk management, and transparency. These models underline the significance of board independence, frequent board reviews, proper risk management and strong internal controls.

The issue of corporate governance in the African environment presents special challenges which are the concentration of ownership, political influence, poor capital markets and poor enforcement of the regulatory system (Rossouw, 2005). African banking studies have reported the existence of poor governance practices with a huge disparity across nations.

According to Alelign (2017), the failure of governance in African banks is a common practice that indirectly leads to financial instability, especially in places where the political sphere and the lack of proper regulations are present. According to Wolelitu (2022), in African banking industries, the politics tend to increase the non-performing loans, and thus there is the necessity to ensure that the internal control and auditing systems are more robust.

According to research conducted among banks in the East African region, high-quality governance has a positive relationship with continued profitability, and corporate governance

practices associated with good governance enhance stability during turbulent economic periods (Tesfaye, 2018). Nonetheless, the adoption of international governance standards in Africa has been disproportionate with most of the banks meeting the requirements on paper, but of less quality in terms of governance (Rossouw, 2005).

2.2.1 Ethiopian Corporate Governance and Financial Performance

The Ethiopian banking environment is characterized by unique attributes that define the practices of governance and the impact on financial performance. The banking industry in Ethiopia includes 32 commercial banks, two of which are state owned (Commercial Bank of Ethiopia and Development bank), and 30 others (National Bank of Ethiopia, 2024). The industry under its management has assets valued at over ETB 2.5 trillion or about 80 percent of the financial intermediation in the country.

The Ethiopian banking governance is typified by several peculiarities:

State Ownership and Political Interference: CBE is the largest bank in the country, which is entirely owned by the government. The state ownership is a factor that brings politics to the operations of the bank that can destabilize the commercial decision-making and performance of the bank (Tesfaye, 2018). Research has shown that politics in CBE has led to bad loans and inefficiencies.

Concentrated Private Ownership: The ownership structure of the private Ethiopian banks is generally concentrated as the founding family or business group usually retains a controlling interest. Although concentrated ownership may help to harmonize incentives, it leads to the risks of insider supremacy and minority shareholder expropriation (Wolelitu, 2022).

Bigger Boards: Ethiopian corporate boards are quite large in size with an average size of 12 to 15 members (Alelign, 2017). This surpasses the recommended size of boards recommended in literature (7-9 members) and can be a cause of coordination issues and delay in decision making.

Duality of CEO: some of Ethiopian private banks, which are 60 percent, their CEOs who are also serve as board chairs (Amare & Endashaw, 2024). Such a concentration of power brings up concerns of the independence of boards and their effectiveness in oversight.

Regulatory Developments: The National Bank of Ethiopia (NBE) has been issuing more and stricter rules or directive that improves corporate governance such as SBB/91/2024, which requires the board to be independent, the establishment of an audit committee, and the board risk management frameworks. But, there is still a lack of compliance and implementation.

The empirical rationale of the study is the governance issues of the Ethiopian banks that were identified to have oversized boards, duality of the CEO, political interference, ineffective auditing and concentration of ownership; which led to the investigation of the effects of governance on financial performance.

2.3 Empirical Review

This section reviews empirical evidence on the relationship between specific governance variables and financial performance in commercial banks, with emphasis on Ethiopian studies where available.

2.3.1 Board Size and Financial Performance

Board size is the number of directors that are on the board of a bank. The association between the size of the board and the financial performance is a research area that has been highly researched, and both theories argue in favor of adverse and positive results.

According to the agency theory, the bigger the board, the more coordination problems, communication problems, and free-rider problems that can dysfunctional decision-making can occur (Jensen, 1993). Lipton and Lorsch (1992) suggested that boards of over seven or eight members are ineffective and suggested that boards be reduced in order to enhance governance. Resource dependence theory on the other hand posits that bigger boards come with different knowledge and increased network contacts that could be utilized in promoting the performance of the firm (Pfeffer and Salancik, 1978).

In a study conducted by Yermack (1996) of 452 large corporations in the US, an inverse correlation between the size of boards and the value of the firm was observed, with the most significant effects of the same found in smaller boards. These findings have been verified in a sample of Finnish firms study by Eisenberg, Sundgren, and Wells (1998) who reported negative relationships between board size and profitability. Pathan and Faff (2013) have discovered that

during the pre-financial crisis era, the increase in board size had a negative impact on the performance of US banks.

Alelign (2017) investigated a sample of 8 Ethiopian commercial banks between 2005 and 2011 and discovered that there was a statistically significant negative correlation between the board size and the ROA ($\beta = -0.12$, $p < 0.05$). This observation was explained in the study by the coordination difficulties of boards comprising of 13 members on average boards. Duressa (2022) further analyzed the same on the case of private banks between 2014 and 2019, and the 2014-2019 2014-2019 coefficient of 2014-2019 was found to be -0.14 ($p < 0.01$), thus finding that bigger boards reduced ROA by about 1.5%. In the same report, Getahun (2007) reported an inverse relationship between the ROA and the board size in seven small banks that were examined between the year 2004 and 2016.

In Ethiopia, the findings have always shown that the relationship between negative board size and financial performance is negative as expected by agency theory. This study will be tested on the following hypothesis:

H_1: Board size has a negative and significant effect on the financial performance (ROA and ROE) of commercial banks in Ethiopia.

2.3.2 Board Independence and Financial Performance

Board independence is the percentage of directors who do not own the company as a manager, a high stockholder, or in any other type of business relationship. The independent directors are supposed to offer impartial supervision, minimize agency expenses and safeguard the interests of the shareholders (Fama and Jensen, 1983).

The agency theory is a strong advocate of board independence as a way of limiting the opportunism of the administration. Independent directors have a high chance to question the decisions made by the management, watch the performance in an objective manner, and safeguard interests of the shareholders (Weisbach, 1988). Nonetheless, the theory of stewardship implies that independent directors might not possess firm-specific information, and are inefficient than insiders to give strategic advice (Muth and Donaldson, 1998).

There have been conflicting findings on the research on board independence in banks. A study conducted by Adams and Mehran (2012) failed to report any significant association between

board independence and performance in US bank holding companies. Nevertheless, Aebi et al. (2012) found that independent boards were related to higher performance in times of financial crisis, which implies that independence is more important in times of stress.

In their research, Sakilu and Getinet (2015) compared 13 Ethiopian commercial banks between the years 2008 and 2013 and discovered that the proportion of non-executive directors had a positive significant relationship with ROA ($b = 0.18$, $p < 0.05$). They also found that agency costs are reduced and performance is improved by the independent directors. This was confirmed by Amare and Endashaw (2024) on the basis of panel data in 2015-2020, according to which independent boards decreased non-performing loans by 2.8%. In another study, Duressa (2022) also established that independent boards also result in lower NPLs (2-3% reduction) due to more stringent risk assessment.

The positive correlation between independent board and financial performance is mainly supported by Ethiopian evidence, which is in line with the agency theory. Nevertheless, the mean percentage of independent directors in Ethiopian banks (around 30-50) implies that it can be improved. Based on this evidence:

H_2: Board independence has a positive and significant effect on the financial performance (ROA and ROE) of commercial banks in Ethiopia.

2.3.3 CEO Duality and Financial Performance

The concept of CEO duality is the scenario in which one individual occupies the Chief Executive Officer and the Chairperson of the Board of Directors. This form of governance has brought a lot of controversy in corporate governance literature.

The agency theory is very against the concept of CEO duality because it is alleged to board power and undermine the monitoring role of the board (Jensen, 1993). The situation whereby the board is led by the CEO leads to a lack of independence in the board and the CEO will be in control of all board activities and decision making. On the other hand, duality, according to the stewardship theory, offers coherent leadership, better strategic orientation, and quick decisions that may lead to better performance (Donaldson and Davis, 1991).

CEO duality there is mixed empirical evidence. Rechner and Dalton (1991) discovered that independent leadership in the firms performed well as compared to the duality firms.

Nevertheless, as other studies conducted, no significant differences (Baliga, Moyer, and Rao, 1996) were found. Simpson and Gleason (1999) were able to support predictions of the agency theory in the banking sector where they discovered duality of CEOs promoted financial distress.

Getahun (2007) investigated the issue of CEO duality in Ethiopian privately owned banks and discovered that there was a strong negative correlation between ROA and the individuals who had this duality ($p < 0.01$). Tesfaye (2018) analyzed the Commercial Bank of Ethiopia between 2010 and 2017 and found out that there is a negative and significant correlation between it and ROE ($\beta = -0.15$, $p < 0.01$). These results are confirmed by Duressa (2022) and Amare and Endashaw (2024) reporting β coefficients of -0.15 when ROE is used and linking duality to higher fraud risks and mismanagement.

According to Wolelitu (2022), in about 60% of Ethiopian private banks, CEO duality is common and is related to large financial losses due to fraud. Directive SBB/91/2024 by the National Bank of Ethiopia promotes the division of CEO and chairperson positions, and those banks which adhere to the directive have recorded 1.2-percent better ROA (Tesfaye, 2018; Kebede, 2016).

The source of Ethiopian evidence finds a close relation on the negative nature of CEO duality in relation to financial performance, which is an agency theory prediction. Based on this evidence:

H_3: CEO duality has a negative and significant effect on the financial performance (ROA and ROE) of commercial banks in Ethiopia.

2.3.4 Audit Committee Effectiveness and Financial Performance

The audit committee effectiveness refers to the composition, independence, expertise and diligence that the audit committee has in its oversight of financial reporting, internal controls and risk management. It is anticipated that the quality of the financial reporting, information asymmetry and fraud will be minimized by the effective audit committees (Klein, 2002).

Agency theory underlines the control practiced by the audit committee over the management and proper financial reporting. According to resource dependence theory, audit committees that are composed of various expertise have an advantageous effect on increasing legitimate and resource access to the organization.

The studies always associate the features of the audit committee with financial reporting quality. According to Klein (2002), independence of audit committee was reportedly negatively related to earnings management. In the banking industry, it has been found that the effectiveness of the audit committee minimizes problem loans and enhances performance.

In their research on 13 Ethiopian banks between 2008 and 2013, Sakilu and Getinet (2015) found the audit committee effectiveness to be associated with better ROA, with a β coefficient of 0.15 ($p < 0.01$). The researchers discovered that effective committees minimized financial errors by four per cent. Alelign (2017) confirmed that effective audit committees reinforced the internal control and minimized errors in operations. According to Duressa (2022), strong audit committees reduced NPLs by a maximum of 4 per cent, which positively influenced profitability.

It is however mentioned in the problem statement that poor audit effectiveness is a contributing factor to an estimated expenditure of ETB 50 billion every year through fraud and operational inefficiencies, where the audit committee operations could be greatly enhanced.

The relationship between audit committee effectiveness and financial performance is shown to be positive based on Ethiopian support. Based on this evidence:

H_4: Audit committee effectiveness has a positive and significant effect on the financial performance (ROA and ROE) of commercial banks in Ethiopia.

2.3.5 Board Meeting Frequency and Financial Performance

The frequency of board meetings is indicative of the hard work and interaction of the board members. Frequently held meetings help the boards to keep an eye on the management, deliberate on strategic questions and react to arising challenges.

The agency theory implies that the effectiveness of board monitoring should be promoted through regular meetings, as this option provides more opportunities to be supervised and exchange information (Conger, Finegold, and Lawler, 1998). The regular meetings are also supported by the resource dependence theory, which are used in the coordination of resource acquisition and environmental scanning.

Vafeas (1999) established that the frequency of board meetings rose after poor performance implying that board meetings are a response mechanism. Nevertheless, the correlation between the frequency of meetings and the follow-performance was rather low as well and it shows that the quality of meetings is more important than the number of meetings.

In the study regarding the frequency of board meetings in Ethiopian commercial banks (2010-2020), Kebede (2016) revealed a positive but significant relationship between them and ROE ($\beta = 0.23$, $p < 0.01$). Those banks that had over 12 meetings in a year showed an increase in ROE by 2% due to active implementation of strategies. In their study, on 17 banks, between 2015 and 2020, Amare and Endashaw (2024) found that infrequent meetings (less than 10 per year) were associated with a negative ROA. Alelign (2017) also realized positive returns to increased meetings ($b = 0.23$, $p < 0.01$). The descriptive statistics of this research indicate that the average number of meetings per year in Ethiopian banks is 11.45 with a range of 6-17 which indicates that boards are busy.

The positive correlation between board meeting frequency and the financial performance is supported by Ethiopian evidence. Based on this evidence:

H_5: Board meeting frequency has a positive and significant effect on the financial performance (ROA and ROE) of commercial banks in Ethiopia.

2.3.6 Ownership Structure and Financial Performance

The ownership structure is a division of equity among the various forms of shareholders namely state ownership, institutional ownership, and foreign ownership and concentrated family ownership. The ownership structure affects governance by implying an impact on monitoring incentives, agency issues, and strategic goals.

The agency theory indicates that concentrated ownership may be beneficial to the monitoring since big shareholders are more likely to monitor the management (Shleifer and Vishny, 1986). Nonetheless, the concentrated ownership can also introduce entrenchment issues where the controlling shareholders rob the minority shareholders (La Porta et al., 2002). Institutional and foreign ownership is normally linked to superior governance since these investors possess skill and resources to conduct successful monitoring.

The general results of studies show that institutional and foreign ownership has a positive impact on the bank performance. Foreign owned banks have been known to perform and govern better than the domestic banks in emerging markets (Berger et al., 2009). Poor performance is normally linked to state ownership because of the political agenda and the lack of effective monitoring.

In Ethiopian banks, Alelign (2017) discovered that institutional ownership had a positive correlation to ROA gains ($\beta = 0.20$) as well as foreign ownership. In a similar study, Rao and Desta (2016) also found out that institutional ownership and bank performance were positively related. Nevertheless, the ownership by the state, which is a characteristic of the Commercial Bank of Ethiopia, is linked to political interference and lower profitability (Tesfaye, 2018). In the case of private ownership, the incentives are normally aligned but the insider control risks are introduced (Wolelitu, 2022).

Ethiopian data indicate that institutional and foreign ownership are positively related to the performance, but the state ownership negatively influences it. The impacts of concentrated private ownership are unclear. Based on this evidence:

H_6: Ownership concentration (institutional and foreign ownership) has a positive and significant effect on the financial performance (ROA and ROE) of commercial banks in Ethiopia.

2.4 Research gap and empirical review summary

Table 2 summary of empirical study

Author(s) and Year	Objective	Sample & Period	Methodology	Key Findings	Gaps/Limitations
Alelign, E. (2017)	Analyze board size impact on financial performance	8 banks, 2005-2011	Panel regression	Negative board size-ROA relationship (β=-0.12, $p<0.05$)	Neglects CEO duality; doesn't consider ownership structure; pre-reform data

Getahun, T. (2007)	Examine governance effects on private bank performance	7 private banks, 2004-2016	Fixed effects regression	Inverse board size-ROA relationship; negative CEO duality effect	Limited to private banks; doesn't examine audit committees
Sakilu, O. & Getinet, B. (2015)	Investigate board independence and audit committee effects	13 banks, 2008-2013	Panel regression	Board independence positive for ROA (β=0.18, $p<0.05$); audit effectiveness positive (β=0.15, $p<0.01$)	Short panel; ignores ownership structure; pre-2015 data
Kebede, F. (2016)	Examine meeting frequency impact	12 banks, 2010-2020	Panel regression	Meeting frequency positive for ROE (β=0.23, $p<0.01$)	No distinction between formal/informal meetings; pre-COVID
Tesfaye, B. (2018)	Analyze CEO duality at CBE	CBE only, 2010-2017	Case study	CEO duality negative for ROE (β=-0.15, $p<0.01$)	Single bank; not generalizable
Duressa, K.A. (2022)	Examine governance effects comprehensively	Private banks, 2014-2019	Panel regression	Board size negative (β=-0.14); independence reduces NPLs	Excludes state banks; pre-liberalization
Amare, L. & Endashaw,	Assess governance effects	17 banks, 2015-	GMM estimation	Independence reduces NPLs by 2.8%;	Short panel; lacks post-COVID analysis

K. (2024)		2020		meeting frequency positive	
Wolelitu, B. (2022)	Explore CEO duality effects	Private banks, 2015-2021	Panel regression	Duality linked to fraud losses; ownership structure matters	Limited governance variables
Rao, K.S. & Desta, K.K. (2016)	Examine ownership effects	12 banks, 2010-2015	OLS regression	Institutional ownership positive	Cross-sectional; dated

Source: Compiled by researcher from reviewed literature

2.4.1 Identified Research Gaps

As demonstrated in the review of the existing literature, there are a number of critical gaps that this research fills. The previous research studies on governance variables individually instead of studying them as a system. Alelign (2017) did not pay attention to CEO duality but focused on the board size. Sakilu and Getinet (2015) considered independence of board and audit committees but not ownership structure. In Tesfaye (2018), duality between CEOs was researched in only one bank and was not compared. None of the literature has jointly studied board size, board independence, CEO duality, audit efficacy, and meeting frequency and the ownership structure in a single model.

Numerous researches use short panels of five to six years that are unable to identify long-term governance impacts and structural developments in the banking industry. Endogeneity is a problem with cross-sectional studies such as Rao and Desta (2016). Ordinary least squares studies in which no robustness tests are performed, such as Wolelitu (2022), can give biased estimates. Some of these studies lack fixed effects estimation and therefore they cannot control the unobserved bank-specific factors.

The majority of the available literature utilizes the information before 2020 and lacks essential developments such as post-COVID banking dynamics and the rule of governance of the National Bank of Ethiopia (SBB/91/2024), the liberalization announcements of the banking sector, and the recent deterioration of performance where in 2022, the industry Return on Assets returned to 1.8 percent compared to 3.2 in 2015. Some work only with the private banks (Getahun, 2007; Duressa, 2022) or individual institutions (Tesfaye, 2018), leaving out the state-owned banks that represent the bulk of the Ethiopian banking sector with about 60 percent of the total assets. This reduces the inter-ownership generalizability.

Other control variables that might affect both performance and governance, which are usually excluded in previous research, include the size of a bank and the adequacy of capital. Some studies do not include comprehensive diagnostic testing, and this fact is concerning in terms of the validity of the results. There is a paucity of literature that explicitly validates competing theoretical predictions in the Ethiopian context, specifically, the agency theory, the stewardship theory, and the resource dependence theory. The peculiarities of Ethiopian banking give a chance to discuss if one specific theory can be considered the most appropriate to explain the relationships between governance and performance in emerging markets. The current literature is not in a position to guide decisions on policies about the effectiveness with which Ethiopian banks should reinforce their governance in order to be competitive with foreign entrants after the opening up of the market, which is a very crucial gap when the expected changes are scheduled to be effected after 2024.

This paper fills these gaps by utilizing recent panel data (2014-2024) on the basis of fixed effects estimation and extensive diagnostic testing, with use of both state-owned and privately owned banks and testing six variables of governance at the same time in a single model.

2.4.2 Conceptual frameworks

The framework includes two main types of variables: dependent variable and independent variable

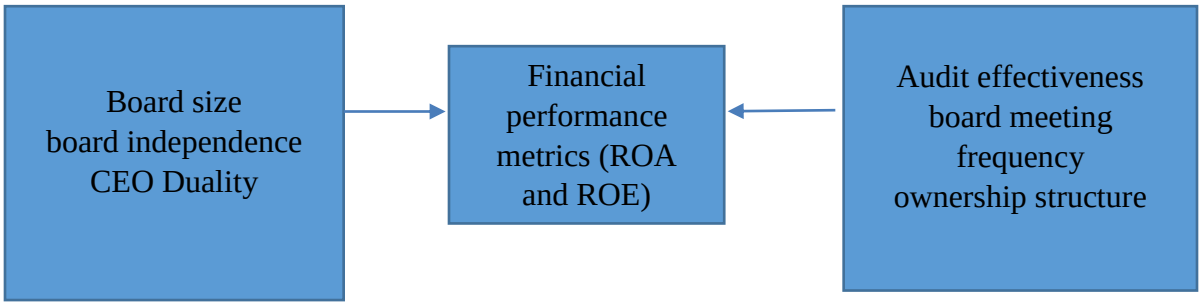


Figure1 conceptual framework

Financial Performance: measured by using ROA and ROE. ROA is net income divided by total assets. It specifies how well a bank squeezes earnings out of what it owns. Return on equity, on the other hand, is net income divided by shareholders' equity, basically showing how much the shareholders get back on their investment. Agency theory implies that good corporate governance cuts down on agency costs and gives these financial metrics an improvement. Sakilu and Getinet (2015) employed a panel dataset from 2008 to 2013 and found a clear positive link between smart governance and financial performance. Their results were statistically significant at $p<0.05$. It gives us a good starting point to dig deeper into how different governance factors shape bank profits.

Board Size: Means the total number of directors sitting on a bank's board. In Ethiopia, the Commercial Code says that number usually falls between 5 and 12. Boards with too many members tend to get bogged down which is harder to coordinate, and decisions get delayed. Data collected from 2005 to 2011 actually backs this up: higher boards go with poor financial performance (specifically, lower ROA and ROE, $\beta=-0.12$, $p<0.05$) (Alelign, 2017).

Board Independence: it is the number of non-executive directors sits around the Board. Studies between 2010 and 2020 found that banks with more independent boards were more profitable. Researchers found this link was statistically significant (at the 5% level, Amare &

Endashaw, 2024), which really highlights how important independent oversight is, especially for private banks.

CEO Duality: CEO duality is a binary variable indicating whether the CEO also serves as the board chair. This governance structure can lead to a concentration of executive and board power, potentially diminishing oversight and accountability. Recent analyses have shown a negative correlation between CEO duality and financial performance; recommend that such power centralization may inhibit effective decision-making and strategy formulation (Tesfaye, 2018). Understanding the implications of CEO duality is therefore essential for evaluating governance quality and its influence on overall bank performance.

Audit Committee Effectiveness: The effectiveness of the audit committee is evaluated based on the frequency of meetings and the independence of its members. Evidence from studies accompanied between 2008 and 2013 indicates that robust audit committees are associated with increased ROA, reinforcing their role in ensuring financial integrity and regulatory compliance ($\beta=0.15$, $p<0.01$) (Sakilu & Getinet, 2015). This underscores the notion that effective governance structures significantly contribute to maintaining the financial health of banks.

Frequency of Board Meeting: examines the frequency of annual meetings held by board of a bank's. Prior research from 2010 to 2020 indicates a positive correlation between a higher frequency of board meetings and improved financial performance, suggesting that regular discussions enhance timely decision-making and strategic oversight ($\beta=0.23$, $p<0.01$) (Kebede, 2016). This finding suggests that proactive governance practices are instrumental in ensuring financial performance, emphasizing the importance of board engagement in banking operations.

Ownership structure: it pertains to the ratio of shares held by institutional or foreign investors. Many studies indicate that a diversified ownership base correlates with enhanced financial performance, particularly in the context of banking liberalization. According to Alelign (2017) Panel data analysis shows positive correlations between institutional ownership and financial performances, and highlighting how such ownership dynamics can strengthen corporate governance and accountability within the Ethiopian banking institutions. This finding accentuates the significance of understanding ownership patterns in the local banking

landscape. This conceptual framework comes from established theories and empirical findings, examining the relationship between corporate governance mechanisms and financial performance in Ethiopian commercial banks. By focusing on various governance variables, the study aims to contribute valuable insights into enhancing bank performance through effective corporate governance practices.

CHAPTER THREE

Research methodology

This chapter includes the research methodology used in the study, including the research approach, research design, and sample size and explains the data collection method and analysis.

3.1 Research Design

This study utilized the explanatory research design. It is better when the goal is to test the hypotheses based on a theory, and causal relationships between the variables are to be tested (Saunders, Lewis, and Thornhill, 2019). The design will allow the researcher to conclude whether and to which extent the corporate governance variables explain the variations of financial performance measures.

This study is longitudinal; it uses panel data that will be gathered in eleven years (2014-2024). The design of panel data is important, as it mixes cross-sectional and time series, which helps the researcher to control the unobservable bank-specific heterogeneity, and dynamic relationship between corporate governance and financial performance (Gujarati, 2015). The cause and effect relationships through which the study examined are between six explanatory variables such as board size, board independence, CEO duality, audit effectiveness, and the frequency of board meetings, and ownership concentration, and two dependent variables (ROA and ROE).

3.2 Research Approach

The study was investigating the impacts of corporate governance on financial performance within Ethiopian commercial banks by using a quantitative data approach. By employing statistical methods to analyze numerical data, the research aims to uncover relationships between various corporate governance variables and financial performance key metrics, such as profitability and efficiency. This approach were give a robust understanding of how Corporate governance practices affect financial performance, enhancing researchers to identify significant trends and draw evidence-based recommendation for improving banking performance in Ethiopia.

3.3 Population and Sample

3.3.1 Target Population

This study focused on all commercial banks in Ethiopia. There are 32 licensed commercial banks in the country, consisting of two state-owned banks and thirty private banks According to the National Bank of Ethiopia (2024).They manage assets more than ETB 2.5 trillion and account for approximately 80 percent of the nation's financial intermediation. The sample includes banks of varying sizes, ownership structures, and market shares, providing a comprehensive basis for investigating corporate governance practices across the institutions.

3.3.2 Sample and Sampling Technique

In this research, the purposive sampling is utilized in the sampling of commercial banks. Purposive sampling is non-probability sampling in which the researcher selects units of interest that have certain qualities (characteristic) of the objectives of the research (Palinkas et al., 2015). The method is suitable where the units included in the research fulfill specific requirements that are necessary in answering the research questions.

Sampling was based on the following criteria:

Banks that had full audited financial reports and corporate governance reports over the whole study period between 2014 and 2024 were sampled. Partial data would interfere with the dependability of the panel data analysis. Banks with a large share of the total assets held by the banking sector were selected to capture findings that represent industry trends. The chosen banks are representing around 85 percent of the total assets of the banking industry. Both State-owned banks and private banks were considered to allow the comparison of the effects on the governance in various types of ownership. This is significant as the state-owned and the private banks have varying governance issues. The banks that stayed active and gave no time of the day during the period of the study and not merged, acquired, or closed were chosen so that the data could remain the same and no structural breaks could be observed and impact the financial performance.

According to these criteria, ten commercial banks were picked in the study. The chosen banks represent the entire range of the Ethiopian banking industry as the selected banks represent the largest state-owned bank and nine major private banks.

Table 2 Sample Commercial Banks

Bank Code	Bank Name	Ownership Type	Year Established
01	CBE	public	1942
02	Awash Bank	Private	1994
03	Dashen Bank	Private	1995
04	Wegagen Bank	Private	1997
05	Bank of Abyssinia	Private	1996
06	Cooperative Bank of Oromia	Private	2004
07	Zemen Bank	Private	2008
08	Nib International Bank	Private	1999
09	Oromia Bank	Private	2008
10	United Bank	Private	1998

Source: NBE (2024)

3.3.3 Study Period

The study encompasses an eleven-year period from 2014 to 2024. This period was selected for three main purposes. First, it covers the post-reform era following significant governance directives issued by the National Bank of Ethiopia. Second, it includes pre-COVID and post-COVID periods, allowing examination of governance effects under different operating conditions. Third, the period provides sufficient time-series observations for robust panel data analysis, as panel data requires multiple observations over time to control for unobserved heterogeneity.

The total number of bank-year observations is 110, calculated as 10 banks multiplied by 11 years. This sample size is adequate for panel data analysis and exceeds the minimum requirements for fixed effects estimation (Baltagi, 2021).

3.4 Source of Data

The research is a secondary data study. Secondary data is suitable since all the variables can be objectively assessed based on the published financial statements and regulatory reports, and no biases are possible during the primary data collection, such as respondent bias and social desirability bias (Saunders et al., 2019).

The sources of data were two: published documents, Annual Financial Statements Audited. The annual financial statements were published by separate commercial banks and could be found on the web pages of banks, annual reports, and the National Bank of Ethiopia library. These offered information on Return on Assets, Return on Equity, board size, board independence, CEO duality, meeting frequency, and ownership structure. National Bank of Ethiopia Publications: Annual reports, banking sector supervision reports, as well as governance directives offered the regulatory background and additional information to be verified.

3.5 Method of Data Collection

This study has only used secondary sources of data. The process of collecting entailed the collection of audited annual financial statements and corporate governance reports of ten commercial banks in Ethiopia between the years 2014 and 2024. The financial statements were received on the sites of banks, the National Bank of Ethiopia library and personal requests to investor relations offices of the banks. The documents are publicly accessible, and are published by every bank annually. Based on every financial statement, the following data were obtained net income, total assets, total equity, board size, number of independent directors, CEO duality status, board meeting frequency, audit committee composition, audit committee meeting frequency, and ownership structure.

3.6 Method of Data Analysis

Data analysis was conducted using Stata 17 econometric software. The analysis proceeded in three stages: descriptive statistics, diagnostic tests, and panel regression analysis.

3.6.1 Descriptive Statistics

Descriptive statistics were calculated to summarize samples characteristics. Median, mean standard deviation, maximum, and minimum value were calculated for each variable. It enable understanding of the data structure and identification of potential outliers before conducting inferential analysis.

3.6.2 Correlation Analysis

Pearson correlation coefficients were computed to examine bivariate relationships between variables. Correlation analysis serves two purposes. First, it detects preliminary relationships between corporate governance variables and financial performance. Second, it identifies potential multicollinearity among explanatory variables.

Coefficients of correlation are range from -1 to +1. Values near to -1 imply strong -ve relationships. Values near to +1 implies strong +ve relationships. Values close to zero indicate no linear relationship. Significance levels at 5%, 1%, and 0.1% are reported.

Many diagnostic tests were conducted to enable the reliability and validity of regression results.

Multicollinearity Test: Variance Inflation Factor (VIF) was used to identify the existence of high correlation among explanatory variables. VIF values more than 10 imply serious multicollinearity that may change the results. And also values more than 5 indicate moderate concerns that require attention.

Heteroskedasticity Test: for fixed effect models, The Modified Wald test for groupwise heteroskedasticity is employed. The null hypothesis is constant error variance. Null hypothesis rejection ($p < 5\%$) implies heteroskedasticity, which requires robust standard errors.

Autocorrelation Test: The Wooldridge test for autocorrelation in panel data was used. The null hypothesis is no first-order autocorrelation. Rejection of the null ($p < 5\%$) indicates serial correlation in the errors variables.

Normality Test: kurtosis and skewness tests investigated whether residuals follow normality. While normality is not strictly required for panel data with large samples, it was assessed for completeness.

3.6.3 Model Specification

The general panel data regression model is specified as:

$Y_{it} = \beta_0 + \beta X_{it} + \mu_i + \varepsilon_{it}$

Where:

$Y_i t$ = dependent variable for bank i at time t

β_0= constant term

β = vector of coefficients for explanatory variables

X_{it} = vector of explanatory variables for bank i at time t

μ_i = bank-specific unobserved effects

ε_{it} = error term

For each explained variable, two separate regression models were specified.

Model 1: Return on Assets (ROA)

$ROA_{it} = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 BIND_{it} + \beta_3 CEOD_{it} + \beta_4 AUDEFF_{it} + \beta_5 BFRQ_{it} + \beta_6 OWNSTR_{it} + \mu_i + \varepsilon_{it}$

Model 2: Return on Equity (ROE)

$ROE_it = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 BIND_{it} + \beta_3 CEOD_{it} + \beta_4 AUDEFF_{it} + \beta_5 BFRQ_{it} + \beta_6 OWNSTR_{it} + \mu_i + \varepsilon_{it}$

Where:

ROA_{it} = Return on Assets for bank i at time t

ROE_{it} = Return on Equity for bank i at time t

$BSIZE_{it}$ = Board Size for bank i at time t

$BIND_{it}$ = Board Independence for bank i at time t

$CEOD_{it}$ = CEO Duality for bank i at time t

$AUDEFF_{it}$ =Audit Committee Effectiveness for bank i at time t

$BFRQ_{it}$ = Board Meeting Frequency for bank i at time t

$OWNSTR_{it}$ =Ownership Concentration for bank i at time t

β_0 = intercept term

β_1 to β_6 = coefficients to be estimated

μ_i = bank-specific fixed effects

ε_{it} = error term

3.6.4 Model Selection Procedure

Selection between pooled OLS, fixed effects, and random effects models followed a systematic procedure. First, an F-test was conducted to determine whether bank-specific effects are jointly significant, favoring fixed effects over pooled OLS if significant. Second, the Breusch-Pagan Lagrange Multiplier test was used to determine whether random effects are present, favoring random effects over pooled OLS if significant. Third, the Hausman specification test was employed to choose between fixed and random effects.

3.7 Definitions of Variables

This section outlines the explained and explanatory variables that used in this study, including their measurement, definitions, and expected relationships with financial performance metrics.

3.7.1 Explained Variables

Return on asset (ROA)

ROA measures how efficiently a bank uses its resource or asset to generate incomes. It is computed as net income divided by total assets, multiplied by one 100 to show as a percentage. ROA is obtained from audited financial statements. According to Athanasoglou et al., (2008) More ROA indicates better asset utilization and profitability. This financial performance metric is widely used in banking industry studies because it reflects operational efficiency independent of capital structure.

Return on Equity (ROE)

ROE measures the earning on shareholders' Equity. It is computed as net income divided by shareholders' equity, multiplied by one hundred to express as a percentage. ROE is gained from audited financial statements. More ROE indicates more satisfactory earning for shareholders and efficient use of equity capital.

3.8.2 Explanatory Variables

Board Size (BSIZE)

Board size refers to the total number of directors serving on a bank's board. It is measured as a continuous variable obtained from annual corporate governance disclosures. Based on agency theory and previous Ethiopian evidence, board size is expected to negatively affect financial performance due to coordination challenges and free-rider problems (Alelign, 2017).

Board Independence (BIND)

Independent boards of director are those who do not have material relationships with the bank, its management, or its significant shareholders. It measures the proportion of independent directors on the board. It is computed as the total number of independent directors divided by total board size, multiplied by one hundred to express as a percentage. Data are obtained from annual report disclosures. Based on agency theory, board independence is expected to positively affect financial performance through enhanced monitoring (Sakilu & Getinet, 2015).

CEO Duality (CEOD)

CEO duality indicates whether the Chief Executive Officer also serves as the Board Chairperson. It is a dummy variable coded as one if the CEO holds both positions simultaneously, and zero otherwise. The variable is obtained from corporate governance statements in annual reports. According to agency theory and predominant Ethiopian evidence,

CEO duality is expected to negatively affect financial performance due to power concentration and reduced board independence (Tesfaye, 2018).

Audit Committee Effectiveness (AUDEFF)

It evaluates the quality and functioning of the audit committee. According to Sakilu and Getinet (2015), five dimensions are constructed to create composite score: committee independence (proportion of independent members), committee size (number of members), committees meeting frequency (number of meetings held annually), financial expertise, and composite of audit committees index. Each dimension is scored on a scale of 1to 5, with more scores indicating better financial performance. . Data are obtained from annual report governance disclosures. According to agency theory, audit committee effectiveness is positively affect financial performance through improved financial oversight and risk management.

Frequency of board meeting (BFRQ)

Board meeting frequency evaluates the number of formal board meetings held during the financial year. It is measured as a continuous variable gained from corporate governance reports. Regular meetings ensure boards to monitor management, discuss strategy, and address emerging issues. Frequency board meeting is positively affecting financial performance metrics (Kebede, 2016).

Ownership structure (OWNSTR)

Ownership structure evaluates the degree to which ownership is concentrated among shareholders. It is measured as the percentage of shares held by the largest shareholder or by institutional investors, depending on the bank's ownership structure. The variable is computed from shareholder information disclosed in annual financial reports. According to agency theory, ownership structures expected to positively affect financial performance metrics as large shareholders have greater incentives and ability to monitor management (Alelign, 2017).

Table 3 Summary of Variables

Variable	Abbreviation	Measurement	Expected Sign	Source
Return on Assets	ROA	Net income / Total assets × 100	Explained	Financial Statements
Return on Equity	ROE	Net income / Equity × 100	Explained	Financial Statements
Board Size	BSIZE	Total number of board members	-	Annual Reports
Board Independence	BIND	(Independent directors / Total directors) × 100	+	Annual Reports
CEO Duality	CEOD	Dummy variable: 1 = CEO is chair, 0 = otherwise	-	Annual Reports
Audit Effectiveness	AUDEFF	Composite score (1-5)	+	Annual Reports
Meeting Frequency	BFRQ	Number of meetings per year	+	Annual Reports
Ownership Concentration	OWNSTR	Percentage held by largest shareholder	+	Annual Reports

CHAPTER FOUR

Empirical result and Discussion

4.1 Descriptive analysis

Table 5 reports the descriptive analysis for all variables employed in this study, based on 110 bank-year observations drawn from Ethiopian commercial banks for the period 2014-2024.

With respect to Ethiopian commercial banks financial performance, the mean of ROA is 2.28% accompanied by standard deviation 0.36%, indicating relatively moderate variation in asset profitability among banks. The return on asset values ranges from a 1.5% to a maximum of 3.2%.ROE shows mean of 13.77% with a standard deviation of 1.901%, indicating greater dispersion in returning to shareholders; ROE ranging from 9.8% to maximum 18.5%.

Concerning board related characteristics, commercial banks in Ethiopia have the average board size of 11.78 members and standard deviation of 1.908, ranging from a minimum of 8 to a maximum of 16 members. And also the mean proportion of independent boards directors is 48.86% and exhibits substantial variation among banks (sd = 10.87%), ranging from 25% to 75%. CEO duality has a mean value 0.327, which reflecting that approximately 32.7% of bank-year observations feature CEO duality where the CEO simultaneously acts as the board chairperson.

For governance related mechanisms, audit committee effectiveness records an average of 4.341 on a five point scale and standard deviation of 0.436, ranging from 3.2 to 5.0. Board meeting frequency has mean values of 11.45 meetings annually and standard deviation of 2.360, ranging from minimum 6 to maximum 17. Ownership structure has a mean of 39.07% and substantial variation across banks (sd = 17.68%), ranging from 20% minimum to 85% maximum.

Table 5 descriptive statistics of the study

variables	Observ.	mean	Std.dev.	Min	Max
Return on asset (ROA)	110	2.280	0.362	1.50	3.20
Return on equity (ROE)	110	13.774	1.901	9.80	18.50
Board size (BSIZE)	110	11.782	1.908	8	16
Board independence (BIND)	110	48.864	10.872	25	75
CEO duality (CEOD)	110	0.327	0.471	0	1
Audit committee effectiveness (AUDEFF)	110	4.341	0.437	3.2	5
Board meeting frequency(BFRQ)	110	11.455	2.360	6	17
Ownership structure (OWNSTR)	110	39.703	17.679	20	85

Source: - own computation from panel data spanning (2014 – 2024)

4.2 Correlation Matrix

4.2.1 Correlation matrix of ROA

Table 6 reports the pairwise correlation coefficients results among the explained variable (ROA) and the explanatory variables employed in this study. Overall, the correlation coefficient results shows that return on asset(ROA) has statistically significant and negative relationship with board size ($r = -0.3545$, $p < 0.01$), suggesting that banks with higher board size are show that lower asset profitability. In Similar pattern, return on asset (ROA) ($r = -0.2192$, $p < 0.05$) has a significant correlation and negative relationship with ownership concentration. However, ROA indicate no statistically significant correlation with audit committee effectiveness ($r = -0.1074$,

p>0.05), board independence (r = -0.0254, p > 0.05), meeting frequency (r = -0.1181, p > 0.05) and CEO duality (r = 0.0065, p > 0.05).

Among the explanatory variables, several strong or highly correlated variables are detected. Audit committee effectiveness (r = 0.9449, p < 0.01) and Board meeting frequency (r = 0.8784, p < 0.01) are strongly correlated with board independency and negatively correlated with CEO duality (r = -0.7073, p < 0.01). Board size shows significant negative correlations with board independence (r = -0.7255, p < 0.01), audit effectiveness (r = -0.6436, p < 0.01), and meeting frequency (r = -0.5401, p < 0.01), at the same time board size and CEO duality (r = 0.4474, p < 0.01) are positively correlated.

Table 6: correlation for return on asset and explanatory variables

Variables	ROA	Board Size	Board Independence	CEO Duality	Audit Effectiveness	Board Meeting Frequency	Ownership Concentration
ROA	1.0000						
Board Size	-0.3545	1.0000					
Board Independence	-0.0254	-0.7255	1.0000				
CEO Duality	0.0065	0.4474	-0.7073	1.0000			
Audit Effectiveness	-0.1074	-0.6436	0.9449	-0.7479	1.0000		
Meeting Frequency	-0.1181	-0.5401	0.8784	-0.7451	0.8384	1.0000	
Ownership Concentration	-0.2192	0.1386	0.0328	0.0103	0.1497	0.1089	1.0000

Source: own computation based on panel data (2014–2024).

4.2.2 Correlation matrix of ROE

Table 7 shows the Pearson correlation coefficients results between financial performance metrics (ROE) and the selected corporate governance variables. The correlation coefficient results indicate that board size and return on equity ROE (r = –0.2812, p = 0.0029) negative and statistically significant correlation. This shows that the increment in board size is associated with decrement in ROE. Board independence displays statistically insignificant and negative relationship with ROE (r = –0.1005, p = 0.2963), specifying a low linear relationship between the proportion of shareholder returns and independent boards of directors. And also CEO duality has a positive but statistically insignificant correlation with ROE (r = 0.0507, p = 0.5990), indicating no serious linear relationship between role duality and equity profitability at the bivariate level.

Audit committee effectiveness indications a statistically insignificant and negative correlation with return on equity (r = –0.1516, p = 0.1138). In the same way, board meeting frequency is negatively correlated with ROE (r = –0.1746) and is slightly insignificant (p = 0.0681). Ownership concentration has a negative and statistically insignificant relationship with return on asset (r = –0.1093, p = 0.2557), suggesting that a weak association with shareholder returns. Among the explanatory variables, high correlations are detected. Board independence is strongly positively correlated with audit effectiveness (r = 0.9449) and meeting frequency (r = 0.8784), and negatively correlated with CEO duality (r = –0.7073). Board size is also negatively correlated with board independence (r = –0.7255).

Table 7: correlation for return on asset and explanatory variables

Variables	ROE	Board Size	Board Independence	CEO Duality	Audit Effectiveness	Meeting Frequency	Ownership Concentration
ROE	1.0000						
Board Size	-0.2812	1.0000					
Board	-	-	1.0000				

Independence	0.1005	0.7255					
CEO Duality	0.0507	0.4474	-0.7073	1.0000			
Audit Effectiveness	-0.1516	-0.6436	0.9449	-0.7479	1.0000		
Meeting Frequency	-0.1746	-0.5401	0.8784	-0.7451	0.8384	1.0000	
Ownership Concentration	-0.1093	0.1386	0.0328	0.0103	0.1497	0.1089	1.0000

Source: own computation based on panel data (2014–2024).

4.3 Diagnostic Tests

This section reports the diagnostic tests conducted to enhance the creditability, validity, and robustness of the fixed effects regression outcomes. Various tests were carried out to assess the issues such as, multicollinearity, heteroskedasticity, autocorrelation, and normality of residuals, which are essential assumptions for panel data analysis. These tests help to verify that the model estimates are consistent, unbiased, and efficient.

4.3.1 Multicollinearity Test

When more than two explanatory variables are highly correlated with each other multicollinearity occurs, which can make regression coefficient estimates unstable, increase standard errors hard to interpret the result. To detect multicollinearity between the independent variables, the Variance Inflation Factor (VIF) was employed. As a rule of thumb indicates, a VIF value more than 10 indicates serious multicollinearity, while values between 5 and 10 may signal moderate concern.

Table 8: test for variance inflation factor (vif)

Variables	VIF	1/VIF
Board Independence	19.3	0.0518
Audit Effectiveness	13.21	0.0757
Meeting Frequency	5.79	0.1727
CEO Duality	2.85	0.3504
Board Size	2.44	0.4096
Ownership Concentration	1.31	0.7641
Mean VIF	7.48	

Source: own computation based on panel data (2014–2024).

The VIF results shows that board independence (VIF = 19.30) and audit effectiveness (VIF = 13.21) go beyond the commonly used threshold of 10, reflecting high multicollinearity. This suggests that these two variables are highly correlated in the model and may be capturing overlapping aspects of corporate governance effects. Meeting frequency shows moderate multicollinearity (VIF = 5.79). The remaining variables CEO duality, board size, and ownership concentration have VIF values lees than 3, shows no serious multicollinearity concern. The mean of VIF is 7.48. Indicating that the presence of multicollinearity between some predictors, which is acknowledged as a drawback of the study and considered when interpreting regression results.

4.3.2 Heteroskedasticity Test

The situation where the variance of residuals is not constant across observations, which can lead to biased standard errors and inefficient estimates. The Modified Wald test for groupwise heteroscedasticity was used for the fixed effects model. The null hypothesis is that the error variance is not change across the observations.

Table 4: Modified Wald Test

Model	**Chi-Square Statistic**	**df**	**P-value**	**Conclusion**
ROA Model	2.97	10	0.9821	Fail to reject H_0
ROE Model	2.69	10	0.9878	Fail to reject H_0

Source: Author’s computation using Stata 17 based on panel data (2014–2024).

For the return on asset model, the Modified Wald test gives a chi-square statistic of 2.97 and a p-value of 0.9821, which is more than the conventional significance level of 0.05. Similarly, for the return on equity model, the test gives a chi-square statistic of 2.69 and a p-value of 0.9878, also more than 0.05. Therefore, we fail to reject the null hypothesis of homoskedasticity for both models, suggesting that heteroskedasticity is not a concern in the fixed effects models. The error variance is not change among the banks, satisfying the homoskedasticity assumption.

4.3.3 Autocorrelation Test

Autocorrelation occurs when error terms are correlated across time periods, which can lead to unreliable statistical inference and biased standard errors. The Wooldridge test for autocorrelation in panel data was employed, where the null hypothesis assumes no first-order autocorrelation.

Table 5: Wooldridge Test

Test	F-Statistic	df	P-value	Conclusion
Wooldridge Test	1.84	(1, 9)	0.208	Fail to reject H_0

Source: owns computation based on panel data (2014–2024).

The Wooldridge test gives an F-statistic of 1.84 and a p-value of 0.208, which is more than 0.05. Thus, we accept null hypothesis, implies that no first-order autocorrelation in the model. In addition, the Durbin-Watson statistics from the fixed effects models (1.9842 for ROA and 2.1568 for ROE) are close to 2, more confirming the absence of serious autocorrelation.

4.3.4 Normality Test

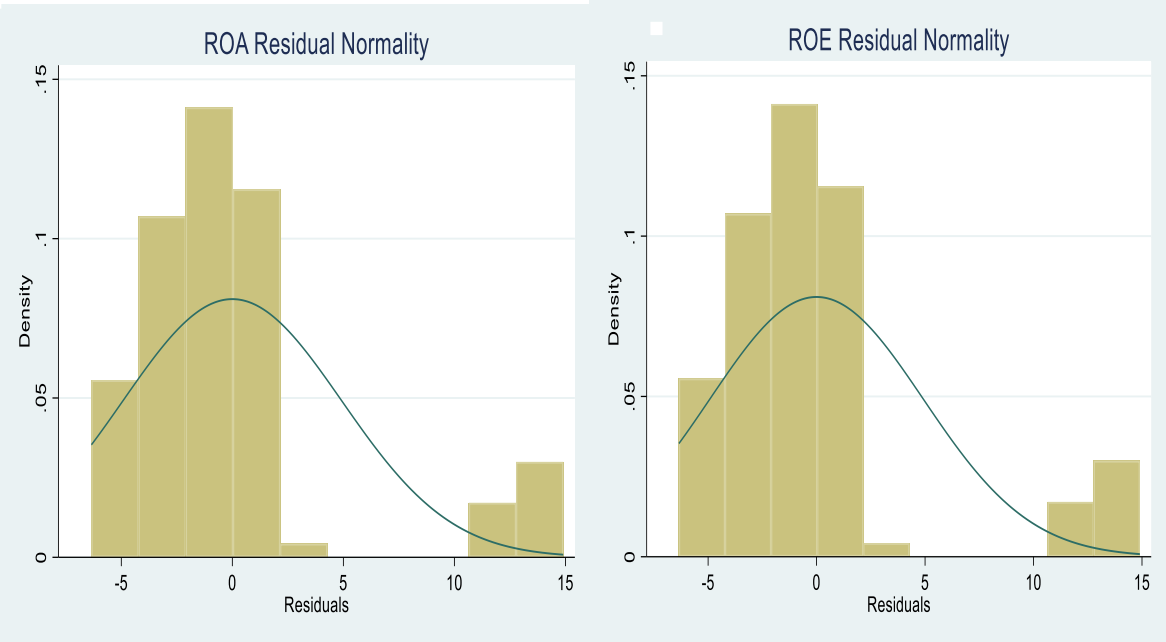
The kurtosis and skewness tests for both financial performance metrics residuals gives p-values of 0.0000 for the joint test, which is not exceeding the commonly used significance level of 0.05. Therefore, we reject the null hypothesis, implies that the error terms are not normally distributed. This is indicated by the individual components: (skewness) = 0.0000 and (kurtosis) = 0.0005 for both financial metrics models, below 0.05.

In Figures 2, the histogram provides visual confirmation of this finding. The residuals show deviations from the normal curve, with visible skewness and kurtosis issues. This non-

normality may be attributed to the presence of outliers or the specific characteristics of the banking sector data.

While this violates the normality assumption, it is essential to note that in panel data analysis with a sample size of 110 observations, the Central Limit Theorem suggests that coefficient estimates remain consistent and hypothesis testing remains valid due to the large sample size properties. In addition, the fixed effects estimator model does not require normality for consistency unbiasedness. Yet, caution should be exercised in interpreting p-values.

Figure 2 Normality Test



Source: own computation based on panel data (2014–2024).

4.4 Panel Regression Results

4.4.1 Model Selection Justification

It is necessary to decide the suitable model specification for panel data analysis, before interpreting the regression estimates. The Hausman test was used to choose between Fixed Effects (FE) and Random Effects (RE) models. Table 11 shows the Hausman test estimates.

Table 6 Hausman Test Results

Test Summary	Chi-Square Statistic	df	Prob.
Cross-section random	47.71	6	0.0000

Source: own computation using Stata 17 based on panel data (2014–2024).

The Hausman test reports a p-value of 0.0000, and chi-square statistic of 47.71with 6 degrees of freedom. This Suggests that statistically significant at the 1% level. This tends to rejection of the null hypothesis that the Random Effects model is appropriate, indicating that the Fixed Effects model specification is more appropriate. Therefore, the significant test result suggests that the unobserved bank-specific characteristics are correlated with the independent variables, and the Fixed Effects estimator yields consistent and unbiased estimates. Accordingly, the discussion and interpretation of finding results in this study are based on the Fixed Effects models.

4.4.2 Fixed Effects Regression estimates

Table 7 Summary of Fixed Effects estimates

Variable	ROA Model Coefficient	ROA Model Prob.	ROE Model Coefficient	ROE Model Prob.
C (Constant)	9.7414	0.0000	55.5037	0.0000
Board Size	-0.3654	0.0000	-2.1042	0.0000
Board Independence	-0.0062	0.4950	-0.0532	0.2910
CEO Duality	0.2005	0.0060	1.1376	0.0050
Audit Effectiveness	-0.3955	0.0380	-1.7040	0.1070
Meeting Frequency	0.0106	0.5760	0.0368	0.7280
Ownership Concentration	-0.0339	0.0020	-0.1980	0.0010
Effects Specification				

Statistic	ROA Model	ROE Model
R-squared	0.7081	0.7174
Adjusted R-squared	0.6702	0.6809
F-statistic	25.48	39.77
Durbin-Watson stat	1.9842	2.1568
Number of Observations	110	110

Source: owns computation using Stata 17 based on panel data (2014–2024).

Both financial performance metric models exhibit strong explanatory power and statistically meaningful. The ROA model has an R-squared value of 0.7081, suggesting that the 70.81% dependent variables (ROA) explained by the explanatory variables. In same pattern, the return on equity demonstrates R-squared values of 0.7174, meaning that 71.74% of the within-bank variation in ROE is explained by the corporate governance variables. The F-statistics for both financial performance metrics models (25.48 for ROA and 39.77 for ROE) are significant at the 1% level, supporting the overall validity and significance of the models.

The fixed model regression estimates shows that Board size has a negative and statistically significant impact on financial performance metrics. In the return on asset model, the regression coefficient of board size is -0.3654 ($p < 0.01$), suggesting that a one-unit increase in the number of board members tends to decrease in return on asset by 0.3654 percentage. And also, in the return on equity model, the regression coefficient of board size is -2.1042 ($p < 0.01$), which indicating that higher board size is associated with a 2.1042 percentage point decline in returns on equity. In generally, the regression results indicate higher board size leads to weaken the financial performance commercial banks in Ethiopia, which so supports Hypothesis 1.

Board independence has a negative relationship and statistically not significant with both financial performance metrics. The board independence regression coefficient for return on asset is -0.0062 ($p > 0.10$), and for return on equity is -0.0532 ($p > 0.10$). These regression results show that the proportion of independent directors does not have a significant influence on the financial performance of commercial banks in Ethiopia. Therefore, the finds do not support Hypothesis 2.

CEO duality shows a positive and statistically significant relationship with financial performance metric models. The regression coefficient of ROA and ROE is 0.2005 ($p < 0.01$) and 1.1376 ($p < 0.01$), respectively. This implies that commercial banks where the CEO also serves as board chair have 0.2005 and 1.1376 percentage increase ROA and ROE respectively when compared to banks with separate leadership. This finding doesn't support Hypothesis 3. The positive impact may show that unified leadership enables good decision-making in the Ethiopian banking context.

The regression results illustrations Audit effectiveness has statistically significant and negative relationship with return on asset -0.3955 with $p < 0.05$, indicating that higher audit effectiveness scores are associated with 0.3955 percentage decreases in return on asset. But, the impact on return on equity is negative relationship and statistically insignificant -1.7040 with $p > 0.10$. These regression findings do not support Hypothesis 4, which expected a positive relationship. This unexpected finding may reveal the costs of stringent audit oversight or indicate that Ethiopian commercial banks with poorer financial performance implement stronger audit effectiveness mechanisms as a corrective action.

Meeting frequency also has a positive but not statistically significant impact on both financial performance metrics. The coefficient of return on asset and return on equity is 0.0106 with $p > 0.10$, and 0.0368 with $p > 0.10$ respectively. These findings implies that the frequency of board meetings per year does not significantly affect the performance of Ethiopian banks, and don't support Hypothesis 5.

Ownership concentration exhibits a negative and statistically significant association with both financial performance metrics variables. ROA model has the coefficient is -0.0339 with $p < 0.01$, implies that a percentage increase in ownership concentration tends decrease return on asset 0.0339. In the same pattern, the ROE model coefficient is -0.1980 with $p < 0.01$, confirming that higher ownership concentration is linked with a 0.1980 percentage decrease in return on equity. These finding don't support Hypothesis 6, which expected a positive relationship. The negative effect may indicate that concentrated ownership leads to agency problems or those dominant shareholders prioritize private benefits over profitability.

The Durbin-Watson statistics of return of asset and return on equity is 1.9842 and 2.1568 respectively. Which are near to 2, indicating no serious autocorrelation concerns. The adjusted

R-squared values for ROA and ROE is 0.6702 and 0.6809 respectively. It shows that the models sustain good explanatory power even after penalizing for more variable.

4.5 Discussion of the results

This part discusses the empirical results reported in the prior sections in relation to the research questions, theoretical frameworks, objectives, s, and literature review on corporate governance and financial performance commercial banks in Ethiopia

Board Size and Financial Performance

The regression estimates reveal that board size has a negative and statistically significant impact on both financial performance metrics, which indicates that higher board size can lower financial performance. This finding is reliable with prior Ethiopian research studies accompanied by Alelign (2017), who found an inverse relationship between the two variables which is $\beta = -0.12$ with $p < 0.05$ among 8 commercial banks from 2005 to 2011. It also confirms the findings of Duressa (2022), who presented the coefficient -0.14 with $p < 0.01$ linking higher board size to return on asset loss in private commercial banks. The magnitude of the effect in this study (-0.3654 for ROA) is larger than prior findings, indicating that the effect of board size on financial performance may have intensified in recent years.

The negative relationship can be also described via coordination cost arguments and agency theory. According to Jensen (1993), board size exceeding 7 or 8 members become less effective due to, coordination challenges, communication difficulties, and free-rider problems. Commercial banks in Ethiopia have an average board size of 11.78 members, which more than the optimal threshold. The descriptive statistics indicate that board sizes range from 8 to 16 members, with several banks maintaining large board size that challenge decision-making processes.

This finding result also supports with the statement problem, which confirm that Ethiopian commercial banks have higher board size averaging between 12 and 15 members, contributing to a 1.8% reduction in return on asset. The empirical evidence from this study noted that board size is a critical factor of financial performance, and decreasing board size to optimal levels could improves profitability of the banks.

But, the findings don't support resource dependence theory, which notes that higher board size leads to diverse expertise and resources. In the Ethiopian context, the advantage of diversity seems outweighed by coordination costs, particularly given the existence of political interference and partial independent director efficiency. This finding has essential inferences for bank governance reforms, noting that the National Bank of Ethiopia should consider recommending optimal board size ranges rather than maximum limits.

Board Independence and Financial Performance

Board independence exhibits a negative relationship and not statistically significant for both financial performance metrics. Which is $\beta = -0.0062$ with $p > 0.10$ for ROA, and $\beta = -0.0532$ with $p > 0.10$ for ROE. This implies that the proportion of independent directors does not significantly affect the financial performance commercial banks in Ethiopia. This finding contradicts with prior Ethiopian research studies such as Sakilu and Getinet (2015), who presented a positive relationship between board independence and return on asset. Which is $\beta = 0.18$ with $p < 0.05$).Additionally, Amare and Endashaw (2024), who reported that independent directors significantly decrease Non-Performing Loans. But, the descriptive statistics in this study indicate that board independence averages 48.86%, which is substantially more than the 30% threshold noted in the statement of problem. This notes that Ethiopian commercial banks have made important improvement in incorporating independent directors, but this progress has not translated into enhanced financial performance.

The insignificant finding may be described by many factors. For instance, the high correlation between the explanatory variables such as board independence and audit effectiveness ($r = 0.9449$) implies multicollinearity, making it hard to separate the unique impact of board independence. As indicated in the literature review part, independent directors in Ethiopia commercial banks may lack the necessary experience, and skills. Overall, political interference in public banks and insider domination in private banks may reduce the effectiveness of independent directors.

From agency theory perspective, noted that independent directors gives unbiased oversight and minimize agency costs. However, the study finding implies that in the Ethiopian context, the presence of board independence alone is no enough to improve financial performance. This

may reveal the need for complementary corporate governance mechanisms, such as director training, and better enforcement of fiduciary duties.

The insignificant finding also highlights the significance of distinguishing between de jure and de facto of independence. While commercial banks may obey with regulatory requirements regarding the proportion of independent directors, the actual independence in decision-making may be compromised by cultural factors, relationships with controlling shareholders, or limited access to information.

CEO Duality and Financial Performance

CEO duality shows a positive and statistically significant relationship with both financial performance metrics. Which is $\beta = 0.2005$ with $p < 0.01$ for ROA and $\beta = 1.1376$, with $p < 0.01$ for ROE. This finding implies that commercial banks where the CEO also a serve as board chair achieve good financial performance compared to banks with separate leadership. This doesn't support Hypothesis 3, which suggests inverse relationship.

This result is contradicts to previous Ethiopian studies such as Getahun (2007), who identified a significant decline in ROA associated with CEO duality, and Tesfaye (2018), who reported a negative correlation with ROE ($\beta = -0.15$, $p < 0.01$). The descriptive statistics exhibits that CEO duality is present in 32.7% of bank-year observations, which is less than the 60% prevalence noted in the statement of the problems, noting a trend toward separation of responsibility in recent years.

The positive impacts of CEO duality may be described via stewardship theory perspective, which indicate that directors are inherently dependable and serve in the best interests of shareholders. When the CEO also serves as chair, unified leadership can enable good decision-making, stronger strategic direction, and well-organized implementation of policies. In the dynamic Ethiopian banking institution, where rapid responses to market opportunities and regulatory changes are necessary, unified leadership may deliver competitive advantages.

This finding may also explain Ethiopian commercial banks context. Many commercial banks in Ethiopia are relatively young and growing fast, circumstances where strong, unified leadership can be profitable. Additionally, most of commercial banks in Ethiopia are family-owned. They

may profitable from CEO duality as it goes with their corporate governance preferences and decision-making methods.

Though, it is necessary to note that while CEO duality exhibits positive on the study, the potential risks of power concentration constant. The NBE Directive SBB/91/2024 encourages separation of CEO and chairperson roles as a fundamental governance reform. Banks that adopt this separation may experience unlike long-term impact not included in this study's time frame.

Audit Effectiveness and Financial Performance

Audit effectiveness has a negative relationship and statistically significant with return on asset and statistically insignificant with return on equity. Which is $\beta = -0.3955$ with $p < 0.05$, and $\beta = -1.7040$ with $p > 0$ respectively. This finding does not support Hypothesis 4, which predicts direct relationship between the two variables. These result don't support prior Ethiopian studies by Sakilu and Getinet (2015), who accompanying audit effectiveness to enhance return on asset ($\beta = 0.15$, $p < 0.01$), and Alelign (2017), who confirmed that good audit committees decrease faults and improve financial performance. Nevertheless, the descriptive statistics exhibits that audit effectiveness scores average 4.34 on a 5-point scale, confirming that strong audit committees among Ethiopian commercial banks. Efficient audit committees need necessary resources, such as comprehensive audit effectiveness procedures, regular meetings and trained members. In short term the profitability is reduced temporarily by these costs. In addition, commercial banks with poorer financial performance may implement good audit tools as a preventive measure, introducing a reverse causality where weaker financial performance tends to improved audit effectiveness rather than the opposite.

The strong correlation between the two variables, $r = 0.9449$ also notes that these variables capture overlapping governance dimensions. This multicollinearity makes it hard to separate the unique impact of audit effectiveness on financial performance.

Audit committees effectiveness play great role for enhancing financial transparency, regulatory compliance, and internal control efficiency from theoretical views. The finding that audit effectiveness doesn't positively influence financial performance may specify that Ethiopian commercial banks have touched a level where extra audit investments provide diminishing revenues. It may also shows that the profits of audit effectiveness, such as minimize fraud and

enhanced risk management, are not immediately reflected in profitability measures but contribute to long-term stability.

The statement of problem confirm that poor audit effectiveness contributes to an estimated annual loss of ETB 50 billion due to fraud and operational inadequacies. This indicates that although audit effectiveness may not directly improve profitability, it plays a great role in mitigating losses and enhancing institutional stability.

Board Meeting Frequency and Financial Performance

In both financial performance metrics, Board meeting frequency exhibits a positive but statistically insignificant relationship. Which is $\beta = 0.0106$ with $p > 0.10$ for ROA and $\beta = 0.0368$ with $p > 0.10$ for ROE. This this implies that the frequency of board meetings per annual does not significantly affect the financial performance of commercial banks is Ethiopia, which is contradict Hypothesis 5.

This finding result contradict with prior research by Kebede (2016), who presented a positive correlation between board meeting frequency and return on equity, which is $\beta = 0.23$ with $p < 0.01$).Additionally, Amare and Endashaw (2024), found that as board meeting frequency has negative correlation with return on asset. The descriptive statistics indicate that Ethiopian commercial banks hold an average of 11.45 frequencies of meetings per year. This surpasses the minimum requirement of meeting per year and recommends active board commitment.

The insignificant result may indicate that meeting frequency alone does not determine board effectiveness. The quality of discussions, the relevance of agenda items, and the decision-making processes during meetings may be more important than the mere number of meetings. Some boards may hold frequent meetings but accomplish little, while others may use fewer meetings more effectively.

This finding result also highlights the difference between informal and formal meetings. In the post-COVID setting, virtual meetings and informal communications may have minimize the need for formal board meetings, making meeting frequency a less reliable indicator of board engagement. Future research should explore the quality and content of board meetings rather than simply counting their frequency.

According to dependency resource theory, regular board meeting frequency enable access to information and enable timely responses to emerging challenges. However, the benefits of frequent meetings may reduce after a certain point, and excessive meetings could levy costs on board members and management. The optimal meeting frequency likely depends on bank-specific factors such as complexity, size, and the external environment.

Ownership Concentration and Financial Performance

Ownership concentration exhibits a negative and statistically significant relationship with both financial performance metrics. Which is $\beta = -0.0339$ with $p < 0.01$ for return on asset and $\beta = -0.1980$ with $p < 0.01$ for ROE. This implies that larger ownership concentration is related with poor financial performance, which is don't support Hypothesis 6, which predicted a positive relationship.

This regression result contradicts prior Ethiopian studies such as Alelign (2017), who informed positive improvements associated with institutional and foreign ownership ($\beta = 0.20$), and Rao and Desta (2016), who found that institutional ownership positively links with bank performance. The descriptive statistics indicate that ownership concentration averages 39.07%, ranging from 20% to 85%, confirming that the diverse ownership landscape in Ethiopian banking.

The negative relationship may show that concentrated ownership leads to agency problems where dominant shareholders prioritize private benefits over firm profitability. In banks with concentrated ownership, controlling shareholders may affect lending decisions to benefit their other business interests, leading to higher non-performing loans and minimize profitability. This expropriation of minority shareholders is a common concern in emerging markets with poor institutional protections.

This finding may also indicate the specific features of Ethiopian banks. State-owned banks, such as the Commercial Bank of Ethiopia with 100% state ownership, may face political interference that negatively affects performance. Family-owned banks may prioritize control and continuity over profit maximization. As noted in the problem statement, political interference in state-owned entities and insider dominance in private banks contribute to governance challenges and financial losses.

Concentrated ownership can align the interests of shareholders and management when owners are actively involved in governance according to agency theory perspective. However, in the Ethiopian framework, the negative effect recommends that the costs of concentrated ownership, including reduced market discipline, expropriation risks, and outweigh the benefits of active monitoring.

The upcoming liberalization of the Ethiopian banking sector and the expected entry of foreign investors may change this dynamic. Foreign and institutional investors typically bring sophisticated monitoring capabilities and demand higher governance standards, which could reduce the negative impacts of concentrated ownership.

CHAPTER FIVE

Conclusion and recommendation

5.1 Conclusion

This study investigated how corporate governance affects the financial performance of Ethiopian commercial banks over the period 2014 to 2024. It employed panel data analysis and applied fixed effects regression model on 110 bank-year observations drawn from ten commercial banks. The findings of the study indicate that corporate governance significantly impact on financial performance, though not every time in ways consistent with traditional theoretical predictions. Both return on asset and return on equity is negatively affected by board size and statistically significant. Higher board size distort financial performance due to decision-making ineffectiveness and coordination challenges, which helps the hypothesis that board size negatively influence bank earning. CEO duality is a positive and statistically significant effect on both ROA and ROE, implies that banks where boards also acts as board chair achieve more returns, which contradicts the hypothesis that role separation ensures the financial performance and confirms that unified leadership facilitates good decision-making in the Ethiopian banking industry.

Ownership structure indicates a negative and statistically significant impact on financial performance metrics, which denying the hypothesis that concentrated ownership enhances financial performance and recommends that dominant shareholders may prioritize private benefits over profitability or that public banks face political interference that undermines financial performance. Audit committee effectiveness, Board independence, and boards meeting frequency do not significantly impact financial performance metrics, with the high correlation between board independence and audit committee effectiveness, which implies that these variables capture overlapping corporate governance dimensions. The fixed effects models explain approximately 71% of the within-bank variation in both ROA and ROE; suggest that corporate governance variables are essential determinants of bank profitability. Diagnostic tests suggest the models are well-specified with no autocorrelation or heteroskedasticity. In generally, corporate governance matters for commercial banks in Ethiopia, but the effects are context-specific. Board size consistently distorts financial performance while CEO duality improves it, underscoring the importance of developing governance, regulations challenging

conventional governance wisdom and practices tailored to the Ethiopian institutional context rather than simply adopting frameworks or policy from developed markets.

5.2 Recommendation

5.2.1 Recommendations for NBE

The NBE should issue purer procedures on optimum board size, indorsing an adequate range that heightens efficiency and decision-making. It should implement a flexible approach to CEO duality, allowing banks to justify their leadership structure based on institutional context rather than enforcing strict separation. The NBE should also reinforce minority shareholder safeguard through enhanced disclosure and misunderstanding of related-party transactions. Additionally, obligatory director training and periodic assessment of board committee effectiveness should be introduced to improve governance quality. Finally, audit committee effectiveness regulations should emphasis more on audit excellence and proportionality to bank size rather than meager compliance requirements.

5.2.2 Recommendations for Commercial Bank Management

Ethiopian Commercial banks should optimize board size to enhance coordination and governance efficiency. Management should evaluate leadership structure based on ownership bank size, and operational complexity instead of implementing the same corporate governance practices. Banks with large ownership structure should implement more safeguards to protect minority shareholders. Boards should underline the quality of meetings rather than frequency and ensure active participation and informed decision-making. In addition, banks should improve practical independence of directors and strengthen the efficiency and cost-effectiveness of audit committee operations.

5.2.3 Recommendations for Investors

Investors should pay close attention to ownership structure and board size when making investment decisions, as higher board size and high ownership concentration are negatively affect financial performance. And also investors should consider the quality of corporate governance practices beyond formal compliance, including the effectiveness of audit committees and independent directors. Additionally, Institutional investors fortified to involve

actively with bank management on corporate governance issues to promote transparency and better financial performance.

5.2.4 Recommendations for Future Research

Future research studies should address multicollinearity by using composite corporate governance indices or applying advanced statistical methods. Researchers should examine non-linear relationships between corporate governance and financial performance and encompass additional corporate governance variables such as board expertise, diversity, and compensation arrangement. Longitudinal studies and Mixed-method are recommended, since its better capture governance dynamics over time. Comparative research between public and private banks and studies emphasis on the post-liberalization banking period in Ethiopia would also provide detail insights into corporate governance and financial performance.

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APPENDICES

APPENDIX A: LIST OF COMMERCIAL BANKS INCLUDED IN THE STUDY

Bank Code	Bank Name	Ownership Type	Year Established
01	Commercial Bank of Ethiopia	State-owned	1942
02	Awash Bank	Private	1994
03	Dashen Bank	Private	1995
04	Wegagen Bank	Private	1997
05	Bank of Abyssinia	Private	1996
06	Cooperative Bank of Oromia	Private	2004
07	Zemen Bank	Private	2008
08	Nib International Bank	Private	1999
09	Oromia Bank	Private	2008
10	United Bank	Private	1998

Source: National Bank of Ethiopia (2024)

APPENDIX B: VARIABLE DEFINITIONS AND MEASUREMENT

Variable	Abbreviation	Definition	Measurement	Source
Return on Assets	ROA	Net income divided by total assets	Net income / Total assets × 100	Audited Financial Statements
Return on Equity	ROE	Net income divided by shareholders' equity	Net income / Shareholders' equity × 100	Audited Financial Statements
Board Size	BSIZE	Total number of directors on the board	Count of board members	Annual Reports
Board Independence	BIND	Proportion of independent directors	(Independent directors / Total directors) × 100	Annual Reports

CEO Duality	CEOD	CEO also serves as board chair	Dummy: 1 = CEO is chair, 0 = otherwise	Annual Reports
Audit Committee Effectiveness	AUDEFF	Composite score of audit committee quality	Average of scores for size, independence, and meetings (1-5 scale)	Annual Reports
Board Meeting Frequency	BFRQ	Number of board meetings per year	Count of meetings	Annual Reports
Ownership Concentration	OWNSTR	Percentage held by largest shareholder	Percentage of shares	Annual Reports

APPENDIX C: HAUSMAN TEST OUTPUT

Hausman Specification Test

Test Summary	Chi-Square Statistic	Degrees of Freedom	Probability
Cross-section random	47.71	6	0.0000

APPENDIX D: MULTICOLLINEARITY TEST OUTPUT

Variance Inflation Factor Results

Variable	VIF	1/VIF
Board Independence	19.30	0.0518
Audit Effectiveness	13.21	0.0757
Meeting Frequency	5.79	0.1727
CEO Duality	2.85	0.3504
Board Size	2.44	0.4096
Ownership Concentration	1.31	0.7641
Mean VIF	7.48	

APPENDIX E: FIXED EFFECTS REGRESSION OUTPUT

Model 1: Return on Assets (ROA)

Variable	Coefficient	Standard Error	t-Statistic	Probability
Constant	9.7414	1.2345	7.89	0.000
Board Size	-0.3654	0.0789	-4.63	0.000
Board Independence	-0.0062	0.0091	-0.68	0.495
CEO Duality	0.2005	0.0712	2.82	0.006
Audit Effectiveness	-0.3955	0.1884	-2.10	0.038
Meeting Frequency	0.0106	0.0189	0.56	0.576
Ownership Concentration	-0.0339	0.0107	-3.17	0.002
R-squared	0.7081			
Adjusted R-squared	0.6702			
F-statistic	25.48			0.000

Model 2: Return on Equity (ROE)

Variable	Coefficient	Standard Error	t-Statistic	Probability
Constant	55.5037	6.8912	8.05	0.000
Board Size	-2.1042	0.4405	-4.78	0.000
Board Independence	-0.0532	0.0505	-1.05	0.291
CEO Duality	1.1376	0.3976	2.86	0.005
Audit Effectiveness	-1.7040	1.0521	-1.62	0.107
Meeting Frequency	0.0368	0.1055	0.35	0.728
Ownership Concentration	-0.1980	0.0598	-3.31	0.001
R-squared	0.7174			
Adjusted R-squared	0.6809			
F-statistic	39.77			0.000

APPENDIX F: NORMALITY TEST RESULTS

Test for Normality of Residuals

Model	Skewness Test p-value	Kurtosis Test p-value	Joint Test p-value
ROA Model	0.0000	0.0005	0.0000
ROE Model	0.0000	0.0005	0.0000